

Secretary  
U.P. Electricity Regulatory Commission  
Near SLDC Complex,  
Vibhuti Khand, Gomti Nagar,  
Lucknow

Dated: 04.11.2020

Sub : Petition under Section 62, 86(1)(a) & 86 (1) (b) of the Electricity Act, 2003 read with Regulation 15 (1) UPERC (Terms and Condition of Tariff) Regulations, 2019 for fixation of Multiyear Tariff for the period from 01.04.2019 to 31.03.2024 In respect of 2 x 45 MW Utraula Thermal power project of Bajaj Energy Limited.

Dear Sir

The present petition is being filed by Bajaj Energy Ltd., for Multiyear Tariff for the period from 01.04.2019 to 31.03.2024 in respect of 2 x 45 MW Utraula Thermal power project of Bajaj Energy Limited.

1. Affidavit along with petition ( 01 original + 05 Photo copies and Soft copy)
2. Demand Draft no. "827122" dated 04.11.2020 & drawn on State Bank of India , Lucknow in favour of Secretary, UPERC, Lucknow amounting to Rs. 1000000/- (Ten Lacs)

It is requested to the Hon'ble Commission to kindly accept the petition and pass necessary orders/directions as deemed proper at earliest.


Thanking you,

Yours faithfully

For Bajaj Energy Ltd.,

  
Authorised Signatory



  
05-11-2020  
C.E. (P.P.A.)

जारी करने वाली भारतीय स्टेट बैंक  
Issuing Bank: State Bank of India  
कोड नं./CODE No: 16726  
Tel No: 0522 9415175

मांगड्राफ्ट  
DEMAND DRAFT

Key: PEJJIP  
Sr. No. 240002

04112020  
D D M M Y Y

मांगे जाने पर THE SECRETARY UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION  
ON DEMAND PAY TO \*\*\*\*\*

या उनके आदेश पर

Ten Lakh Only

OR ORDER

रुपये RUPEES

अदा करें

₹

1000000.00

IOI 000453827122  
Name of Applicant

Key: PEJJIP

Sr. No: 240002

AMOUNT BELOW 1000001(1/7)

BR PARKING A/C WITH INB-16726 SBI

गुल्य प्राप्त / VALUE RECEIVED

भारतीय स्टेट बैंक

STATE BANK OF INDIA

अदाकर्ता शाखा / DRAWEE BRANCH: LUCKNOW MAIN BRANCH

कोड नं./CODE No: 00125

Manoj Ag. Wd.

A-5146

आधिकृत हस्ताक्षरकर्ता

AUTHORISED SIGNATORY

Shashya Chaturvedi

S-20489

आखिरी प्रबंधक

BRANCH MANAGER

कम्प्यूटर द्वारा मुद्रित होने पर ही वैध  
VALID ONLY IF COMPUTER PRINTED

केवल 3 महीने के लिए वैध  
VALID FOR 3 MONTHS ONLY

₹ 1,00,00,000 एवं अधिक के लिखत दो अधिकारियों द्वारा हस्ताक्षरित होने पर ही वैध है।  
INSTRUMENTS FOR ₹ 1,00,00,000 & ABOVE ARE NOT VALID UNLESS SIGNED BY TWO OFFICERS

08271220 0000020000 000453 16

**BEFORE THE HON'BLE UTTAR PRADESH ELECTRICITY REGULATORY  
COMMISSION**

**PETITION NO: \_\_\_\_\_ of 2020**

**IN THE MATTER OF:**

Petition under Section 62, 86(1)(a) & 86 (1) (b) of the Electricity Act, 2003 read with Regulation 15 (1) UPERC (Terms and Condition of Tariff) Regulations, 2019 for fixation of Multiyear Tariff for the period from 01.04.2019 to 31.03.2024 in respect of 2 x 45 MW Utraula Thermal power project of Bajaj Energy Limited.

**AND**

**IN THE MATTER OF:**

Bajaj Energy Limited,  
Unit – Utraula, Distt – Balrampur, Uttar Pradesh

**...Petitioner**

Versus

Uttar Pradesh Power Corp. Ltd. (UPPCL)

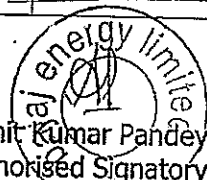
**....Respondent**

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Lucknow

Dated:- 03.11.2020

  
Amit Kumar Pandey  
Authorised Signatory  
Bajaj Energy Limited  
Petitioner/Applicant

**BEFORE THE UTTAR PRADESH ELECTRICITY REGULATORY**  
**COMMISSION, LUCKNOW**

**PETITION NO: .....**

**IN THE MATTER OF:**

Petition under Section 62, 86(1)(a) & 86 (1) (b) of the Electricity Act, 2003 read with Regulation 15 (1) UPERC (Terms and Condition of Tariff) Regulations, 2019 for fixation of Multiyear Tariff for the period from 01.04.2019 to 31.03.2024 in respect of 2 x 45 MW Utraula Thermal power project of Bajaj Energy Limited.

**AND**

**IN THE MATTER OF:**

**Petitioner :**

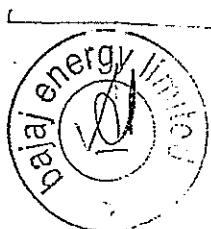
Bajaj Energy Limited,  
TC – 13, Gomti Nagar, Lucknow  
Unit – Utraula, Distt – Balrampur,  
Uttar Pradesh

**Respondent :**

Uttar Pradesh Power Corp. Ltd. (UPPCL)  
Shakti Bhawan  
14, Ashok Marg  
Lucknow – 226 001

**MOST RESPECTFULLY SHOWETH:**

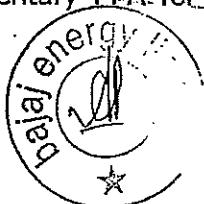
Bajaj Energy Limited ("Petitioner/BEL") most respectfully submits as under:-





The Petitioner humbly states that:

- 1) The present Petition is being filed under Section 62, 86(1)(a) and 86(1)(b) of Electricity Act, 2003 ("**Electricity Act**") read with Regulation 15 (1) of the Uttar Pradesh Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations 2019 ("**Tariff Regulations, 2019**") for fixation of Multiyear Tariff for the period from 01.04.2019 to 31.03.2024 in respect of 2 x 45 MW Utraula Thermal power project of Bajaj Energy Limited.
- 2) The Petitioner herein, i.e., Bajaj Energy Limited (hereinafter called "**BEL**" or the "**Petitioner**") is a company within the meaning of Companies Act, 2013 and was promoted by Bajaj Hindusthan Sugars Limited (erstwhile Bajaj Hindusthan Limited) (hereinafter '**BHL**') and is a generating company under Section 2(28) of the Electricity Act. BEL was earlier known as Bajaj Energy Private Ltd. The name was subsequently changed to Bajaj Energy Ltd. upon its conversion to a Public Limited Company. BEL has set up and, *inter-alia*, operates five generating stations in the State of Uttar Pradesh having total installed capacity of 450 MW, subsequent to a Memorandum of Understanding ("**MoU**") executed between the Government of Uttar Pradesh ("**GoUP**") and BHL under GoUP's Energy Policy, 2009.
- 3) BEL has entered into Power Purchase Agreements ("**PPA**") dated 10.12.2010 read with Supplementary PPAs dated 15.06.2011 with Uttar Pradesh Distribution Licensees ("**UP Discoms**"), which were signed by Uttar Pradesh Power Corporation Limited ("**UPPCL**") on behalf of UP Discoms in respect of each of the five generating stations for supply of 100% saleable energy for a period of 25 years. The PPA(s) were approved by Ld. UP Commission on 18.11.2010 read with Order dated 07.12.2010 (PPA for 90% saleable energy) and 03.11.2014 (Supplementary PPA for 100% saleable energy from BEL's Plant). The



present Petition pertains to the thermal generating station (2 x 45 MW) set up by BEL at Utraula (Balrampur District) ("**Plant**"). The Commercial Operation Date ("**COD**") of the Plant is 24.04.2012.

- 4) It is submitted that Section 62 of Electricity Act provides for determination of Tariff by this Hon'ble Commission for supply of electricity by generating company to a distribution licensee in accordance with the provisions of the Electricity Act. Since the entire power from BEL's plant is supplied to the UP Discos, this Hon'ble Commission has the necessary jurisdiction to determine BEL's Tariff under Section 86(1)(a) & (b) of the Electricity Act.
- 5) The Hon'ble Commission has notified the Uttar Pradesh Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2019 (hereinafter 'Tariff Regulations 2019') which came into force from 01.04.2019, specifying the terms & conditions and methodology of Tariff determination for the period 01.04.2019 to 31.03.2024.
- 6) Regulation 15 of UPERC Generation Tariff Regulations 2019 provides as follows:

**Quote**

**"Application for determination of Tariff:**

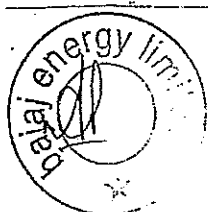
*(1) The generating company shall make an application for fixation of Tariff in respect of the completed units of the generating station in such forms and such manners as prescribed in these Regulations and Uttar Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations, 2004 as amended from time to time or any statutory reenactment thereof.*



*Provided that the applications for determination of Tariff shall be filed covering the period for which the terms and conditions of Tariff shall remain in force. "*

**Unquote**

- 7) BEL has recently filed the true up Petition of Utraula Station (2x45 MW) for the period from 01.04.2014 to 31.03.2019 on 19.10.2020 for trueing up of Tariff determined vide Order dated 24.5.2017 based on actual capital expenditure claimed as per UPERC (Terms and Conditions of Generation Tariff), 2014. Further, as per the aforesaid true-up Petition filed, the closing capital cost of the instant Station as on 31.03.2019 (i.e. Rs 534.97 Cr) has been considered as the opening capital cost for computation of Tariff in the instant Petition. This capital cost shall be subject to the outcome of the True up Petition filed before Hon'ble Commission for the period 2014-19 and based on the outcome, opening capital cost would be adopted accordingly.
- 8) The capital expenditure claimed in the instant Petition is based on the opening capital cost as on 01.04.2019 considered as above and estimated capital expenditures for the period 2019-24 have been projected based on the Regulation 17 and Regulation 20 of the Tariff Regulations, 2019.
- 9) As per Regulation 24(iv)(f) of the Tariff Regulations 2019, the water charges for thermal generating stations are to be allowed separately. Further, Clause 7.3.7 (b) of Schedule: 7-Tariff of the PPA with respect to water charges recovery provides as under:  
*"(b) The expenses on regulatory fee, payment to pollution control board, fringe benefit tax, impact of pay revision, cost of water and water cess shall be paid additionally at actuals."*



Accordingly, aforesaid charges may be allowed to be recovered based on the actual payment made by the Petitioner to the Govt. of U.P based on actuals for the 2019-24.

10) It is noteworthy to mention that Tariff has been calculated by considering 16% ROE worked out as follows:

- a) Additional 0.5 % ROE for early commissioning
- b) Base ROE as 15.5%

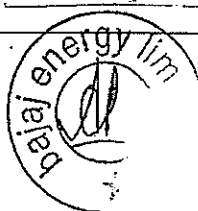
10.1 Additional 0.5% ROE for early commissioning of units was allowed during the applicable first Tariff period i.e. from the COD to 31.03.2014. Hon'ble Commission has continued the incentive of additional 0.5% ROE for subsequent Tariff period i.e. 01.04.2014 to 31.03.2019 by Hon'ble Commission vide order dated 24.05.2017 (Para -4, Pg-35). The same is quoted below:

**Quote**

***"Commission Analysis***

*(i) The Commission has allowed the following parameters for calculation of the Capacity Charges for BEPL plants:*

<b><i>Parameter</i></b>	<b><i>Norms</i></b>
<i>Interest on loan Capital</i>	<i>Weighted Average rate of Interest for the period</i>
<i>Depreciation including Advance against Depreciation</i>	<i>As per Regulations(Although for the addition..... during the year, depreciation is calculated for half year)</i>
<i>Return on Equity</i>	<i>16%(15.5% plus 0.5% additional ROE)</i>
<i>Tax on ROE</i>	<i>No grossing up is allowed as per the Regulations. The tax will be</i>



	<i>separately collected in Tax Escrow Account</i>
<i>Operation and Maintenance Expenses</i>	<i>As per Regulations</i>
<i>Interest on working Capital</i>	<i>As per Regulations</i>
<i>Compensation Allowance</i>	<i>Not Applicable</i>

### **5. Additional RoE:-**

*The Commission has approved additional RoE of 0.5% in line with its order dated 09.07.2014 and the applicable Regulations."*

**Unquote**

10.2 Additional 0.5% ROE (As per order dated 09.07.2014) provides as under:

**Quote**

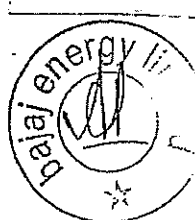
*"11. The provision under clause 21 (iii) of the UPERC (Terms and Condition of Tariff) Regulations, 2009 states as below:*

*Return on equity shall be computed on the equity base determined in accordance with Regulation 20 @ 15.5% per annum;*

*Provided that in case of projects commissioned on or after 1<sup>st</sup> April, 2009, if such projects are completed within the timeline specified in Appendix – IV, or for projects approved before 1<sup>st</sup> April, 2009 in absence of any provision made in PPA, an additional return of 0.5% shall be allowed.*

*Provided further that additional return shall not be admissible, if the project is not completed within the timeline specified above for reasons whatsoever."*

**Unquote**



- 10.3 PPA Provisions for 15.5% base ROE as applicable: It is submitted that Schedule 7 of the PPA deals with Tariff and recognizes the individual components including depreciation, advance against depreciation, ROE, O&M expenses, working capital, taxes duties impositions etc. However, It is relevant to note that the PPA and the Regulations 2019 provide differently with regard to ROE. A comparison of the two is as under:

### PPA

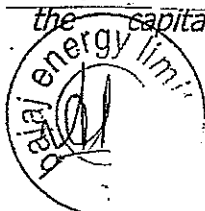
### Regulations, 2019

#### **7.3.6 Return on Equity**

*Return on Equity* Return on equity shall be computed on the equity base determined in accordance with UPERC Regulations @ 15.50% per annum. Provided that in case the Unit(s) of the Seller is Commissioned within the timelines as specified in UPERC Regulations, the Seller shall also be entitled to an additional return of 0.5%  
 Provided that equity invested in foreign currency shall be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the exchange rate on the Due Date prevailing on the Due Date.  
 The premium raised by the Seller while issuing share capital and investment of internal resources created out of free reserve of the Seller, if any, for the funding of the Power Station, shall also be reckoned as paid Equity, provided such premium amount and internal resources are actually utilised for meeting the capital

#### **(i) Return on Equity**

*Return on equity* shall be computed in rupee terms on the equity base determined in accordance with these Regulations @ 15% per annum.  
 Provided that the rate of return of a new project shall be reduced by upto 1% for such period as maybe decided by the Commission, if the generating station is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch center or protection system based on the report submitted by SLDC;  
 Provided also that as and when any of the above requirements are found lacking in an existing generating station based on the report submitted by the SLDC, RoE may be reduced by up to 1 % for such period as may be decided by the Commission;  
 Explanation: The premium raised by the generating company while issuing share capital and investment of internal resources created out of free reserve of the generating company, if any, for the funding of the project, shall also reckoned as paid up capital for the purpose of computing return on equity,



*expenditure of the Seller and provided such premium amount and forms part of the approved up internal resources are actually utilized capital for the purpose of for meeting the capital expenditure of computing Return on financial the generating station and forms part of package. the approved financial package.*

- 10.4 It is respectfully submitted that even at the time of framing of the Tariff Regulations, the Hon'ble Commission was cautious of the fact that individual PPAs with generators provide for different Tariff parameters and therefore has provided the following safeguards in the Regulations, 2019:

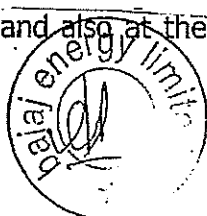
**2. Scope and extent of Application:**

*"(4) In case of any conflict between provisions of these Regulations and a Power Purchase Agreement signed between a Generating Company and Distribution Licensee(s)/beneficiary (ies), the provisions of these Regulations shall prevail.*

*Provided that in case of Projects where parameters have been agreed to in the Power Purchase Agreement or determined through earlier Regulations prior to 1.4.2019, for any hardship due to discrepancy/ inconsistency with parameters given in these Regulations, the Commission may be approached and parameters in such cases may be determined by the Commission at the time of Tariff determination of concerned Generating Station."*

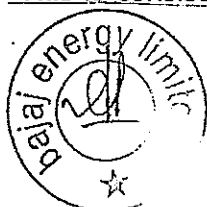
.....

- 10.5 It is submitted that in terms of the proviso to Regulation 2 (4) (quoted above) the Hon'ble Commission while recognizing the supervening effect of the Tariff Regulations over the terms and conditions contained in the PPA had specifically notified the proviso in terms of which the Hon'ble Commission has retained the power to deal with the hardship due to deviation contained in the Regulation from the PPA. The Petitioner submits that the Petitioner had entered into the PPA on 10.12.2010 with UPPCL and, therefore, the provisions of the proviso to Regulation 2 (4) of the Tariff Regulations (quoted above) squarely applies to the Petitioner's Power Projects of 2 x45 MW. At the time when the Petitioner signed the PPA and also at the time when the Power Projects achieved



commercial operation, the Tariff Regulations notified by the Hon'ble Commission specifically provided for the Return on Equity to be allowed at 15.5% per annum. The financial closure, arrangement of funds, deployment of equity and investments made in the capital cost of the plant etc. by the Petitioner have been on the above parameters of the Return on Equity being allowed at 15.5%. The Return on Equity at 15.5% was also consistent with the Tariff Regulations of the Central Commission which recognize the equity even for public sector companies such as NTPC, Powergrid, DVC, NEEPCO etc. at the above rate. The Return on Equity was envisaged to be at 15.5% on account of the risk involved to the Investor in investing in the power project as compared to the risk in other sectors. The post-tax return of 15.5% was considered by the Government of India, the Central Commission, the State Commission including the Hon'ble Commission to be necessary to incentivize the generating companies to invest in the generating projects and supply power to the distribution licensees. It was considered necessary to allow such Return on Equity at 15.5% to give certainty to the Investor.

- 10.6 In the facts and circumstances mentioned above, the Petitioner herein as well as the other similarly placed generating companies had invested in the generating projects relying on the Return on Equity being available at 15.5% per annum and had arranged their affairs on the above basis while committing in the power projects and entering into the PPA for a period of 25 years with UPPCL.
- 10.7 In view of the above, the changes made to the Tariff Regulations, 2019 in regard to the Return on Equity on its terms should not be applied to the generating companies which have already entered into the PPA with UPPCL on the terms and conditions duly settled by the Hon'ble Commission. This is consistent with the objective behind the proviso to





Regulation 2 (4) which provides for the power in the Hon'ble Commission to make an exception in case of the PPA as the Tariff determined under the earlier Regulations prior to 1.4.2019. The proviso thus, recognizes that there will be hardship to such generating companies because of the inconsistency that the parameters given in the Regulation. The fundamental basis on which the investment was made by the Petitioner would be changed if the reduction in the Return on Equity from 15.5% per annum to 15% is given effect to.

10.8 It is stated that in so far as the Petitioner is concerned, the Tariff norms provided in the PPA forms the basis for achieving of financial closure, which was done on the basis of the ROE @ 15.5% as per the PPA. However, the Regulations 2019 provide differently on ROE which can apply prospectively to parties entering in to a PPA today but ought not to affect the rights of the Petitioner who has entered into PPA before the notification of Regulation 2019.

10.9 Further, Section 61 of the Electricity Act, 2003, inter-alia, reads as under

***Section 61. (Tariff Regulations):***

*The Appropriate Commission shall, subject to the provisions of this Act, specify the terms and conditions for the determination of Tariff, and in doing so, shall be guided by the following, namely:-*

*(a) The principles and methodologies specified by the Central Commission for determination of the Tariff applicable to generating companies and transmission licensees;*

10.10 It is respectfully submitted that the Central Electricity Regulatory Commission (**CERC**) has also framed its Tariff Regulations for 2019-2024 wherein the ROE has been provided at 15.5 %. The Central Commission has retained the ROE at 15.5% from its earlier Tariff Regulations, 2014-2019. In the statement of object and reasons, the Central Commission has stated as under:



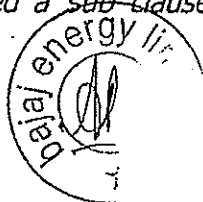
## **"10. Chapter 8 – Computation of Annual Fixed Cost**

### **10.1 Return on Equity [Regulation 30]**

10.1.1 In the draft 2019 Tariff Regulations, the Commission had specified a post-tax RoE rate of 15.50% for thermal generating station, transmission system and run of the river hydro generating station. The Commission also provided that rate of return on equity in respect of additional capitalization after cut-off date within or beyond the original scope of work shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system. Besides, the Commission also provided for specific instances, where rate of return of equity shall be reduced by 1.00% , in case of a generating station or transmission system is found to be declared under commercial operation without commissioning or otherwise at any point of time, without operating of any of the RGMO, FGMO, data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC.

The Commission has considered the stakeholders comments/suggestions. The Commission is of the view that in cases where the additional capitalization has become necessary to Change in Law event, normal rate of return of equity should be allowed instead of allowing rate of return on equity at weighted average rate of interest on actual loan portfolio. Therefore, first proviso to clause (2) of Regulation 30 has been revised suitably.

10.1.3 The Commission agrees with suggestion of the stakeholders that in the wake of large-scale renewable integration and dynamic shape of the load curve, higher degree of ramping support from thermal generation would be required. The CEA (Technical Standards for Construction of Electrical plant and Electric lines) Regulations 2010 prescribe +/-3% per minute ramp rate for coal fired thermal generating stations. The Indian Electricity Grid Code (IEGC) provide for a ramp rate of +/-1 % per minute only. The Commission is of the view that all thermal generating units should mandatorily provide minimum ramp rate of +/-1 % per minute and there should be disincentive for not achieving the minimum ramp rate of +/-1 % per minute with effect from 1.4.2020. In addition, in order to encourage generating stations to provide higher ramp rate than +/-1 % per minute, there should be incentive. Therefore, the Commission has added a sub clause (iii) in the second Proviso to clause (2) of



*Regulation 30, which shall be applicable to thermal generating station and shall be effective from 1.4.2020, providing for incentive or disincentive for achieving or failing to achieve desired ramping levels. In case of failure to achieve the ramp rate of 1% per minute, the rate of return on equity shall be reduced by 0.25%. Further, an additional return of 0.25% on equity shall be allowed on achievement for every incremental ramp rate of 1% over and above the ramp rate of 1% per minute, subject to ceiling of additional return of 1.00%. It is further provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019"*

10.11 In addition to Regulation 2 (4) of the Tariff Regulations, 2019 there are following provisions in the said Tariff Regulations.

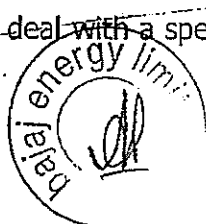
**"11. Power to Remove Difficulties:**

*If any difficulty arises in giving effect to these Regulations, the Commission may, of its own motion or otherwise, by an Order and after giving a reasonable opportunity to those likely to be affected by such Order, make such Provisions not inconsistent with these Regulations, as may appear to be necessary for removing the difficulty.*

**12. Power to Relax:**

*The Commission, for reasons to be recorded in writing, may vary any of the Provisions of these Regulations on its own motion or on an application made before it by an interested person by an order."*

10.12 In the facts and circumstances mentioned above, it is a fit and proper case where the Hon'ble Commission may be pleased to exercise the powers to remove difficulties and power to relax as provided in the above Regulation to give relief to the Petitioner. The Petitioner submits that the provisions such as Regulations 2 (4), 11 and 12 of the Tariff Regulations, 2019 are provided in the Tariff Regulations (delegated legislation or plenary legislation) by nature of exemption etc. specifically in order to deal with a specific situation which needs to be addressed on



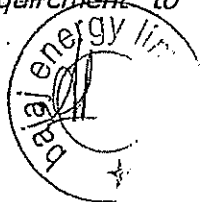
account of the hardship or adverse impact that may arise. The objective and nature of the provision providing for exclusion by way of exemption, power to relax, power to remove difficulties has been considered by the Hon'ble Courts in the following cases:

**1. M.P. Jain – Cases and Materials on Indian Administrative Law – 1994 Edition Volume 1, Page 117:**

*"At times, a statute may contain a 'removal of difficulty' clause. The need for such a clause arises because at the time of passing a new law, it may not be possible to foresee all the difficulties which might arise in its working. In order to obviate the need to go to the legislature to pass a law to remove any difficulty howsoever trivial, the executive is given power to remove any such difficulty by making an order. At times, 'removal of difficulty' clause may empower the government to amend the parent Act or any other Act with a view to bring the parent Act into full operation. Its widest extension is to empower the delegate, 'if any, difficulty arises in bringing the Act into operation to remove the difficulty by order.' This kind of clause has acquired the nickname of Henry VIII clause, as personifying 'executive autocracy'. According to the Committee on Ministers Powers, the sole purpose of Parliament in enacting such a provision is 'to enable minor adjustments of its own handiwork to be made for the purpose of fitting its principal into the fabric of existing legislation, general or local.' ..."*

**2. NTPC Limited v. Madhya Pradesh State Electricity Board 2007 ELR APTEL 7**

- i. *"It must be held, that the power comprised in Regulation 13 is essentially the 'power to relax'. In case any Regulation causes hardship to a party or works injustice to him or application thereof leads to unjust result, the Regulation can be relaxed. The exercise of power under Regulation 13 of the Regulation is minimized by the requirement to record the reasons in writing by the*



*Commission before any provision of the Regulations is relaxed. Therefore, there is no doubt that the Commission has the power to relax any provision of the Regulations.*

*(para 24 b)*

- ii. *The power to relax any provision by the Commission can be invoked by the Commission itself or on an application made by an interested person.*  
*(Para 25 d)*

- iii. *The scarcity of gas for which the Appellant was not able to reach the target availability ought to have been taken note of by the CERC in the Impugned Order. In the circumstances, it is fit case in which the Commission ought to have exercised its powers under Regulation 13 of the Regulations for relaxing the target availability for Kawas and Gandhar GPS.*  
*(Para 36 g)"*

**3. Hindustan Paper Corporation Limited v. Government of Kerala (1986) 3 SCC 398:**

*"9. ... In almost all the statutes by which the fiscal or economic interests of the State are regulated, provision for granting exemption in appropriate cases would have necessarily to be there and the power to grant exemption is invariably conferred on the Government concerned. The Legislature which is burdened with heavy legislative and other types of work is not able to find time to consider in detail the hardships and difficulties that are likely to result by the enforcement of the statute concerned. It has, therefore, now become a well-recognised and constitutionally accepted legislative practice to incorporate provisions conferring the power of exemption on the Government in such statutes. Such exemptions cannot ordinarily be granted secretly. A notification would have to be issued and published in the Gazette and in the ordinary course it would be subject to the scrutiny by the Legislature. The*



*power can be exercised only in the public interest as provided by the Section itself. The validity of provisions conferring the power of exemption has been consistently upheld by this Court in a number of decisions commencing with the State of Bombay and Anr. v. F.N. Balsara MANU/SC/0009/1951 : [1951]2SCR682 ."*

The above judgments are collectively enclosed as **Annexure A (colly)**.

10.13 It is well settled that power to relax the norms is a judicial discretion and can be exercised on a case to case basis by recording reasons in writing. It is submitted that the Petitioner has clearly set out the reasons above and therefore is entitled to the said relief.

11) Further, it is pertinent to mention that M/s Lalitpur Power Generation Company Limited (LPGCL) Group Company of Bajaj Group had filed Petition no. 1524/2019 on 06.11.2019 on the issue of ROE. The main prayer of the Petition was to hold that the PPA dated 10.12.2010 entered into between LPGCL and Uttar Pradesh Power Corporation Limited in regard to generation and supply of power to Uttar Pradesh Power Corporation Limited from 3 x 660 MW Thermal Power Plants of LPGCL shall continue to be eligible for a Return on Equity at the rate of 15.5% per annum as per Article 7.3.6 of the PPA for the entire duration of the PPA even after coming into force of the Tariff Regulations, 2019 notified by the Hon'ble Commission.

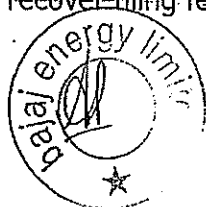
12) Since, LPGCL Tariff Petition 2014-19 was pending before Hon'ble Commission, LPGCL decided to withdraw the Petition with the liberty to approach the commission at later stage. Hon'ble Commission vide order dated 03.02.2020 while allowing the withdrawal of the Petition has mentioned the following:

*"The Commission allowed to withdraw the Petition and **granted liberty to approach at a later stage.**" Emphasis added*



It is pertinent to mention that since, BEL PPA also have similar provisions as stipulated in LPGCL PPA regarding return on equity, BEL is praying this Hon'ble Commission to kindly allow the 16% ROE for BEL stations.

- 13) The Petitioner has accordingly calculated the Tariff for 2019-24 period based on the above and the same is enclosed as **Appendix-II** to this Petition.
- 14) The Petitioner is filing this Tariff Petition subject to the outcome of its various appeals/ Petitions pending before different courts. Besides, the Petitions filed by BEL for determination of capital base as on 31.03.2014 through true-up exercise are pending before the Hon'ble Commission and would take some time. The Petitioner, therefore, reserves its right to amend the Tariff Petition as per the outcome in such appeals/ Petitions, if required.
- 15) Accordingly, the Petitioner has considered ROE @ 15.5%+0.5% as applicable at the time of investment approval for computation of Tariff for the period 2019-24. Hon'ble Commission may approve the same and grant the Tariff accordingly.
- 16) The Petitioner has already paid the requisite filing fee vide ..... on .....for the year 2019-20 and the details of the same have been duly furnished to the Hon'ble Commission. For the subsequent years, it shall be paid as per the provisions of the UPERC (Payment of Fees) Regulations, 2012 as amended. Further Regulation 33 of Tariff Regulations 2019 provides that the application fee shall be allowed to be recovered from the beneficiaries subject to prudence check by Hon'ble Commission. Accordingly, it is prayed that Hon'ble Commission may be pleased to allow recover-filing fee from the beneficiary.



- 17) It is further submitted that levies, taxes, duties, service tax etc. levied by the various authorities on Petitioner in accordance with law shall be billed to beneficiaries additionally.
- 18) The Petitioner further craves liberty to add or make further submission as may be required by the Hon'ble Commission during the course of these proceedings.

### PRAYERS

In the light of the above submissions, the Petitioner prays that the Hon'ble Commission may be pleased to:

- i) Approve Tariff of Utraula for the Multiyear Tariff period 01.04.2019 to 31.03.2024 as per appendix-II enclosed herewith as per provisions of UPERC (Terms and Condition of Tariff) Regulations, 2019;
- ii) Allow the ROE @ 16% as brought out at para 10, 11 and 12 of this Petition.
- iii) Allow the recovery of filing fees paid to the Hon'ble Commission from the beneficiary.
- iv) Pass any other order as it may deem fit in the circumstances mentioned above.

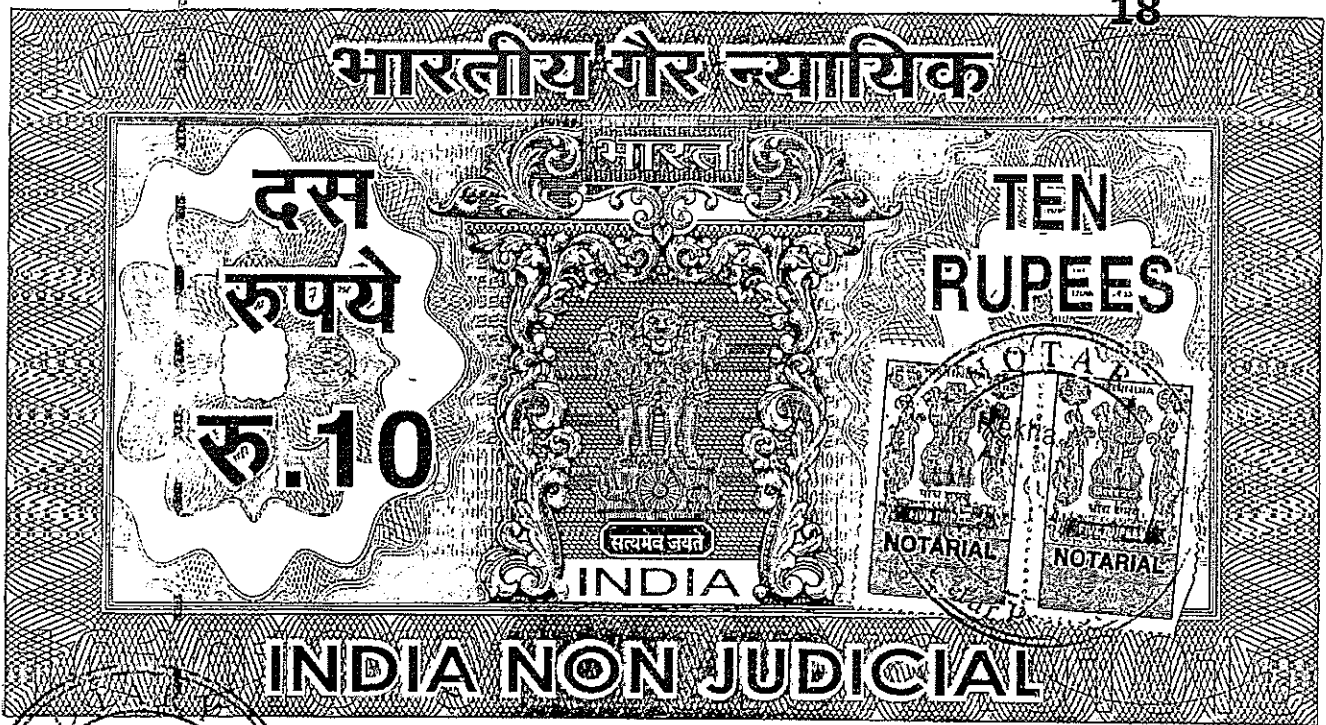
Lucknow

Dated: - 03.11.2020



Amit Kumar Pandey  
Authorised Signatory  
Bajaj Energy Limited  
Petitioner/Applicant





UTTAR PRADESH

15AE 795265

**BEFORE THE UTTAR PRADESH ELECTRICITY REGULATORY  
COMMISSION, LUCKNOW**

PETITION NO.

OF 2020

**IN THE MATTER OF: Fixation of Multiyear Tariff.**

Petition under Section 62, 86(1) (a) & 86 (1) (b) of the Electricity Act, 2003 read with Regulation 15 (1) UPERC (Terms and Condition of Tariff) Regulations, 2019 for fixation of Multiyear Tariff for the period from 01.04.2019 to 31.03.2024 in respect of 2 x 45 MW Utraula Thermal power project of Bajaj Energy Limited.

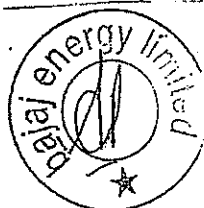
M/S Bajaj Energy Limited, Utraula Unit

.....Petitioner

**VERSUS**

Uttar Pradesh Power Corporation Limited and others .....Respondents

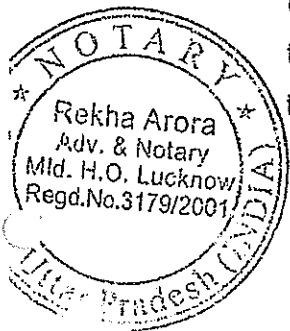
R.A. 2020  
31/11/2020  
Rekha A. Gupta  
Adv. & Notary  
Mtd. H.O. LUCKNOW, U.P. INDIA  
Regd. No. 3179/2001



**AFFIDAVIT IN SUPPORT OF THE PETITION**

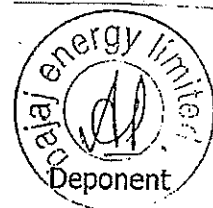
I, Amit Kumar Pandey son of Shri Suresh Pandey aged about 40 years, resident of H 308, Vrindavan Yojna, Raibarelli Road, Lucknow do hereby solemnly affirm & state on oath as under:

1. That the deponent is the Authorized Representative, of M/s Bajaj Energy Ltd., and as such is well conversant with the facts & circumstances of the case deposed hereunder and is authorized to swear this on behalf of the Petitioner Company.
2. The applicant is filing this Petition with respect to Utraula Unit, under section 62, 86(1) (a) and 86(1) (b) of the Electricity Act, 2003, the provisions of Power Purchase Agreement and relevant Regulations.
3. That the deponent declares that there is no case pending in any court of law with regard to the matter referred to the Commission.
4. That the contents of paragraph 1 to 5 of the accompanying Petition are true on facts and those of Paragraph 6 to 11 are believed to be true and correct upon information received from the documents on record and those of Paragraph 12 to 18 and Prayer Clause are believed to be true on the basis of my knowledge, belief and legal advice sought.



Place: Lucknow.

Dated: 03.11.2020



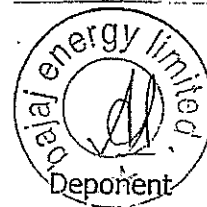
*R. Arora*  
*Rekha Arora*  
 Adv. & Notary  
 Mtd. H.O. LUCKNOW U.P. INDIA  
 Regd.No. 3179/2001

**VERIFICATION**

I, Anil Kumar Pandey, the above-named deponent, do hereby verify that the contents of paragraphs 1 to 4 of this Affidavit are true to my personal knowledge. No part of it is false and nothing material has been concealed, so help me God.

Place: Lucknow.

Dated: 03.11.2020



Execution admitted  
before me.

*R. Arora*  
*31/11/2020*  
Rekha Arora  
Adv. & Notary  
Mid. H.O. LUCKNOW U.P. INDIA  
Regd. No. 3179/2001

I know & certify the deponent ~~Execution~~  
who has signed/ put his ~~mark~~ *mark*

**Appendix-II**

**TARIFF FILING FORMS (THERMAL)**

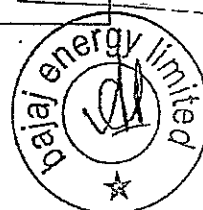
**FOR DETERMINATION OF TARIFF**

**PART-I**

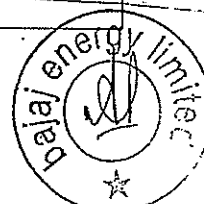
## PART-I

Checklist of Forms and other Information/ documents for tariff filing forThermal Stations

Form No.	Title of Tariff Filing Forms (Thermal)	Tick
FORM- 1	Summary Sheet	
Form-1(I)	Statement showing claimed capital cost	
Form-1(II)	Statement showing Return on Equity	
FORM-2	Plant Characteristics	
FORM-3	Normative parameters considered for tariff computations	
FORM- 4	Details of Foreign loans	
FORM- 4A	Details of Foreign Equity	
FORM-5	Abstract of Admitted Capital Cost for the existing Projects	
FORM-5A	Abstract of Capital Cost Estimates and Schedule of Commissioning for the New projects	
FORM-5B	Break-up of Capital Cost for Coal based projects	
FORM-5C	Break-up of Construction/Supply/Service packages	
FORM-5D	Details of variables , parameters , optional package etc. for New Project	
FORM-5Di	In case there is cost over run	
FORM-5Dii	In case there is time over run	
FORM-5E	In case there is claim of additional RoE	
FORM- 6	Financial Package upto COD	
FORM- 7	Details of Project Specific Loans	
FORM- 8	Details of Allocation of corporate loans to various projects	
FORM-9A	Statement of Additional Capitalisation after COD	
FORM – 9B	Statement of Additional Capitalisation during lag end of the useful life of Project	
FORM – 9Bi	Details of Assets De-capitalised during the period	
FORM – 9C	Statement showing reconciliation of ACE claimed with the capital additions as per books	
FORM – 9D	Statement showing items/assets/works claimed under Exclusions	



Form No.	Title of Tariff Filing Forms (Thermal)	Tick
FORM- 9E	Statement of Capital cost	
FORM- 9F	Statement of Capital Works in Progress	
FORM- 10	Financing of Additional Capitalisation	
FORM- 11	Calculation of Depreciation	
FORM- 12	Statement of Depreciation	
FORM- 13	Calculation of Weighted Average Rate of Interest on Actual Loans	
FORM- 13A	Calculation of Interest on Normative Loan	
FORM- 13 B	Calculation of Interest on Working Capital	
FORM- 13 C	Other Income as on COD	
FORM- 13 D	Incidental Expenditure during Construction up to Scheduled COD and up to Actual COD	
FORM- 13 E	Expenditure under different packages up to Scheduled COD and up to Actual COD	
FORM- 14	Draw Down Schedule for Calculation of IDC & Financing Charges	
FORM- 14A	Actual cash expenditure	
FORM-15	Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges <sup>1</sup>	
FORM-16	Details/Information to be Submitted in respect of Capital Spares	
FORM-17	Liability Flow Statement	
FORM-18	Station wise Cost Audit Report	
Other Information/ Documents		
Sl. No.	Information/Document	Tick
1	Certificate of incorporation, Certificate for Commencement of Business, Memorandum of Association, & Articles of Association ( For New Station setup by a company making tariff application for the first time to CERC)	
2	Station wise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & annexures on COD of the Station for the new station & for the relevant years.  Station wise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & annexures for the existing station for relevant years.	
3	Copies of relevant loan Agreements	
4	Copies of the approval of Competent Authority for the Capital Cost and Financial package.	
5	Copies of the Equity participation agreements and necessary approval for the foreign equity.	
6	Copies of the BPSA/PPA with the beneficiaries, if any	



7	<p>Detailed note giving reasons of cost and time over run, if applicable.</p> <p>List of supporting documents to be submitted:</p> <p>Detailed Project Report</p> <p>CPM Analysis</p> <p>PERT Chart and Bar Chart</p> <p>Justification for cost and time Overrun</p> <p>Generating Company shall submit copy of Cost Audit Report along with cost accounting records, cost details, statements, schedules etc. for the Generating Unit wise /stage wise/Station wise/ and subsequently consolidated at Company level as submitted to the Govt. of India for first two years i.e. 2014-15 and 2015-16 at the time of mid-term true-up in 2016-17 and for balance period of tariff period 2014-19 at the time of final true-up in 2019-20. In case of initial tariff filing the latest available Cost Audit Report should be furnished.</p>	
8		
9	Any other relevant information, (Please specify)	
10	Reconciliation with Balance sheet of any actual additional capitalization and amongst stages of a generating station	

Note1: Electronic copy of the petition (in words format) and detailed calculation as per these formats (in excel format ) and any other information submitted shall also be furnished in the form of CD/Floppy disc.



Summary Sheet

Name of the Petitioner

Bajaj Energy Pvt. Ltd.

Name of the Generating Station Place (Region/District/State):

Utraula 2x 45 MW TPP

S.No.	Particulars	Unit	Existing 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
1	2		3	4	5	6	7	8
1.1	Depreciation	Rs Lakh	3,112.99	3,113.11	3,114.00	3,129.58	3,144.20	2,663.27
1.2	Interest on Loan	Rs Lakh	2,063.99	1,753.55	1,333.21	941.18	552.13	144.55
1.3	Return on Equity <sup>1</sup>	Rs Lakh	2,567.76	2,567.86	2,568.59	2,581.39	2,593.46	2,593.46
1.4	Interest on Working Capital	Rs Lakh	1,486.07	948.49	944.74	944.58	944.71	940.40
1.5	O & M Expenses	Rs Lakh	2,745.90	2,986.40	3,070.80	3,177.90	3,290.40	3,465.60
1.7	Compensation Allowance (If applicable)	Rs Lakh	-	-	-	-	-	-
	Total	Rs Lakh	11,976.71	11,349.40	11,031.44	10,774.63	10,524.91	9,757.28
2.1	Total (Rs./Kwh)	Rs./Kwh	2.01	1.88	1.82	1.78	1.74	1.62
	Landed Fuel Cost ( Domestic : coal)	Rs/Tone						
	(%) of Fuel Quantity	(%)						
2.2	Landed Fuel Cost ( Imported Coal)	Rs/Tone						
	(%) of Fuel Quantity	(%)						
2.3	Secondary fuel oil cost	Rs/Unit						
	Energy Charge Rate ex-bus(Paise/kWh) <sup>2A, 2B, 2C</sup>	Rs/Unit	-	-	-	-	-	-

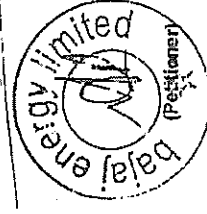
## Note:

1: Details of calculations, considering equity as per regulation, to be furnished.

2A: If multifuel is used simultaneously, give 2 in respect of every fuel individually.

2B: The total energy charge shall be worked out based on ex-bus energy scheduled to be sent out.

2C: The Energy Charge rate for the month shall be based on fuel cost(s) and GCV(s) for the month as per Regulation 26 (i).





Amount in Rs. Lakh

Form-1(I) -Statement showing claimed capital cost:

S. No.	Particulars	Existing 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
(1)	(2)		(3)	(4)	(5)	(6)	(7)
#	Opening Capital Cost	53,492.98	53,496.99	53,496.99	53,527.70	54,030.40	54,030.40
	Add: Addition during the year / period	4.01	-	30.70	532.70	-	-
	Less: Decapitalisation during the year / period	-	-	-	-	-	-
	Less: Reversal during the year / period	-	-	-	-	-	-
	Add: Discharges during the year / period	-	-	-	-	-	-
	Closing Capital Cost	53,496.99	53,496.99	53,527.70	54,530.40	54,030.40	54,030.40
	Average Capital Cost	53,494.99	53,496.99	53,512.34	53,779.25	54,030.40	54,030.40

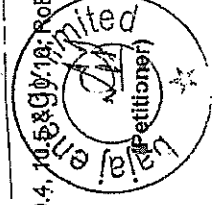
# Closing Capital cost as on 31.03.2019 as filed in true up Tariff Petition for the period 01.04.2014 to 31.03.2019.

Form-1(II) -Statement showing Return on Equity:

Sl. No.	Particulars	Existing 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
(1)	(2)		(3)	(4)	(5)	(6)	(7)
	Opening Equity	16,047.89	16,049.10	16,049.10	16,058.31	16,209.12	16,209.12
	Add: Increase due to addition during the year / period	1.20	-	9.21	150.81	-	-
	Less: Decrease due to de-capitalisation during the year / period	-	-	-	-	-	-
	Less: Decrease due to reversal during the year / period	-	-	-	-	-	-
	Add: Increase due to discharges during the year / period	-	-	-	-	-	-
	Closing Equity	16,049.10	16,049.10	16,058.31	16,209.12	16,209.12	16,209.12
	Average Equity	16,048.50	16,049.10	16,053.70	16,133.71	16,209.12	16,209.12
	Rate of ROE (pre tax)	16.00%	16.00%	16.00%	16.00%	16.00%	13.00%
	Return on Equity	2,567.76	2,567.86	2,568.59	2,531.39	2,593.46	2,593.46

Note: 1) 0.5% for early COD as allowed vide orders dated 09.07.2014 &amp; 24.05.2017 for the period of COD to 31.03.2014 and 01.04.2014 to 31.03.2019 respectively (as submitted under para 10.1 of the Petition).

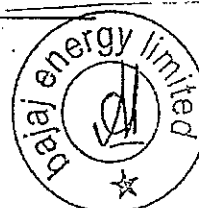
2) According to UPERC 2019 tariff regulations (2) (4), PPA signed with UPPCL &amp; CERC tariff regulation 2019 as mentioned in para 10.4, the ROE at the base rate of 15.5% has been considered &amp; prayed for.



## PART-I FORM- 2

## Plant Characteristics

Unit(s)/Block(s)/Parameters	Unit-I	Unit-II
Installed Capacity ( MW)	45	45
Schedule COD as per Investment Approval	24-Apr-12	
Actual COD /Date of Taken Over (as applicable)	24-Apr-12	
Pit Head or Non Pit Head	Non Pit Head	
Name of the Boiler Manufacture	M/s Thermax	
Name of Turbine Generator Manufacture	M/s Siemens India	
Main Steams Pressure at Turbine Inlet (kg/cm <sup>2</sup> ) <sup>1</sup>		
Main Steam Temperature at Turbine Inlet (°C) <sup>1</sup>		
Reheat Steam Pressure at Turbine inlet (kg/cm <sup>2</sup> ) <sup>1</sup>		
Reheat Steam Temperature at Turbine inlet (°C) <sup>1</sup>		
Main Steam flow at Turbine inlet under MCR condition (tons /hr) <sup>2</sup>		
Main Steam flow at Turbine inlet under VWO condition (tons /hr) <sup>2</sup>		
Unit Gross electrical output under MCR /Rated condition (MW) <sup>2</sup>		
Unit Gross electrical output under VWO condition (MW) <sup>2</sup>		
Guaranteed Design Gross Turbine Cycle Heat Rate (kCal/kWh) <sup>3</sup>	2281	2281
Conditions on which design turbine cycle heat rate guaranteed		
% MCR		
% Makeup Water Consumption		
Design Capacity of Makeup Water System		
Design Capacity of Inlet Cooling System		
Design Cooling Water Temperature (°C)		
Back Pressure		
Steam flow at super heater outlet under BMCR condition (tons/hr)		
Steam Pressure at super heater outlet under BMCR condition) (kg/cm <sup>2</sup> )		
Steam Temperature at super heater outlet under BMCR condition (°C)		
Steam Temperature at Reheater outlet at BMCR condition (°C)		
Design / Guaranteed Boiler Efficiency (%) <sup>4</sup>	83.60	83.60
Design Fuel with and without blending of domestic/imported coal		
Type of Cooling Tower		
Type of cooling system <sup>5</sup>	Induced Draft Closed Circuit Cooling Tower	
Type of Boiler Feed Pump <sup>6</sup>	Motor Driven	
Fuel Details <sup>7</sup>		
-Primary Fuel	Coal	
-Secondary Fuel	Light Diesel Oil	
-Alternate Fuels	N.A.	



## PART-I FORM-3

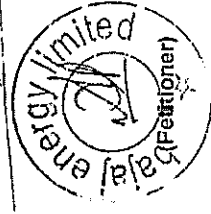
Normative parameters considered for tariff computations

Name of the Petitioner  
Name of the Generating Station

Bajaj Energy Pvt. Ltd.  
Utrula 2x 45 MW TPP

Particulars	Unit	Existing 2018-19	Year Ending March				
			2019-20	2020-21	2021-22	2022-23	2023-24
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Base Rate of Return on Equity	%	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%
Effective Tax Rate 4	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Target Availability	%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%
Auxiliary Energy Consumption	%	11.00%	9.75%	9.75%	9.75%	9.75%	9.75%
Gross Station Heat Rate	kCal/kWh	2,890	2,838	2,838	2,838	2,838	2,838
Specific Fuel Oil Consumption	ml/kWh	1	0.25	0.25	0.25	0.25	0.25
Cost of Coal for WC <sup>1</sup>	In Days	60	50	50	50	50	50
Cost of Main Secondary Fuel Oil for WC <sup>1</sup>	In Months	2	2	2	2	2	2
O & M expenses	Rs lakh / MW	30.51	32.96	34.12	35.31	36.56	37.84
Maintenance Spares for WC	% of O&M	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Receivables for WC	In Months / Days	2	45	45	45	45	45
Storage capacity of Primary fuel	MT	80,000	80,000	80,000	80,000	80,000	80,000
SBI 1 Year MCLR + 350 basis points as on 01st April 2019 <sup>2</sup>	%	13.50%	12.05%	12.05%	12.05%	12.05%	12.05%
Blending ratio of domestic coal/imported coal			100% Domestic Indian Coal				

1. For Coal based generating stations
2. Mention relevant date



PART-I FORM- 4

## Details of Foreign loans - NOT APPLICABLE

(Details only in respect of loans applicable to the project under petition)

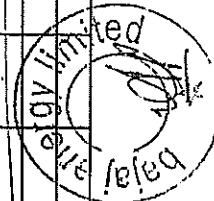
Name of the Petitioner Bajaj Energy Pvt. Ltd.  
 Name of the Generating Station Ultraia 2x 45 MW TPP  
 Exchange Rate at COD or 31.03.2004, whichever is later  
 Exchange Rate as on 31.3.2019

S. No.	Financial Year (Starting from COD)	Year 1			Year 2			Year 3 and so on					
		2	3	4	5	6	7	8	9	10	11	12	13
		Date	Amount (Foreign Currency )	Relevant Exchange Rate	Amount (Rs. Lakh)	Date	Amount (Foreign Currency )	Relevant Exchange Rate	Amount (Rs. Lakh)	Date	Amount (Foreign Currency )	Relevant Exchange Rate	Amount (Rs. Lakh)
	Currency <sup>1</sup>												
A.1	At the date of Drawl or at the beginning to the year of the period <sup>2</sup>												
2	Scheduled repayment date of principal												
3	Scheduled payment date of interest												
4	At the end of Financial year												
B	In case of Hedging <sup>3</sup>												
1	At the date of hedging												
2	Period of hedging												
3	Cost of hedging												
	Currency <sup>2</sup>												
A.1	At the date of Drawl <sup>2</sup>												
2	Scheduled repayment date of principal												
3	Scheduled payment date of interest												
4	At the end of Financial year												
B	In case of Hedging <sup>3</sup>												
1	At the date of hedging												
2	Period of hedging												
3	Cost of hedging												

Not Applicable

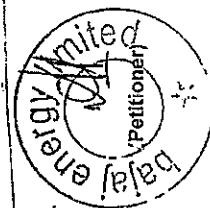
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Not Applicable



**UFR**

1. Name of the currency to be mentioned e.g. US\$, £M, etc.
2. In case of more than one draw during the year, Exchange rate at the date of each crawl to be given
3. Furnish details of hedging, in case of more than one hedging during the year or part hedging, details of each hedging are to be given
4. Tax (such as withholding tax) details as applicable including change in rates, date from which change effective etc. m.usdt be clearly indicated



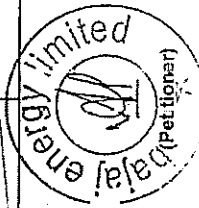
Details of Foreign Equity - NOT APPLICABLE  
(Details only in respect of Equity infusion if any applicable to the project under petition)

Name of the Petitioner  
Name of the Generating Station  
Exchange Rate on date/s of Infusion

Bajaj Energy Pvt. Ltd.  
Utraula 2x45 MW TPP

Financial Year		Year 1			Year 2			Year 3 and so on					
S. No.	1	2	3	4	5	6	7	8	9	10	11	12	13
		Date	Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs. Lakh)	Date	Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs. Lakh)	Date	Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs. Lakh)
	Currency <sup>1</sup>												
A.1	At the date of infusion <sup>2</sup>												
2													
3													
	Currency <sup>2</sup>												
A.1	At the date of infusion <sup>2</sup>												
2													
3													
	Currency <sup>3</sup>												
A.1	At the date of infusion <sup>2</sup>												
2													
3													
	Currency <sup>1</sup> and so on												
A.1	At the date of infusion <sup>2</sup>												
2													
3													

**Not Applicable**



1. Name of the currency to be mentioned e.g. US\$, DM, etc.
2. In case of equity infusion more than once during the year, Exchange rate at the date of each infusion to be given

Abstract of Admitted Capital Cost for the existing Projects

Name of the Company

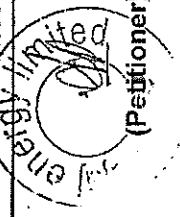
Bajaj Energy Pvt. Ltd.

Name of the Power Station

Utraula 2x 45 MW TFP

(Rs. in Lakhs)

Last date of order of Commission for the project	Date (DD-MM-YYYY)	24-05-2017
Reference of petition no. in which the above order was passed	Petition no.	973 of 2014, 1036 of 2015 & 1079 of 2016
Following details (whether admitted and /or considered) as on the last date of the period for which tariff is approved, in the above order by the Commission: (As per Truing Up / Additional Capitalisation Petition filed separately for the period COD to 31.03.2019)		
Capital cost as on 31.03.2019 - As submitted		53,496.99
Amount of un-discharged liabilities included in above (& forming part of admitted capital cost)		-
Amount of un-discharged liabilities corresponding to above admitted capital cost (but not forming part of admitted capital cost being allowed on cash basis)		-
Gross Normative Debt	(Rs. in lakh)*	37,447.89
Cumulative Repayment as on 31.03.19		22,637.12
Net Normative Debt as on 31.03.19		14,810.77
Normative Equity		16,049.10
Cumulative Depreciation as on 31.03.19		22,637.12
Leasehold Land		98.93



(Petitioner)

Abstract of Capital Cost Estimates and Schedule of Commissioning for the New Projects - Not Applicable

Name of the Petitioner

Bajaj Energy Pvt. Ltd.

Name of the Generating Station

Utraula 2x 45 MW TPP

New ProjectsCapital Cost Estimates

Board of Director/ Agency approving the Capital cost estimates:	Uttar Pradesh Electricity Regulatory Commission		
Date of approval of the Capital cost estimates:			
	Present Day Cost	Completed Cost	
Price level of approved estimates	As on End of March Qtr. of the year 2011-12	As on scheduled COD of the Station	
Foreign Exchange rate considered for the Capital cost estimates	NA	NA	
Capital Cost excluding IDC, IEDC & FC (Rs.Lakh)			
Foreign Component, if any (In Million US \$ or the relevant Currency)	-	-	
Domestic Component (Rs. Lakh)	47,941.99	47,941.99	
Capital cost excluding IDC, IEDC, FC, FERV & Hedging Cost (Rs. Lakh)	47,941.99	47,941.99	
IDC, IEDC, FC, FERV & Hedging Cost			
Foreign Component, if any (In Million US \$ or the relevant Currency)	-	-	
Domestic Component (Rs. Lakh)	5,555.00	5,555.00	

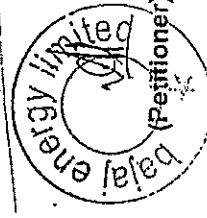




PART-I FORM- 5A		
Total IDC, IEDC, FC, FERV & Hedging Cost (Rs. Lakh)	5,555.00	5,555.00
Rate of taxes & duties considered		
Capital cost Including IDC, IEDC, FC, FERV & Hedging Cost		
Foreign Component, if any (In Million US \$ or the relevant Currency)		-
Domestic Component (Rs. Lakh)		53,496.99
Capital cost Including IDC, IEDC & FC (Rs. Lakh)		53,496.99
Schedule of Commissioning as per investment approval		
Station COD	24-Apr-12	

## Note:

1. Copy of Investment approval letter should be enclosed
2. Details of Capital Cost are to be furnished as per FORM-5B or 5C as applicable
3. Details of IDC & Financing Charges are to be furnished as per FORM-14.



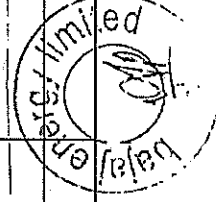
Break-up of Capital Cost for New Coal based projects - NOT APPLICABLE

Name of the Petitioner

Name of the Generating Station

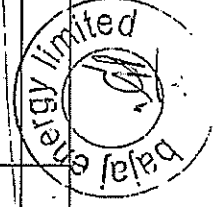
S. No. (1)	Break Down (2)	As per Original Estimates as per Investment Approval(3)	Actual Capital Expenditure as on COD/ anticipated COD (4)	Liabilities/ Provisions (5)	Variation (3-4-5) (6)	Specific Reasons for Variation (7)	Estimated Capital expenditure upto Cut-off date (8)
			Actual Amount				
1	Cost of Land & Site Development						
1.1	Land*						
1.2	Rehabilitation & Resettlement (R&R)						
1.3	Preliminary Investigation & Site Development						
	Total Land & Site Development						
2	Plant & Equipment						
2.1	Steam Generator Island						
2.2	Turbine Generator Island						
2.3	BOP Mechanical						
2.3.1	External water supply system						
2.3.2	CW system						
2.3.3	DM water Plant						
2.3.4	Clarification plant						

Not Applicable



PART-I FORM-5B

2.3.5	Chlorination Plant						
2.3.6	Fuel Handling & Storage system						
2.3.7	Ash Handling System						
2.3.8	Coal Handling Plant						
2.3.9	Rolling Stock and Locomotives						
2.3.10	MGR						
2.3.11	Air Compressor System						
2.3.12	Air Condition & Ventilation System						
2.3.13	Firefighting System						
2.3.14	HP/LP Piping						
2.3.15	FGD system, if any						
2.3.16	De-salination plant for seawater intake						
2.3.17	External coal handling in Jetty, if any						
	Total BOP Mechanical						
2.4	BOP Electrical						
2.4.1	Switch Yard Package						
2.4.2	Transformers Package						
2.4.3	Switch gear Package						



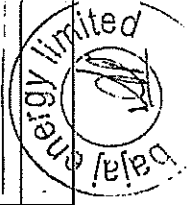
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Calaf Energy Limited

PART-J FORM- 6B

4.12	Firefighting System								
4.13	Township & Colony								
4.14	Temp. construction and erealing works								
4.15	Road & Drainage								
	Total Civil works								
5	Construction & Pre- Commissioning Expenses								
5.1	Erection Testing and commissioning								
5.2	Site supervision								
5.3	Operator's Training								
5.4	Construction Insurance								
5.5	Tools & Plant								
5.6	Startup fuel								
	Total Construction & Pre-Commissioning Expenses								
6	Overheads								
6.1	Establishment								
6.2	Design & Engineerig								
6.3	Audit & Accounts								
6.4	Contingency								
	Total Overheads								



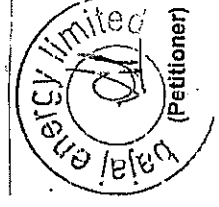
PART-I FORM-5B

7	Total Capital cost excluding IDC & FC								
8	IDC, FC, FERV & Hedging Cost								
8.1	Interest During Construction (IDC)								
8.2	Financing Charges (FC)								
8.3	Foreign Exchange Rate Variation (FERV)								
8.4	Hedging Cost								
	Total of IDC, FC, FERV & Hedging Cost								
9	Capital cost including IDC, FC, FERV & Hedging Cost								

\*Provide details of Freehold land and Lease hold land separately

Note:

1. In case of cost variation, a detailed note giving reasons of such variation should be submitted clearly indicating whether such cost over-run was beyond the control of the generating company.
2. In case of both time & cost overrun, a detailed note giving reasons of such time and cost over-run should be submitted clearly bringing out the agency responsible and whether such time and cost overrun was beyond the control of the generating company.
3. The implication on cost due to time over run, if any shall be submitted separately giving details of increase in prices in different packages from scheduled COD to Actual COD/anticipated COD, increase in IDC from scheduled COD and increase of IDC from scheduled COD to actual anticipated COD.
4. Impact on account of each reason for Time over run on Cost of project should be quantified and substantiated with necessary documents and supporting workings.
5. A list of balance work assets/work wise including initial spare on original scope of works along with estimate shall be furnished positively.



Break-up of Construction/Supply/Service packages - NOT APPLICABLE

Name of the Petitioner  
Name of the Generating Station

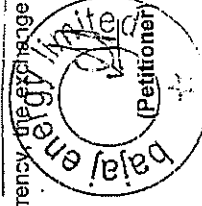
Bajaj Energy Pvt. Ltd.  
Ultraula 2x 45 MW TPP

1	Name/No. of Construction / Supply / Service Package	Package A	Package B	Package C	---	Total Cost of all packages
2	Scope of works <sup>1</sup> (in line with head of cost break-ups as applicable)					
3	Whether awarded through CB/DCB/ Departmentally/ Deposit Work					
4	No. of bids received					
5	Date of Award					
6	Date of Start of work					
7	Date of Completion of Work/Expected date of completion of work					
8	Value of Award <sup>2</sup> in (Rs. Lakh)					
9	Firm or With Escalation in prices					
10	Actual capital expenditure till the completion or up to COD whichever is earlier (Rs. Lakh)					
11	Taxes & Duties and IEDC (Rs. Lakh)					
12	IDC, FC, FERV & Hedging cost (Rs. Lakh)					
13	Sub-total (10+11+12) (Rs. Lakh)					

Note:

1. The scope of work in any package should be indicated in conformity of Capital cost break-up for the coal based plants in the FORM-5B to the extent possible.

2. If there is any package, which need to be shown in Indian Rupee and foreign currency(ies), the same should be shown separately along with the currency, the exchange rate and the date e.g. Rs.80 Cr. +US\$50m=Rs.330Cr. at US\$=Rs62 as on say 01.04.14.

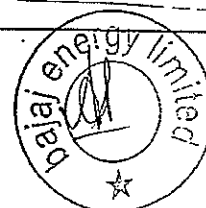


Details of variables, paramotors, optional package etc. for New Project - NOT APPLICABLE

Name of the Petitioner Bajaj Energy Pvt. Ltd.

Name of the Generating Station Ultraula 2x 45 MW TPP

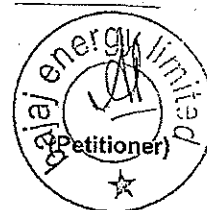
Unit Size		
Number of Units		
Greenfield/Extension		
<b>Not Applicable</b>		
S. No.	Variables	(Design Operating Range) Values
1	Coal Quality — Calorific Value	
2	Ash Content	
3	Moisture Content	
4	Boiler Efficiency	
5	Suspended Particulate Matter	
6	Ash Utilization	
7	Boiler Configuration	
8	Turbine Heat Rate	
9	CW Temperature	
10	Water Source	
11	Distance of Water Source	
12	Clarifier	
13	Mode of Unloading Oil	
14	Coal Unholding Mechanism	
15	Type of Fly Ash Disposal and Distance	
16	Type of Bottom Ash Disposal and Distance	
17	Type of Soil	
18	Foundation Type (Chimney)	
19	Water Table	
20	Seismic and Wind Zone	
21	Condensate Cooling Method	
22	Desalination/RO Plant	
23	Evacuation Voltage Level	
24	Type of Coal (Domestic/Imported)	





PART-I FORM- 5D

Parameter/Variables	Values
Completion Schedule	
Terms of Payment	
Performance Guarantee Liability	
Basis of Price (Firm/Escalation-Linked)	
Equipment Supplier (Country of Origin)	
Optional Packages	Yes/No
Desalination Plant/RO Plant	
MGR	
Railway Siding	
Unloading Equipment at Jetty	
Rolling Stock/Locomotive	
FGD Plant	
Length of Transmission Line till Tie Point (in km)	



PART-I FORM- 5DI

In case there is cost over run - NOT APPLICABLE

Name of the Petitioner

Bajaj Energy Pvt. Ltd.

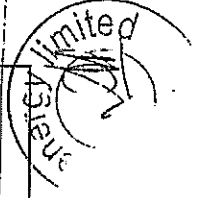
Name of the Generating Station

Uraula 2x 45 MW TPP

S. No.	Break Down	Original Cost (Rs.Lakh) as approved by the Board of Members	Actual/Estimat ed Cost as Incurred/to be incurred(Rs. Lakh)	Difference	Reasons for Variation(Please submit supporting computations and documents wherever applicable)	Increase in soft cost due to increase in hard cost
1	Cost of Land & Site Development	Total Cost	Total Cost	Total Cost		
1.1	Land*					
1.2	Rehabilitation & Resettlement (R&R)	Not Applicable				
1.3	Preliminary Investigation & Site Development					
2	Plant & Equipment					
2.1	Steam Generator Island					
2.2	Turbine Generator Island					
2.3	BOP Mechanical					
2.3.1	Fuel Handling & Storage system					
2.3.2	External water supply system					
2.3.3	DM water Plant					



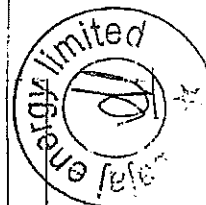
2.3.4	Clarification plant						
2.3.5	Chlorination Plant						
2.3.6	Fuel Handling & Storage system						
2.3.7	Ash Handling System						
2.3.8	Coal Handling Plant						
2.3.9	Rolling Stock and Locomotives						
2.3.10	MGR						
2.3.11	Air Compressor System						
2.3.12	Air Condition & Ventilation System						
2.3.13	Firefighting System						
2.3.14	HP/LP Piping						
	Total BOP Mechanical						
	BOP Electrical						
2.4.1	Switch Yard Package						
2.4.2	Transformers Package						
2.4.3	Switch gear Package						
2.4.4	Cables, Cable facilities & grounding						
2.4.5	Lighting						
2.4.6	Emergency D.G. set						
	Total BOP Electrical						



# STR



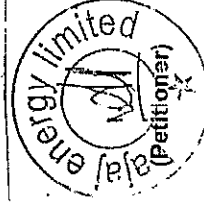
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8.2	Financing Charges (FC)						
8.3	Foreign Exchange Rate Variation (FERV)						
8.4	Hedging Cost						
	Total of IDC, FC, FERV & Hedging Cost						
9	Capital cost including IDC, FC, FERV & Hedging Cost						

\*Submit details of Freehold and Lease hold land

Note: Impact on account of each reason for Cost overrun should be quantified and substantiated with necessary documents and supporting workings.



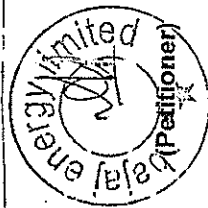
In case there is time over run - NOT APPLICABLE

Name of the Petitioner Bajaj Energy Pvt. Ltd.  
Name of the Generating Station Utraula 2x 45 MW TPP

S. No.	Description of Activity /Works /Service	Original Schedule (As per Planning)		Actual Schedule (As per Actual)		Time Over- Run		Other Activity affected (Mention S. No. of activity affected)
		Start Date	Completion Date	Actual Start Date	Actual Completion Date	Days	Reasons for delay	
1								
2								
3								
4								
5								
6								
7								
8								
9								
....	.....							

Not Applicable

1. Delay on account of each reason in case of time overrun should be quantified and substantiated with necessary documents and supporting workings.
2. Indicate the activities on critical path

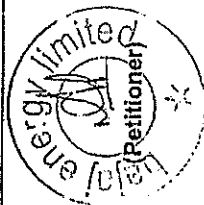


PART-I FORM- 5E

In case there is claim of additional RoE

Name of the Petitioner Bajaj Energy Pvt. Ltd. .  
 Name of the Generating Station Utrula 2x 45 MW TPP

Project	Completion Time (Months)				Actual Completion time			Qualifying time schedule(as per regulation)	
	Start Date	Scheduled COD (Date)	Completion time in Months	Installed Capacity	Start Date	Actual COD (Date)	Actual Completion time in Months	Tested Capacity	Months
Unit 1	22-Apr-10	22-Apr-12	24	45 MW	22-Apr-10	03-Apr-12	23.37	45 MW	0.63
Unit 2	22-Apr-10	22-Aug-12	28	45 MW	22-Apr-10	24-Apr-12	24.30	45 MW	4.00





PART-I FORM-6

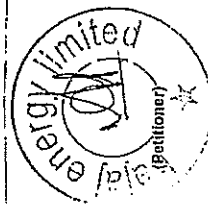
Financial Package upto COD

Name of the Petitioner: Bajej Energy Pvt. Ltd.  
 Name of the Generating Station: Utraula 2x45 MW TPP  
 Project Cost as on COD<sup>1</sup>: Actual 53,522.84 Rs. Lacs  
 Acquired 50,684.00 Rs. Lacs  
 Date of Commercial Operation of the Station<sup>2</sup>

	Financial Package as Approved		Financial Package as on COD		As Admitted on COD	
	Currency and Amount <sup>2</sup>		Currency and Amount <sup>3</sup>		Currency and Amount <sup>3</sup>	
1	2	3	4	5	6	7
Loan-I						
State Bank of India				INR	7,000.00	INR
State Bank of Hyderabad				INR	2,600.00	INR
State Bank of Mysore				INR	1,000.00	INR
State Bank of Palali				INR	1,300.00	INR
Allahabad Bank				INR	1,900.00	INR
Bank of Baroda				INR	2,600.00	INR
Bank of India				INR	2,600.00	INR
Corporation Bank				INR	3,800.00	INR
Dena Bank				INR	1,900.00	INR
IDBI Bank Ltd				INR	2,000.00	INR
Punjab National Bank				INR	2,100.00	INR
PTC India Financial				INR	1,500.00	INR
Oriental Bank of				INR	1,900.00	INR
Union Bank of India				INR	2,600.00	INR
Normative Debt				INR	2,665.99	INR
Loan-						
Foreign						
Domestic				INR	37,465.99	35,478.80
Total loan(Rs)				INR	37,465.99	35,478.80
Equity-						
Foreign						
Domestic				INR	15,056.85	15,205.20
Total Equity( Rs)				INR	15,056.85	15,205.20
Debt : Equity Ratio					2.33	2.33

Note:

1. Say Rs. 80 Cr. + US\$ 200 m or Rs. 1320 Cr. including US\$ 200 m at an exchange rate of US\$=Rs62
2. Provide details on commercial operation as on COD of each Unit
3. For example: US \$ 200m, etc.



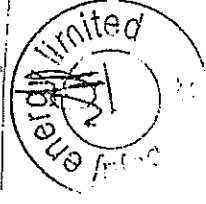
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PART-I FORM--3

Details of Allocation of corporate loans to various projects - NOT APPLICABLE

Name of the Petitioner Bajaj Energy Pvt. Ltd.  
 Name of the Generating Station Utraula 2x 45 MW TPP

Particulars	Package 1	Package 2	Package 3	Package 4	Package 5	Remarks
1	2	3	4	5	6	7
Source of Loan <sup>1</sup>						
Currency <sup>2</sup>						
Amount of Loan sanctioned						
Amount of Gross Loan drawn upto 31.03.2014/COD <sup>3,4,5,13,15</sup>						
Interest Type <sup>6</sup>						
Fixed Interest Rate, if applicable						
Base Rate, if Floating Interest <sup>7</sup>						
Margin, if Floating Interest <sup>8</sup>						
Are there any Caps/Floor <sup>9</sup>	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	
If above is yes, specify caps/floor						
Moratorium Period <sup>10</sup>						
Moratorium effective from						
Repayment Period <sup>11</sup>						
Repayment effective from						
Repayment Frequency <sup>12</sup>						
Repayment Instalment <sup>13,14</sup>						
Base Exchange Rate <sup>15</sup>						
Are foreign currency loan hedged?						
If above is yes, specify details <sup>17</sup>						



Name of the Projects	Distribution of loan packages to various projects			Total
Project 1				
Project 2				
Project 3 and so on				

Note:

1. Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.
2. Currency refers to currency of loan such as US\$, DM, Yen, Indian Rupee etc.
3. Details are to be submitted as on 31.03.2014 for existing assets and as on COD for the remaining assets.
4. Where the loan has been refinanced, details in the Form are to be given for the loan refinanced. However, the details of the original loan are to be given separately in the same form.
5. If the Tariff in the petition is claimed separately for various units, details in the Form are to be given separately for all the units in the same form.
6. Interest type means whether the interest is fixed or floating.
7. Base rate means the base as PLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.
8. Margin means the points over and above the floating rate.
9. At times caps/floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.
10. Moratorium period refers to the period during which loan servicing liability is not required.
11. Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.
12. Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.
13. Where there is more than one drawal/repayment for a loan, the date & amount of each drawal/repayment may also be given separately.
14. If the repayment installment amount and repayment date cannot be worked out from the data furnished above, the repayment schedule to be furnished separately.
15. In case of Foreign loan, date of each drawal & repayment along with exchange rate at that date may be given.
16. Base exchange rate means the exchange rate prevailing as on 31.03.2004 or COD, whichever is later
17. In case of hedging, specify details like type of hedging, period of hedging, cost of hedging, etc.
18. In case of foreign loans, provide details of exchange rate considered on date of each repayment of principal and date of interest payment.
19. At the time of truing up rate of interest with relevant reset date (if any) to be furnished separately
20. At the time of truing up provide details of refinancing of loans considered earlier. Details such as date on which refinancing done amount of refinancing loan, terms and conditions of refinanced loan, financing and other charges incurred for refinancing etc.



## PART - I FORM - 9A

## Year wise Statement of Additional Capitalisation after COD - Projected To be incurred during the Tariff period 2019-24

Name of the Petitioner Bajaj Energy Limited  
 Name of the Generating Station Utraula 2 X 45 MW TPP  
 For Financial Year April 2019 - March 2024

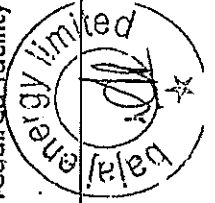
Sl. No.	Head of Work/ Equipment	ACE Claimed (Actual/ Projected)			Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in col. 3	Cash basis (5=3-4)			
(1)	(2)	(3)	(4)	(5=3-4)	(6)	(7)	(8)
<b>FY 2019 - 20</b>							
	<b>Total</b>	-	-	-	-		
<b>FY 2020 - 21</b>							
1	Electrostatic Precipitator (ESP) up-gradation to Achieve MoEF Revised Environmental Norms			30.70		UPERC Tariff Regulations 2019 20 (2) (i) or (ii)	Neec of Installations: UP Pollution Control Board (UPPCB) in its Consent Order for the period of 01.01.2020 to 31.12.2021 has issued statutory direction to BEL Barkhara power station, under Section 21/22 of The air (Prevention and Control of Pollution) Act, 1981 (as amended) wherein it has stipulated at para 3c(1), that the emission by various stacks into the environment should be as per the norms of the Board. While the particulate matter limit mentioned is 502

502

Schedule of Implementation: Unit-2: 31.03.2021						<p>mg/Nm<sup>3</sup>. Although in case of the instant station: the air consent issued by UPPCB upto 31.12.2021 has specified the particulate matter emission limit as 150 mg/Nm<sup>3</sup>, this limit is going to be aligned in accordance with the particulate matter emission limit as set out in air consent of Barkhera station w.e.f. 01.01.2022.</p> <p>In order to comply with above statutory direction of UP pollution control board it has becomes necessary to install a required facility to meeting above norms.</p> <p>Earlier MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (MOEF &amp; CC) vide its notification dated 7th Dec 2015 (under Sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government has amended the Environment (Protection) Rules, 1986) &amp; issued revised norms for environmental emission parameters, for the plants installed after 1st January, 2003, up to 31st December, 2016*) which are as under:</p> <p>New Norm for Particulate Matter 50 mg/Nm<sup>3</sup>.</p> <p>As per UPPCB Consent Order issued for the power plant upto 31.12.2019 the norms was specified as 150 mg/Nm<sup>3</sup> (Annexure-B_UPPCB_Air Consent_UTR_2018).</p> <p>Based on communication from Ministry of Power Government of India a special technical coordination meeting was held by TCC-NRPC/CEA on 14.09.2017 (Copy enclosed Annexure-C) for Preparation of Phasing Plan for implementation of new</p>
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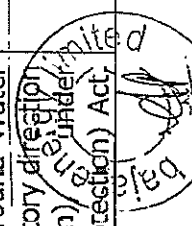


									a statutory authority as per UPERC Tariff Regulations 2019 20(2)(i)). Otherwise also, all the thermal power stations of the country have been subjected to revised environmental norms including SPM level as per MoEF & CC Notification dated 7.12.2015 as Change in Law as permitted under UPERC Tariff Regulations 2019 20(2) (ii).
	<b>Total</b>	-	-	-	<b>30.70</b>	-			
<b>FY 2021 - 22</b>									
1	Electrostatic Precipitator (ESP) up-gradation to Achieve MoEF Revised Environmental Norms  Schedule of Implementation: Unit-1: 30.09.2021				30.70			UPERC Tariff Regulations 2019 20 (2) (i) or (ii)	<p>Need of Installations: UP Pollution Control Board (UPPCB) in its Consent Order for the period of 01.01.2020 to 31.12.2021 has issued statutory direction to BEL Barkhara power station, under Section 21/22 of The Air (Prevention and Control of Pollution) Act, 1981 (as amended) wherein it has stipulated at para 3c(1), that the emission by various stacks into the environment should be as per the norms of the Board whereas particulate matter limit mentioned is 50 mg/Nm<sup>3</sup>. Although in case of the instant station the air consent issued by UPPCB upto 31.12.2021 has specified the particulate matter emission limit as 150 mg/Nm<sup>3</sup>, this limit is going to be aligned in accordance with the particulate matter emission limit as set out in air consent of Barkhara station w.e.f. 01.01.2022.</p> <p>In order to comply with above statutory direction of UP pollution control board it has becomes necessary to install a required facility to meeting above norms.</p>





<p>Earlier MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (MOEF &amp; CC) vide its notification dated 7th Dec 2015 (under Sections 6 and 25 of the Environment (Protection) Act, 1936 (29 of 1936), the Central Government has amended the Environment (Protection) Rules, 1936) &amp; issued revised norms for environmental emission parameters, for the plants installed after 1st January, 2003, up to 31st December, 2016*) which are as under:</p> <p>New Norm for Particulate Matter: 50 mg/Nm<sup>3</sup>.</p> <p>As per UPPCB Consent Order issued for the power plant upto 31.12.2019 the norms was specified as 150 mg/Nm<sup>3</sup> (Annexure-B_JPPCB_Air Consent_LTR_2018).</p> <p>Based on communication from Ministry of Power Government of India a special technical coordination meeting was held by TCC-NRDC/CEA on 14.09.2017 (Copy enclosed Annexure-C) for Preparation of Phasing Plan for implementation of new Environmental Norms for Thermal Plants in Northern Region wherein an action plan for complying the above was discussed for various coal based units of Northern Region. The units having prevailing level of SPM below 100 mg/Nm<sup>3</sup> which included all five power stations of BEL (para-09 &amp; Annexure-2 (D), Sr. No- 488 to 499) were identified amongst the unit that did not required FGD installations of SO<sub>2</sub> norms &amp; were only required to take up SO<sub>2</sub> norms upgradation.</p>			

							<p>Therefore consistent with the recommendation of TCC-NRPC/CEA as set out above, read with statutory direction of UPPCE dated 09.01.2020 ESP upgradation has become essential. Accordingly it is required to upgrade existing ESP controller by an ADVANCED ESP INTEGRATED CONTROLLER (EPIC). EPIC (Electrostatic Precipitator Integrated Controller) is an ESP bus-section controller for transformers (T/Rs), which includes basic functionalities, current control, spark detection, and repping efficiency. It performs advanced optimization using software algorithms like EPOC (Electrostatic Precipitator Optimizing of Charge) and OpOpt (Opacity Optimization) to obtain optimum performance from the ESP. This is highly cost effective technological solution which has been identified by BEL.</p> <p>Accordingly the Hon'ble Commission may be pleased to allow this projected expenditure, to be incurred for complying with the directions of a statutory authority as per UPERC Tariff Regulations 2019 20(2)(i)).</p> <p>Otherwise also, all the thermal power stations of the country have been subjected to revised environmental norms including SPM level as per MoEF &amp; CC Notification dated 7.12.2015 as Change in Law as permitted under UPERC Tariff Regulations 2019 20(2) (ii).</p>	
2	Installation of Reverse osmosis (RO) plants for re use of ETP		457.00				UPERC Tariff Regulations 2019	<p>Purpose of Installation: Central Ground Water Authority (CGWA) has issued statutory direction (Annexure-D_CGWA Notification) under the Section 5 of the Environment (Protection) Act, 1986.</p> 

discharge water as CT make up water  Schedule of Implementation: 30.01.2022				20 (2) (i) or (ii)	<p>1986 (29 of 1986) for the purposes of regulation and control of Ground Water management and development has issued a notification dated 24.09.20 where in at para 4.-(iii), it has directed that:-</p> <p><i>"All industries abstracting ground water in excess of 100 m<sup>3</sup>/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to CGWA. All such industries shall be required to reduce their ground water use by at least 20% over the next three years through appropriate means."</i></p> <p>(Copy of Notification enclosed as annexure-B)</p> <p><b>Emphasis Added</b></p> <p>Therefore for compliance of statutory directives from CGWA, installation of RC plant of 1000 KLD capacity is essential. This recycled water shall be used as make up water in Cooling Tower thus reducing ground water consumption.</p> <p>Accordingly the Hon'ble Commission may be pleased to allow this projected capital expenditure, to be incurred for complying with the directions of a statutory authority as per UPERC Tariff Regulations 2019 20(2)(i).</p> <p>Otherwise also, this projected capital expenditure shall qualified as Change in Law as</p>
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								<p>1) Construction of boring for installation of piezometers at the required depth.</p> <p>2) Need to procure piezometers having specifications meeting the requirements of CGWA. Also telemetry equipment need to be procured. (As per Point-2.4 of CGWA Notification).</p> <p>3) To do RCC grouting of required dimensions around 2 Nos of bore wells at each site (as per Annexure III- Point No. 3 of CGWA notifications).</p> <p>Therefore for compliance of statutory directives from CGWA, construction of observation well(s) &amp; piezometer installation is essential. These initiatives will help to measure ground water level.</p> <p>Accordingly the Hon'ble Commission may be pleased to allow this projected capital expenditure, to be incurred for complying with the directions of a statutory authority as per UPERC Tariff Regulations 2019 20(2)(i).</p> <p>Otherwise also, this projected capital expenditure shall qualify as Change in Law as permitted under UPERC Tariff Regulations 2019 20(2) (ii).</p>	
	<b>Total</b>	-	-	-	<b>502.70</b>	-			
<b>FY 2022 - 23</b>									
1	Installation of DeSOx System as per MoEF Notification							UPERC Tariff Regulations 2019 20 (2) (i) or (ii)	<p>MoEF&amp;CC vide its notification dated 7.12.2015 (MOEF Notification 2015) has issued new environmental norms for thermal power generators, which are also applicable to BEL Stations. For assessing the requirements for implementation of MOEF Notification 2015, BEL</p>



Statement of Additional Capitalisation during the end of useful life of the Project - NOT APPLICABLE

Name of the Petitioner Bajaj Energy Pvt. Ltd.  
 Name of the Generating Station Ultraula 2x 45 MW TPP

S. No.	Year	Work / Equipment added during last five years of useful life of each Unit/Station	ACE Claimed (Actual / Projected)				Regulations under which claimed	Justification	Impact on life extension
			Accrual basis	Un-discharged Liability included in col. 4	Cash basis	IDC included in col. 4			
(1)	(2)	(3)	(4)	(5)	(6=4-5)	(7)	(8)	(9)	(10)

Not Applicable

Note:

1. Cost Benefit analysis for capital additions done should be submitted along with petition for approval of such schemes
2. Justification for additional capital expenditure claim for each asset should be relevant to regulations under which claim has been made and the necessity of capitalization of the asset.



## PART-I FORM- 9Bi

Details of Assets De-capitalized during the period - NOT APPLICABLE

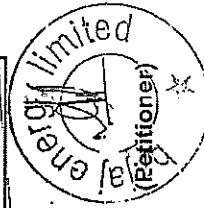
Name of the Petitioner  
Name of the Generating Station

Bajaj Energy Pvt. Ltd.  
Utraula 2x 45 MW TPP

Region		State	District			
S. No.	Name of the Asset	Nature of de-capitalization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of de-capitalization	
1	2	3	4	5	6	
1						
2						
3						
4						
5						

Not Applicable

Note: Year wise detail need to be submitted.





Statement showing reconciliation of ACE claimed with the capital additions as per books

Name of the Petitioner

Bajaj Energy Pvt. Ltd.

Name of the Generating Station

Utraula 2x 45 MW TPP

COD

Sl. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Closing Gross Block	-	30.70	533.41	533.41	533.41
	Less: Opening Gross Block	-	-	30.70	533.41	533.41
	Total Additions as per books	-	30.70	502.70	-	-
	Less: Additions pertaining to other Stages (give Stage wise breakup)	-	-	-	-	-
	Net Additions pertaining to Instant project/Unit/Stage	-	30.70	502.70	-	-
	Less: Exclusions (items not allowable / not claimed)	-	-	-	-	-
	Net Additional Capital Expenditure Claimed	-	30.70	502.70	-	-

(Rs. in Lakhs)

Note: Reason for exclusion of any expenditure shall be given in Clear terms



Statement showing items/assets/works claimed under Exclusions: NOT APPLICABLE

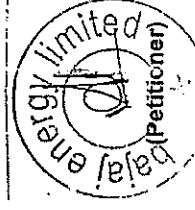
Name of the Petitioner Bajaj Energy Pvt. Ltd.  
 Name of the Generating Station Utraula 2x 45 MW TPP  
 COD

S. No.	Head of Work / Equipment	ACE Claimed under Exclusion			IDC included in col. 3	Justification
		Accrual basis	Un-discharged Liability included in col. 3	Cash basis		
(1)	(2)	(3)	(4)	(5=3-4)	(6)	(7)
1				NIL		

**Not Applicable**

Note:

- Exclusions claimed on assets not allowed in Tariff should be supported by the specific reference of Commission Order date, Petition No., amount disallowed, etc.
- For inter unit transfer, nature of transfer i.e. temporary or permanent should be mentioned. It is to be certified that exclusion sought in receiving station only and not in sending station or in both the station.



## PART-I FORM- 9E

Name of the Petitioner

Bajaj Energy Pvt. Ltd.

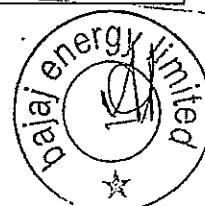
Name of the Generating Station

Utrula 2x 45 MW TPP

Statement of Capital cost(To be given for relevant dates and year wise)

Amount in Rs Lakh

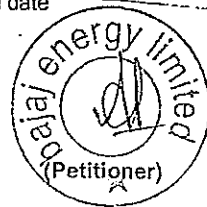
S. No.	Particulars	As on relevant date.
A	Opening Gross Block Amount as per books	
	Amount of capital liabilities in A(a) above	
	Amount of IDC in A(a) above	
	Amount of FC in A(a) above	
	Amount of FERV in A(a) above	
	Amount of Hedging Cost in A(a) above	
	Amount of IEDC in A(a) above	
B	Addition in Gross Block Amount during the period (Direct purchases)	
	Amount of capital liabilities in B(a) above	
	Amount of IDC in B(a) above	
	Amount of FC in B(a) above	
	Amount of FERV in B(a) above	
	Amount of Hedging Cost in B(a) above	
	Amount of IEDC in B(a) above	
C	Addition in Gross Block Amount during the period (Transferred from CWIP)	
	Amount of capital liabilities in C(a) above	
	Amount of IDC in C(a) above	
	d) Amount of FC in C(a) above	
	e) Amount of FERV in C(a) above	
	f) Amount of Hedging Cost in C(a) above	
	g) Amount of IEDC in C(a) above	
D	a) Deletion in Gross Block Amount during the period	
	b) Amount of capital liabilities in D(a) above	



	c) Amount of IDC in D(a) above	
	d) Amount of FC in D(a) above	
	e) Amount of FERV in D(a) above	
	f) Amount of Hedging Cost in D(a) above	
	g) Amount of IEDC in D(a) above	
E	a) Closing Gross Block Amount as per books	
	b) Amount of capital liabilities in E(a) above	
	c) Amount of IDC in E(a) above	
	d) Amount of FC in E(a) above	
	e) Amount of FERV in E(a) above	
	f) Amount of Hedging Cost in E(a) above	
	g) Amount of IEDC in E(a) above	

Note:

Relevant date/s means date of COD of unit/s/station and financial year start date and end date



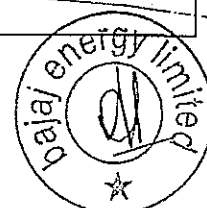
Name of the Petitioner

Name of the Generating Station

Statement of Capital works in progress(To be given for relevant dates and year wise)

Amount in Rs. Lakh

Sl. No.	Particulars	As on relevant date.
A	Opening CWIP as per books	
	Amount of capital liabilities in A(a) above	
	Amount of IDC in A(a) above	
	Amount of FC in A(a) above	
	Amount of FERV in A(a) above	
	Amount of Hedging Cost in A(a) above	
	Amount of IEDC in A(a) above	
B	Addition in CWIP during the period	
	Amount of capital liabilities in B(a) above	
	Amount of IDC in B(a) above	
	Amount of FC in B(a) above	
	Amount of FERV in B(a) above	
	Amount of Hedging Cost in B(a) above	
	Amount of IEDC in B(a) above	
C	Transferred to Gross Block Amount during the period	
	Amount of capital liabilities in C(a) above	
	Amount of IDC in C(a) above	
	Amount of FC in C(a) above	
	Amount of FERV in C(a) above	
	Amount of Hedging Cost in C(a) above	
	Amount of IEDC in C(a) above	
D	a) Deletion in CWIP during the period	



**ANNEXURE - II****UTR****71**

	b) Amount of capital liabilities in D(a) above	
	c) Amount of IDC in D(a) above	
	d) Amount of FC in D(a) above	
	e) Amount of FERV in D(a) above	
	f) Amount of Hedging Cost in D(a) above	

**PART-I FORM- 9F**

	g) Amount of IEDC in D(a) above	
E	a) Closing CWIP as per books	
	b) Amount of capital liabilities in E(a) above	
	c) Amount of IDC in E(a) above	
	d) Amount of FC in E(a) above	
	e) Amount of FERV in E(a) above	
	f) Amount of Hedging Cost in E(a) above	
	g) Amount of IEDC in E(a) above	

Note:

1. Relevant date/s means date of COD of unit/s/station and financial year start date and end date



Financing of Additional Capitalisation

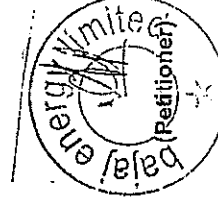
Name of the Petitioner  
Name of the Generating Station  
Date of Commercial Operation

Bajaj Energy Pvt. Ltd.  
Utraula 2x 45 MW TPP  
24-Apr-12

	Actual		Admitted		Amount in Rs Lakh						
	2019-20	2020-21	2021-22	2022-23	2023-24	2019-20	2020-21	2021-22	2022-23	2023-24	
1 Financial Year (Starting from COD) <sup>1</sup>	2	3	4	5	6	7	8	9	10	11	
Amount capitalised in Work/Equipment	-	30.70	502.70	-	-						
Financing Details											
Consortium Lending											
Loan-2											
Loan-3 and so on											
Total Loan <sup>2</sup>											
Equity											
Internal Resources	-	30.70	502.70	-	-						
Others (Pl. specify)											
Total	-	30.70	502.70	-	-						

Note:

1. Year 1 refers to Financial Year of COD and Year 2, Year 3 etc. are the subsequent financial years respectively.
2. Loan details for meeting the additional capitalisation requirement should be given as per FORM-7 or 8 whichever is relevant.



## PART - I FORM - II

Name of the Petitioner  
Name of the Generating Station

Calculation of Depreciation

Bajaj Energy Pvt. Ltd.  
Utrula 2x 45 MW TPP

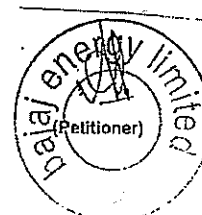
Amount in Rs Lakh

S. No.	Name of the Assets <sup>1</sup>	Gross Block as on 31.03.2019 or as on COD, whichever is later and subsequently for each year thereafter upto 31.3.24	Depreciation Rates as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year up to 31.03.24
1	2	3	4= Col.2 X Col.3	
		Existing 2018-19		
1	Land (see note)	98.93	0.00%	-
	EPC Cost + Construction & Pre Commissioning	53,398.06		3,113.11
2	+Overheads + IDC		5.83%	
	<b>TOTAL</b>	<b>53,498.99</b>		<b>3,113.11</b>
	<b>Weighted Average Depreciation Rate (%)</b>			<b>5.82%</b>
		2019-20		
1	Land (see note)	98.93	0.00%	-
	EPC Cost + Construction & Pre Commissioning	53,398.06		3,113.11
2	+Overheads + IDC		5.83%	
	<b>TOTAL</b>	<b>53,498.99</b>		<b>3,113.11</b>
	<b>Weighted Average Depreciation Rate (%)</b>			<b>5.82%</b>
		2020-21		
1	Land (see note)	98.93	0.00%	-
	EPC Cost + Construction & Pre Commissioning	53,428.77		3,114.90
2	+Overheads + IDC		5.83%	
	<b>TOTAL</b>	<b>53,527.70</b>		<b>3,114.90</b>
	<b>Weighted Average Depreciation Rate (%)</b>			<b>5.82%</b>
		2021-22		
1	Land (see note)	98.93	0.00%	-
	EPC Cost + Construction & Pre Commissioning	53,931.47		3,144.20
2	+Overheads + IDC		5.83%	
	<b>TOTAL</b>	<b>54,030.40</b>		<b>3,144.20</b>
	<b>Weighted Average Depreciation Rate (%)</b>			<b>5.82%</b>
		2022-23		
1	Land (see note)	98.93	0.00%	-
	EPC Cost + Construction & Pre Commissioning	53,931.47		3,144.20
2	+Overheads + IDC		5.83%	
	<b>TOTAL</b>	<b>54,030.40</b>		<b>3,144.20</b>
	<b>Weighted Average Depreciation Rate (%)</b>			<b>5.82%</b>
		2023-24		
1	Land (see note)	98.93	0.00%	-
	EPC Cost + Construction & Pre Commissioning	53,931.47		3,144.20
2	+Overheads + IDC		5.83%	
	<b>TOTAL</b>	<b>54,030.40</b>		<b>3,144.20</b>
	<b>Weighted Average Depreciation Rate (%)</b>			<b>5.82%</b>

\*Provide details of Freehold land and Lease hold land separately

Note:

1. Name of the Assets should conform to the description of the assets mentioned in Depreciation





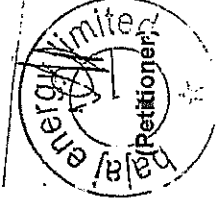
**ANNEXURE - II****UTR**  
**Statement of Depreciation****PART-I FORM-74**

Name of the Petitioner

Name of the Generating Station

S. No. (1)	Particulars (2)	Existing 2018-19 (3)	2019-20 (4)	2020-21 (5)	2021-22 (6)	2022-23 (7)	2023-24 (8)
	Opening Capital Cost	53,492.98	53,496.99	53,496.99	53,527.70	54,030.40	54,030.40
	Closing Capital Cost	53,496.99	53,496.99	53,527.70	54,030.40	54,030.40	54,030.40
	Average Capital Cost	53,494.99	53,496.99	53,512.34	53,779.05	54,030.40	54,030.40
	Freehold land	98.93	98.93	98.93	98.93	98.93	98.93
	Rate of depreciation	5.82%	5.82%	5.82%	5.82%	5.82%	5.82%
	Depreciable value						
	Balance useful life at the beginning of the period						
	Remaining depreciable value						
	Depreciation (for the period)	3,112.99	3,113.11	3,114.00	3,129.58	3,144.20	2,683.27
	Depreciation (annualised)	3,112.99	3,113.11	3,114.00	3,129.58	3,144.20	2,683.27
	Cumulative depreciation at the end of the period	22,637.12	25,750.23	28,864.23	31,993.81	35,138.01	37,821.28
	Less: Cumulative depreciation adjustment on account of un-discharged liabilities deducted as on 01.04.2009/Station COD						
	Less: Cumulative depreciation adjustment on account of de-capitalisation						
	Net Cumulative depreciation at the end of the period	22,637.12	25,750.23	28,864.23	31,993.81	35,138.01	37,821.28

1. In case of details of FERV and AAD, give information for the applicable period.



PART-I FORM-13

**FORM-13 Calculation of Weighted Average Rate of Interest on Actual Loans <sup>1</sup>****Name of the Petitioner**

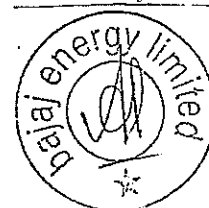
Bajaj Energy Pvt. Ltd.

**Name of the Generating Station**

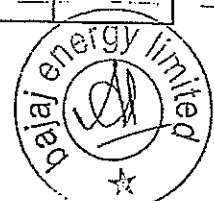
Utravala 2x 45 MW TPP

Amount in Rs. Lakh

Sl. No.	Particulars	Existing 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
I	State Bank of India						
	Gross loan - Opening	-	-				
	Cumulative repayments of Loans upto previous year						
	Net loan - Opening	4,580.00	3,442.50	2,295.00	1,147.50	-	-
	Add: Drawal(s) during the Year	-	-	-	-	-	-
	Less: Repayment (s) of Loans during the year	1,147.50	1,147.50	1,147.50	1,147.50	-	-
	Net loan - Closing	3,442.50	2,295.00	1,147.50	-	-	
	Average Net Loan	4,016.25	2,868.75	1,721.25	573.75	-	-
	Rate of Interest on Loan	11.9310%	13.5500%	13.5500%	13.5500%	13.5500%	13.5500%
	Interest on loan	479.18	388.72	233.23	77.74	-	-



2	Allahabad Bank						
	Gross loan - Opening	-					
	Cumulative repayments of Loans upto previous year	-					
	Net loan - Opening	330.00	252.00	168.00	84.00	-	-
	Add: Drawal(s) during the Year	-	-	-	-	-	-
	Less: Repayment (s) of Loans during the year	84.00	84.00	84.00	84.00	-	-
	Net loan - Closing	252.00	168.00	84.00	-	-	-
	Average Net Loan	294.00	210.00	126.00	42.00	-	-
	Rate of Interest on Loan	11.9310%	13.5500%	13.5500%	13.5500%	13.5500%	13.5500%
	Interest on loan	35.08	20.40	17.07	5.09		
3	Bank of India						
	Gross loan - Opening	-					
	Cumulative repayments of Loans upto previous year	-					
	Net loan - Opening	1,040.00	780.00	520.00	260.00	-	-
	Add: Drawal(s) during the Year	-	-	-	-	-	-
	Less: Repayment (s) of Loans during the year	260.00	260.00	260.00	260.00	-	-
	Net loan - Closing	780.00	520.00	260.00	-	-	-
	Average Net Loan	910.00	650.00	390.00	130.00	-	-
	Rate of Interest on Loan	11.9310%	15.0000%	15.00%	15.0000%	15.0000%	15.0000%
	Interest on loan	108.57	97.50	58.50	19.50	-	-
4	Corporation Bank						
	Gross loan - Opening	-					
	Cumulative repayments of Loans upto previous year	-					
	Net loan - Opening	480.00	360.00	240.00	120.00	-	-
	Add: Drawal(s) during the Year	-	-	-	-	-	-
	Less: Repayment (s) of Loans during the year	120.00	120.00	120.00	120.00	-	-
	Net loan - Closing	360.00	240.00	120.00	-	-	-
	Average Net Loan	420.00	300.00	180.00	60.00	-	-
	Rate of Interest on Loan	11.9310%	13.5500%	13.5500%	13.5500%	13.5500%	13.5500%
	Interest on loan	50.11	40.65	24.39	8.13	-	-
5	IDBI Bank Ltd						
	Gross loan - Opening	-					



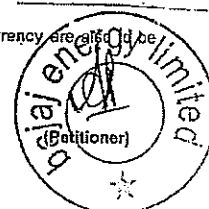
	Cumulative repayments of Loans upto previous year	-					
	Net loan - Opening	800.00	600.00	400.00	200.00	-	-
	Add: Drawal(s) during the Year	-	-	-	-	-	-
	Less: Repayment (s) of Loans during the year	200.00	200.00	200.00	200.00	-	-
	Net loan - Closing	800.00	400.00	200.00	-	-	-
	Average Net Loan	700.00	500.00	300.00	100.00	-	-
	Rate of Interest on Loan	13.3907%	13.4200%	13.4200%	13.4200%	13.4200%	13.4200%
	Interest on loan	83.73	67.10	40.26	13.42	-	-
6	Oriental Bank of Commerce						
	Gross loan - Opening	-					
	Cumulative repayments of Loans upto previous year	-					
	Net loan - Opening	300.00	225.00	150.00	75.00		-
	Add: Drawal(s) during the Year	-	-	-	-	-	-
	Less: Repayment (s) of Loans during the year	75.00	75.00	75.00	75.00	-	-
	Net loan - Closing	225.00	150.00	75.00	-	-	-
	Average Net Loan	262.50	187.50	112.50	37.50	-	-
	Rate of Interest on Loan	11.9310%	13.5500%	13.5500%	13.5500%	13.5500%	13.5500%
	Interest on loan	31.32	25.41	15.24	5.08	-	-
7	IIFCL						
	Gross loan - Opening	-					
	Cumulative repayments of Loans upto previous year	-					
	Net loan - Opening	11,599.95	10,937.09	10,274.23	9,611.38	8,948.52	8,285.66
	Add: Drawal(s) during the Year	-	-	-	-	-	-
	Less: Repayment (s) of Loans during the year	662.86	662.86	662.86	662.86	662.86	662.86
	Net loan - Closing	10,937.09	10,274.23	9,611.38	8,948.52	8,285.66	7,622.81
	Average Net Loan	11,268.52	10,605.66	9,942.81	9,279.95	8,617.09	7,954.23
	Rate of Interest on Loan	12.2918%	12.4000%	12.4000%	12.4000%	12.4000%	12.4000%
	Interest on loan	1,385.10	1,315.10	1,232.91	1,150.71	1,068.52	986.32
8	Canara Bank						
	Gross loan - Opening	-					
	Cumulative repayments of Loans upto previous year	-					
	Net loan - Opening	420.00	315.00	210.00	105.00	-	-



	Add: Drawal(s) during the Year	-	-	-	-	-	-
	Less: Repayment (s) of Loans during the year	105.00	105.00	105.00	105.00	-	-
	Net loan - Closing	315.00	210.00	105.00	-	-	-
	Average Net Loan	387.60	282.50	167.60	52.50	-	-
	Rate of Interest on Loan	11.9310%	13.9900%	13.5500%	13.5500%	13.5500%	13.5500%
	Interest on loan	43.85	36.57	21.34	7.11	-	-
9	Union Bank of India						
	Gross loan - Opening	-	-	-	-	-	-
	Cumulative repayments of Loans upto previous year	-	-	-	-	-	-
	Net loan - Opening	500.00	375.00	250.00	125.00	-	-
	Add: Drawal(s) during the Year	-	-	-	-	-	-
	Less: Repayment (s) of Loans during the year	125.00	125.00	125.00	125.00	-	-
	Net loan - Closing	375.00	250.00	125.00	-	-	-
	Average Net Loan	437.50	312.50	187.50	62.50	-	-
	Rate of Interest on Loan	11.9310%	13.5500%	13.5500%	13.5500%	13.5500%	13.5500%
	Interest on loan	52.20	42.34	25.41	8.47	-	-
	Total Loan						
	Gross loan - Opening	-	-	-	-	-	-
	Cumulative repayments of Loans upto previous year	-	-	-	-	-	-
	Net loan - Opening	20,065.95	17,286.59	14,507.23	11,727.88	8,948.52	8,285.66
	Add: Drawal(s) during the Year	-	-	-	-	-	-
	Less: Repayment (s) of Loans during the year	2,779.36	2,779.36	2,779.36	2,779.36	662.86	662.86
	Net loan - Closing	17,286.59	14,507.23	11,727.88	8,948.52	8,285.66	7,622.81
	Average Net Loan	18,676.27	15,896.91	13,117.56	10,338.20	8,617.09	7,954.23
	Interest on loan	2,279.14	2,040.84	1,668.35	1,295.86	1,068.52	986.32
	Weighted average Rate of Interest on Loans	12.2034%	12.8380%	12.7185%	12.5347%	12.4000%	12.4000%

## Note:

1. In case of Foreign Loans, the calculations in Indian Rupees are to be furnished. However, the calculations in Original currency are also to be furnished separately in the same form.



Calculation of Interest on Normative LoanName of the Petitioner

Bajaj Energy Pvt. Ltd.

Name of the Generating Station

Utraula 2x45 MW TPP

(Amount in Rs. Lakh)

Sl. No.	Particulars	Existing 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Gross Normative loan - Opening	37,445.09	37,447.89	37,447.89	37,469.35	37,821.28	37,821.28
	Cumulative repayment of Normative loan upto previous year	19,524.13	22,837.12	25,750.23	28,864.23	31,993.81	35,138.01
	Net Normative loan - Opening	17,920.96	14,810.77	11,697.67	8,605.16	5,827.47	2,683.27
	Add: Increase due to addition during the year/period	2.81	-	21.49	351.83	-	-
	Less: Decrease due to de-capitalisation during the year/period	-	-	-	-	-	-
	Net Normative loan - Closing	3,112.99	3,113.11	3,114.00	3,129.53	3,144.20	2,683.27
	Add: Increase due to discharges during the year/period	-	-	-	-	-	-
	Average Normative loan	14,810.77	11,697.67	8,605.16	5,827.47	2,683.27	-
	Weighted average rate of interest	16,365.86	13,254.22	10,151.41	7,216.31	4,255.37	1,341.63
	Interest on Loan	12.2034%	12.8380%	12.7185%	12.5347%	12.4000%	12.4000%
	Sharing of Savings on Refinance Reg. No. 25(i)(e)	1,997.19	1,706.24	1,291.10	304.54	527.67	166.82
	Effective Interest on Loan	66.80	47.32	42.21	36.53	24.47	7.74
		2,063.99	1,753.55	1,333.31	941.18	552.13	174.55

Calculation of Interest on Working Capital

Name of the Petitioner

Bajaj Energy Pvt. Ltd.

Name of the Generating Station

Utraula 2x 45 MW TPP

Amount in Rs. Lakhs

Sl. No.	Particulars	Existing 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7	8
1	Cost of Coal <sup>1</sup>	4,008.85	2,936.72	2,936.72	2,936.72	2,936.72	2,936.72
2	Cost of Main Secondary Fuel Oil <sup>1</sup>	80.23	17.39	17.39	17.39	17.39	17.39
3	Fuel Cost						
4	Liquid Fuel Stock						
5	O & M Expenses	228.83	247.20	255.90	264.83	274.20	283.80
6	Maintenance Spares	549.18	593.28	614.15	635.53	658.08	681.12
7	Receivables	6,140.87	4,055.16	4,015.93	3,984.30	3,953.51	3,863.80
8	Total Working Capital	11,007.94	7,849.76	7,840.14	7,838.82	7,839.91	7,782.84
9	Rate of Interest	13.50%	12.05%	12.05%	12.05%	12.05%	12.05%
10	Interest on Working Capital	1,486.07	948.49	944.74	944.53	944.71	940.40

Note:

1 For Coal based generating stations



**ANNEXURE - II****UTR****81**  
PART I FORM-1JCOther Income as on COD - NOT APPLICABLEName of the Petitioner

Bajaj Energy Pvt. Ltd.

Name of the Generating Station

Utraula 2x 45 MW TPP

Amount in Rs. Lakh

S No.	Particulars	Existing 2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
1	Interest on Loans and advance	Not Applicable					
2	Interest received on deposits						
3	Income from Investment						
4	Income from sale of scrap						
5	Rebate for timely payment						
6	Surcharge on late payment from beneficiaries						
7	Rent from residential building						
8	Misc. receipts (Please Specify Details)						
...	...						
...	... (add)						





**ANNEXURE - II****UTR**PART **82** FORM 13DIncidental Expenditure during Construction up to Scheduled COD and up to Actual/anticipated COD - NOT APPLICABLEName of the Petitioner

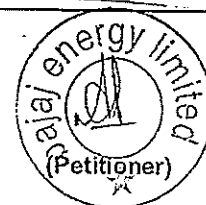
Bajaj Energy Pvt. Ltd.

Name of the Generating Station

Utraula 2x 45 MW TPP

Amount in Rs. Lakh

S. No.	Parameters	As on Scheduled COD	As on actual COD/anticipated COD
A	Head of Expenses:		
1	Employees' Bonofits Expenses		
2	Finance Costs		
3	Water Charges		
4	Communication Expenses		
5	Power Charges		
6	Other Office and Administrative Expenses		
7	Others (Please Specify Details)		
8	Other Pre-Operating Expenses		
	...		
	...		
B	Total Expenses		
	Less: Income from sale of tenders		
	Less: Income from guest house		
	Less: Income recovered from Contractors		
	Less: Interest on Deposits		
	...		

**Not Applicable**

**ANNEXURE - II****UTR**

PART-89 FORM-13E

Expenditure under different packages up to Scheduled COD and up to Actual/anticipated COD - NOT APPLICABLEName of the Petitioner

Bajaj Energy Pvt. Ltd.

Name of the Generating Station

Utraula 2x 45 MW TPP

Amount in Rs. Lakh

SL. No.	Parameters	As on Scheduled COD	As on actual /anticipated COD
1	Package 1		
2	Package 2		
3	Package 3		
4			
5			
6			

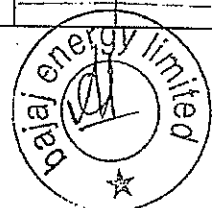
**Not Applicable**

Draw Down Schedule for Calculation of IDC & Financing Charges - NOT APPLICABLE

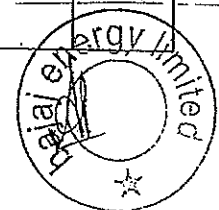
Name of the Petitioner Bajaj Energy Pvt. Ltd.

Name of the Generating Station Ultraula 2x 46 MW TPP

Sl. No.	Draw Down Particulars	Quarter 1			Quarter 2			Quarter n (ROD)		
		Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee (Rs Lakh)	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee (Rs Lakh)	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee (Rs Lakh)
1	Loans									
1.1	Foreign Loans									
1.1.1	Foreign Loan <sup>1</sup>									
	Draw down Amount									
	IDC									
	Financing charges									
	Foreign Exchange Rate Variation									
	Hedging Cost									
1.1.2	Foreign Loan <sup>2</sup>									
	Draw down Amount									
	IDC									
	Financing charges									
	Foreign Exchange Rate Variation									
	Hedging Cost									
1.1.3	Foreign Loan <sup>3</sup>									
	Draw down Amount									



	IDC									
	Financing charges									
	Foreign Exchange Rate Variation									
	Hedging Cost									
1.1.4	--									
	--									
	--									
1.1	Total Foreign Loans									
	Draw down Amount									
	IDC									
	Financing charges									
	Foreign Exchange Rate Variation									
	Hedging Cost									
1.2	Indian Loans									
1.2.1	Indian Loan <sup>1</sup>									
	Draw down Amount	-	-		-	-		-	-	
	IDC	-	-		-	-		-	-	
	Financing charges	-	-		-	-		-	-	
1.2.2	Indian Loan <sup>2</sup>									
	Draw down Amount	-	-		-	-		-	-	



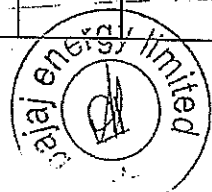
## ANNEXURE - II

## UTR

86

PART-I FORM-14

	IDC	-	-		-	-		-	-	
	Financing charges	-	-		-	-		-	-	
1.2.3	Indian Loan <sup>3</sup>									
	Draw down Amount	-	-					-	-	
	IDC	-	-		-	-				
	Financing charges	-	-		-	-			-	
1.2.4	--	-	-		-	-		-	-	
	--	-	-		-	-		-	-	
	--	-	-		-	-		-	-	
1.2	Total Indian Loans									
	Draw down Amount	-	-		-	-		-	-	
	IDC	-	-		-	-		-	-	
	Financing charges	-	-		-	-		-	-	
1	Total of Loans drawn									
	IDC									
	Financing charges									
	Foreign Exchange Rate Variation									
	Hedging Cost									
2	Equity									
2.1	Foreign equity drawn									



**ANNEXURE - II****UTR****87**  
**PART-I FORM-14**

2.2	Indian equity drawn									
	Total equity deployed									

**Note:**

- 1 Drawal of debt and equity shall be on paripassu basis quarter wise to meet the commissioning schedule. Drawal of higher equity in the beginning is permissible.
- 2 Applicable interest rates including reset dates used for above computation may be furnished separately.
- 3 In case of multi-unit project details of capitalization ratio used to be furnished.



**ANNEXURE - II****UTR**

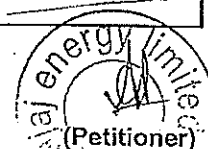
PART 88 FORM-14A

Actual cash expenditure NOT APPLICABLE

(Amount in Rs. Lakh)

Particulars	Quarter-I	Quarter-II	Quarter-III	Quarter-n (COD)
Expenditure towards Gross Block				
Add: Expenditure towards CWIP				
Add: Capital Advances, if any				
Less: Un-discharged liabilities (Included above)	Not Applicable			
Add/Less: Others				
Payment to contractors /suppliers towards capital assets				
Cumulative payments				

Note: If there is variation between payment and fund deployment justification need to be furnished



## ANNEXURE - II

## UTR

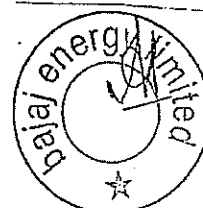
89  
PART-I FORM-15Details/Information to be submitted in respect of Fuel for Computation of Energy Charges<sup>1 - NOT APPLICABLE</sup>Name of the Petitioner

Bajaj Energy Pvt. Ltd.

Name of the Generating Station

Utrula 2x45 MW IPP

S. No.	Month	Unit	For preceding 3rd Month (from COD or from 1.4.2014 as the case may be)		For preceding 2nd Month (from COD or from 1.4.2014 as the case may be)		For preceding 1st Month (from COD or from 1.4.2014 as the case may be)	
			Domestic	Imported	Domestic	Imported	Domestic	Imported
1	Quantity of Coal supplied by Coal Company	(MMT)	Not Applicable					
2	Adjustment (+/-) in quantity supplied made by Coal Company	(MMT)						
3	Coal supplied by Coal Company (1+2)	(MMT)						
4	Normative Transit & Handling Losses (For coal based Projects)	(MMT)						
5	Net coal Supplied (3-4)	(MMT)						
6	Amount charged by the Coal Company	(Rs.)						
7	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)						
8	Total amount Charged (6+7)	(Rs.)						
9	Transportation charges by rail/ship/road transport	(Rs.)						
10	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)						
11	Demurrage Charges, if any	(Rs.)						
12	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)						
13	Total Transportation Charges	(Rs.)						





**ANNEXURE - II****UTR****90**

	(9+/-10- 11+12)							
14	Total amount Charged for coal supplied including Transportation (8+13)	(Rs.)						
15	Landed cost of coal	Rs./MT						
16	Blending Ratio (Domestic/Imported)							
17	Weighted average cost of coal for preceding three months	Rs./MT						
18	GCV of Domestic Coal as per bill of Coal Company	(kCal/ Kg)						
19	GCV of Imported Coal as per bill of Coal Company	(kCal/ Kg)						
20	Weighted average GCV of coal as Billed	(kCal/ Kg)						
21	GCV of Domestic Coal as received at Station	(kCal/ Kg)						
22	GCV of Imported Coal as received at Station	(kCal/ Kg)						
23	Weighted average GCV of coal as Received	(kCal/ Kg)						

Note:

1. Similar details to be furnished for secondary fuel oil for coal based thermal plants with appropriate units.
2. As billed and as received GCV, quantity of coal, and price should be submitted as certified by statutory auditor.



**ANNEXURE - II****UTR**

PART-91RM-16

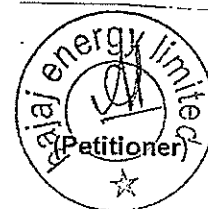
Details/Information to be submitted in respect of Capital Spares - NOT APPLICABLEName of the Petitioner

Bajaj Energy Pvt. Ltd.

Name of the Generating Station

Utrula 2x 45 MW TPP

Sl. No.	Details of Capital Spares and Expenses		Claimed as a part of additional Capitalisation	Funded through compensatory allowance	Funded through Special allowance (If Applicable)	Claimed as a part of stores and spares
	Name of spare	Amount				
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

**Not Applicable**

**ANNEXURE - II****UTR****92**

PART-I FORM-17

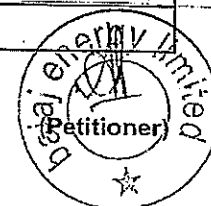
**Liability Flow Statement - NOT APPLICABLE****Name of the Petitioner**

Bajaj Energy Pvt. Ltd.

**Name of the Generating Station**

Utraula 2x 45 MW TPP

Party	Asset / Work	Year of actual capitalisation	Original liability	Liability as on 31.03.2019	Discharges (Yearwise)	Reversal (Yearwise)

**Not Applicable**

## **Power Purchase Agreement**

**Between**

**Paschimanchal Vidyut Vitran Nigam Ltd.  
("Procurer 1")**

**and**

**Poorvanchal Vidyut Vitran Nigam Ltd.  
("Procurer 2")**

**and**

**Madhyanchal Vidyut Vitran Nigam Ltd.  
("Procurer 3")**

**and**

**Dakshinanchal Vidyut Vitran Nigam Ltd.  
("Procurer 4")**

**and**

**Bajaj Energy Private Limited  
Unit – Utraula (Balrampur)  
("Seller")**

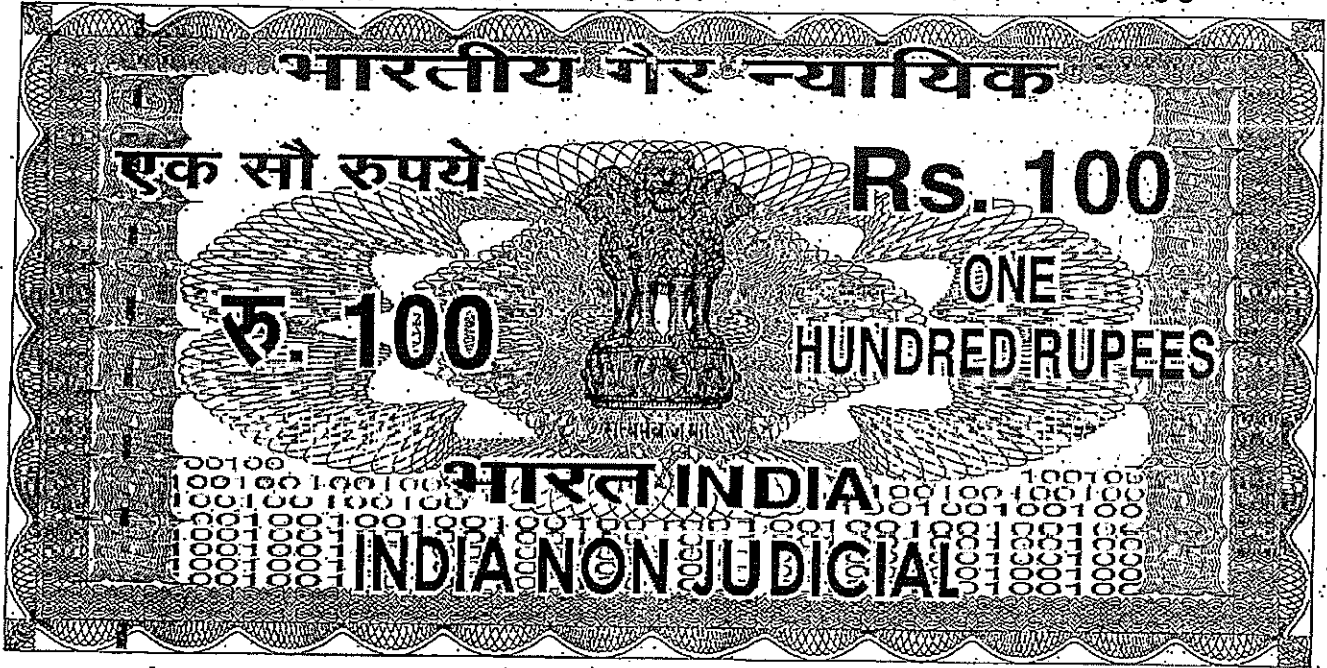
**(As Approved by UPERC)**

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DATED, 07.12.2010



उत्तर प्रदेश UTTAR PRADESH

AM 467460

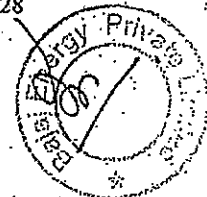
This Agreement is made on the 10th day of December, 2010

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Between

- (1) Paschimanchal Vidyut Vitran Nigam Ltd, a company incorporated in India and registered under the Companies Act, 1956, having its registered office at Victoria Park Meerut-250001 (Hereinafter referred to as "Procuree 1", which expression shall, unless repugnant to the context or meaning thereof, be deemed to include their respective successors, nominees and permitted assigns); and
- (2) Poorvanchal Vidyut Vitran Nigam Ltd, a company incorporated in India and registered under the Companies Act, 1956, having its registered office at Vidyut Nagar, P.O. DLW, Varanasi-2201010 (Hereinafter referred to as "Procuree 2", which expression shall, unless repugnant to the context or meaning thereof, be deemed to include their respective successors, nominees and permitted assigns); and
- (3) Madhyanchal Vidyut Vitran Nigam Ltd, a company incorporated in India and registered under the Companies Act, 1956, having its registered office at 4A, Gokhale Marg, Lucknow-226001 (Hereinafter referred to as "Procuree 3", which expression shall, unless

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U.P.P.C. Ltd.  
Shakti Bhawan Extn.  
Lucknow.



repugnant to the context or meaning thereof, be deemed to include their respective successors, nominees and permitted assigns); and

(4) **Dakshinanchal Vidyut Vitran Nigam Ltd**, a company incorporated in India and registered under the Companies Act, 1956, having its registered office at Urja Bhawan, NH2, Sikandra, Agra (Hereinafter referred to as "Procuree 4", which expression shall, unless repugnant to the context or meaning thereof, be deemed to include their respective successors, nominees and permitted assigns)

#### THROUGH

**UTTAR PRADESH POWER CORPORATION LIMITED ("UPPCL")** a company incorporated in India and registered under the Companies Act, 1956, having its registered office at Shakti Bhawan, 14, Ashok Marg, Lucknow, U.P. duly authorised by each of the above Procurers to enter into this Agreement on their behalf

(The "Procuree 1", "Procuree 2", "Procuree 3" and "Procuree 4" are hereinafter collectively referred to as the "Procurers" and individually as a "Procuree")

And

**Bajaj Energy Private Limited** (the "Seller"), a company incorporated in India and registered under the Companies Act, 1956, having its registered office at 2<sup>nd</sup> Floor, Bajaj Bhawan, Jamna Lal Bajaj Marg, Nariman Point, Mumbai-400021 and Corporate office at B-10 Sector 3, Noida, Gautam Budh Nagar (UP)

(each of the "Procuree 1", "Procuree 2", "Procuree 3", "Procuree 4" and or "Procurers" and "Seller" are individually referred as "Party" and collectively to as the "Parties")

Whereas:

A) The Government of Uttar Pradesh ("GoUP") has announced 'Energy Policy 2009' for the promotion of power generation within Uttar Pradesh and Bajaj Hindusthan Ltd. ("BHL"), a company engaged in the business of manufacture, production, processing or sale of sugar, molasses, molasses based industrial alcohol, organic manure and power and having its manufacturing units located in the various districts of Uttar Pradesh and presently having Cogeneration Power Plants at its various Sugar Mills in U.P. and supplying power to the State Grid under respective Power Purchase Agreements, being desirous to set up additional generation capacity under the MOU route as Independent Power Producer (IPP) in accordance with Para 5.2.2 of the Energy Policy, 2009 (as amended) issued by Department of Energy, Govt. of Uttar Pradesh (GOUP) entered into a Memorandum of Understanding ("MoU") with the Government of UP on 14<sup>th</sup> January 2010 for setting up of the FIVE (5) Thermal Power Plants each of 80 MW capacity as Independent Power

Bajaj (2 X 45 MW) Utrula

Page 5 of 128

*[Signature]*  
UPPCL (PPA)  
U.P.P.C. Ltd.  
Shakti Bhawan Bldg.  
Lucknow.






Producing (IPPs) Units ["Projects" or "Generating Plants"] on the land available at their Sugar Mills:

- B. Subsequently, the installed capacity of each of the Generating Plants has been revised by the Company from 80 MW as contemplated in the MOUs to 90 MW and accordingly a fresh MoU dated 22-04-2010 was entered into between BHL and the GoUP for the below mentioned generating plants :

Location	Installed Capacity(MW)
Barkhera (Pilibhit)	90 MW
Khanbhaikhara (Lakhimpur Kheri)	90 MW
Magsudapur (Shahjahanpur)	90 MW
Kundarkhi (Gonda)	90 MW
Utraula (Balrampur)	90 MW

- C. UPPCL, as the sole State Nominated Agency, has also agreed vide Memorandum of Understanding dated 31<sup>st</sup> December 2009, to purchase at least 50 % power from the Company for a period of 25 years at the price to be determined by 'UP Electricity Regulatory Commission' ("UPERC") and further with the mutual consent of the parties to this Agreement, also agree for purchase of power beyond 50 % on the same terms and conditions. BHL has finally offered 90 % of saleable energy to UPPCL at the price to be determined by UPERC and UPPCL has agreed to purchase the same;
- D. BHL has, in pursuance of and in accordance with the aforesaid MOUs, proceeded with the setting up of the aforesaid **Thermal Power Plants**. However, subsequently, pursuant to Clause 12 of the aforesaid MoU dated 22-04-2010, BHL has assigned the aforesaid projects to its subsidiary namely Bajaj Energy Private Limited (the Company) herein and the same has been duly approved by the GoUP vide GO No. 618 dated 11.06.2010.
- E. UPPCL and the Company have mutually agreed to this Power Purchase Agreement in respect of the Company's Generating Plant being Set up as aforesaid at **UTRAULA** District **BALRAMPUR**, which has been duly approved by UPERC vide its Order dated 18.11.2010, copy of which is annexed hereto as **Annexure-1**

NOW, THEREFORE, in consideration of the foregoing and respective covenants and agreements set forth in this PPA and other consideration, the receipt, sufficiency and adequacy of which is hereby acknowledged, and intending to be legally bound hereby, the Parties agree as follows:

  
CE, P.P.A.  
U.P.P.C.L.  
Shakti Bhawan Bata  
Lucknow.

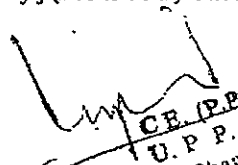


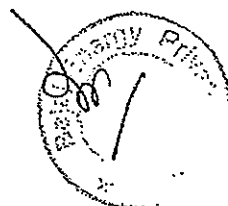
**ARTICLE 1: DEFINITIONS AND INTERPRETATION****1.1 Definitions**

The terms used in this Agreement, unless as defined below or repugnant to the context, shall have the same meaning as assigned to them by the Electricity Act, 2003 and the rules or regulations framed there under, including those issued/framed by Appropriate Commission (as defined hereunder), as amended or re-enacted from time to time.

The following terms when used in this Agreement shall have the respective meanings, as specified below:

"Act" or "Electricity Act 2003"	means the Electricity Act 2003 or any amendments made to the same or any succeeding enactment thereof;
"Agreed Form"	means, in relation to any document, the form of the said document most recently agreed to by the Parties and initialled by them for identification;
"Agreement" or "Power Purchase Agreement" or "PPA"	means this document including its recitals and Schedules;
"Appropriate Commission"	means the Uttar Pradesh Electricity Regulatory Commission constituted under the Electricity Act, 2003- or such other succeeding authority or commission as may be notified by Government of UP from time to time;
"Allocated Contracted Capacity"	means portion of the Contracted Capacity allocated to each of the Procurers as provided in Schedule 13 hereof, subject to adjustment as per the terms of this Agreement;
"Auxiliary Consumption" or Normative Auxiliary Consumption or AUX	, in relation to a period means, the quantum of energy consumed by auxiliary equipment of the generating station and transformer losses within the generating station and shall be expressed as a percentage of the sum of gross energy generated at the generator terminals of all the Units of the generating station.
"Availability Based Tariff" or "ABT" or "UPERC Regulations"	Shall mean all the regulations contained in the Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions of Generation Tariff) Regulations, 2009, as amended or revised from time to time, to the extent applied as per the terms of this Agreement;

  
CE (PPA)  
U.P.P.C. Lt.  
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Lucknow.



"Availability Factor" or "Availability" in relation to a thermal generating station for any period means the average of the daily average Declared Capacities (DCs) for all the days during that period expressed as a percentage of the Installed Capacity of the generating station minus Normative Auxiliary Consumption in MW, and shall be computed in accordance with the following formula:

$$\text{Availability (\%)} = 10000 \times \sum_{i=1}^N \text{DC}_i / \{ N \times \text{IC} \times (100 - \text{AUX}_n) \} \%$$

Where,

IC = Installed Capacity of the Unit in MW;  
 $\text{DC}_i$  = average Declared Capacity for the  $i^{\text{th}}$  day of the period in MW  
 $N$  = Number of days during the period; and  
 $\text{AUX}_n$  = Normative Auxiliary Consumption as a percentage of gross generation

"Available Capacity" means in each Settlement Period Power Station Declared Capacity (as is grossed up for Normative Auxiliary Consumption) in that Settlement Period;

"Bill Dispute Notice" means the notice issued by a Party raising a Dispute regarding a Monthly Bill or a Supplementary Bill issued by the other Party;

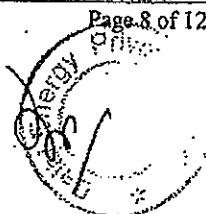
"Business Day" means with respect to Seller and each Procurer, a day other than Sunday or a statutory holiday, on which the banks remain open for business in the State of Uttar Pradesh in which the concerned Procurer's registered office is located;

"Capacity Charge" or "Capacity Charges" or "Fixed Charge" shall have meaning ascribed thereto in Schedule 7;

"Capacity Notice" shall have the meaning ascribed thereto under ABT or the Grid Code;

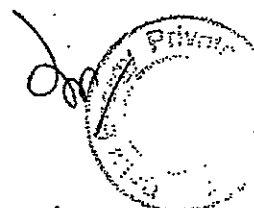
"Capital Cost" shall mean the total expenditure actually incurred by Seller, in setting up and constructing the Power Station, as approved by Appropriate Commission;

*[Signature]*  
 Shakti Bhawan Extra.  
 Lucknow.



'Capital Structure Schedule'	shall mean sources of finance used to finance the Capital Cost as provided in the Financing Agreements;
"Central Transmission Utility" or "CTU"	shall have the meaning ascribed thereto in the Electricity Act, 2003;
"CERC"	means the Central Electricity Regulatory Commission, as defined in the Electricity Act, 2003, or its successors;
"Change in Law"	shall have the meaning ascribed thereto in Article 13.1.1;
"Commercial Operation Date" or "COD"	means, in relation to Unit, the date one day after the date when each of the Procurers receives a Final Test Certificate of the Independent Engineer as per the provisions of Article 6.3.1 and in relation to the Power Station shall mean the date by which such Final Test Certificate as per Article 6.3.1 are received by the Procurers for all the Units;
"Commissioning" or "Commissioned" with its grammatical variations	means, in relation to a Unit, that the Unit or in relation to the Power Station, all the Units of the Power Station that have passed the Commissioning Tests successfully;
"Commissioning Tests" or "Commissioning Test"	means the Tests provided in Schedule 5 herein;
"Commissioned Unit"	means the Unit in respect of which COD has occurred;
"Construction Contractor/s"	means one or more main contractors, appointed by the Seller to design, engineer, supply, construct and commission the Project;
"Construction Period"	means the period from (and including) the date upon which the Construction Contractor is instructed or required to commence work under the Construction Contract up to (but not including) the Commercial Operation Date of the Unit in relation to a Unit and of all the Units in relation to the Power Station;
"Consultation Period"	means the period, commencing from the date of issue of a Seller Preliminary Default Notice or a Procurer Preliminary Default Notice as provided in Article 14 of this Agreement,

*Shakti Bhawan Estate,  
Lucknow.*



for consultation between the Parties to mitigate the consequence of the relevant event having regard to all the circumstances;

"Contract Year"

means the period beginning on the Effective Date (as defined hereunder) and ending on the immediately succeeding March 31 and thereafter each period of 12 months beginning on April 1 and ending on March 31 provided that :

(i) in the financial year in which Scheduled COD of the first Unit would have occurred, a Contract Year shall end on the date immediately before the Scheduled COD of the first Unit and a new Contract Year shall begin once again from the Scheduled Commercial Operation Date of the first Unit and end on immediately succeeding March 31 and provided further that

(ii) the last Contract Year of this Agreement shall end on the last day of the term of this Agreement;

Provided that for the purpose of payment, the tariff will be as determined by the UPERC for the applicable Contract Year;

"Contracted Capacity"

means ninety percent (90%) of Installed Capacity.

"Control Centre" or  
"Nodal Agency"

means the RLDC or SLDC or such other load control centre designated by the Procurers from time to time through which the Procurers shall issue Dispatch Instructions to the Seller for the Power Station;

"Current Rate(s) of  
Exchange"

shall mean the market rate(s) of foreign exchange not exceeding the highest State Bank of India (SBI) TT selling rates applicable to any liability of Seller in respect of any installment of the principal or any interest on any foreign Debt or where applicable in respect of any return on foreign equity as on the date on which such installment or as the case may be such return on foreign equity becomes due;

"Day"

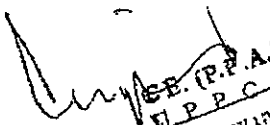
Shall mean the 24 hour period beginning at 00:00 hours (IST);

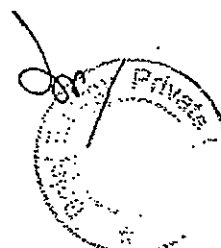
"Date of Financial  
Closing" or

shall mean the date upon which the Financing Agreements have been executed and the same is approved by the Board of

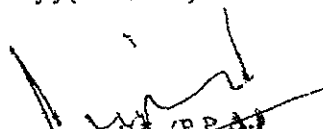
"Investment Approval  
Date"

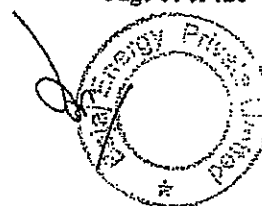
Directors of the Seller;

  
S.E. (P.P.A.)  
U.P.P.C.L.  
Shakti Bhawan Bldg.  
Lucknow.



"Debt Service"	means the amounts which are due under the Financing Agreements by the Seller to the Lenders, expressed in Rupees (with all amounts denominated in currencies other than Rupees being converted to Rupees at the Current Rate(s) of Exchange;
"Declared Capacity"	In relation to a Unit or the Power Station at any time means the net capacity of the Unit or the Power Station at the relevant time (expressed in MW at the Interconnection Point) as declared by the Seller in accordance with the Grid Code and dispatching procedures as per the Availability Based Tariff;
"Delivery Point" or "Interconnection Point"	means the points of delivery specified in Schedule 8 for fulfilling the obligation of the Seller to deliver the Electrical Output to the Procurers;
"Direct Non-Natural Force Majeure Event" "Dispute"	shall have the meaning ascribed thereto in Article 12.3(ii)(1); means any dispute or difference of any kind between a Procurer and the Seller or between the Procurers (jointly) and the Seller, in connection with or arising out of this Agreement including any issue on the interpretation and scope of the terms of this Agreement as provided in Article 17;
"Dispatch Instruction"	means any instruction issued by the Procurers through the respective SLDC and RLDC to the Seller, in accordance with applicable Grid Code and this Agreement;
"Due Date"	means the thirtieth (30 <sup>th</sup> ) day after a Monthly Bill or a Supplementary Bill is received and duly acknowledged by any Procurer (or, if such day is not a Business Day, the immediately succeeding Business Day) by which date such bill is payable by the said Procurer;
"Effective Date"	means the date of signing of this Agreement by last of all the Parties;
"Electricity Laws"	means the Electricity Act, 2003 and the rules and regulations made thereunder from time to time along with amendments thereto and replacements thereof and any other Law pertaining to electricity including regulations framed by the Appropriate Commission;
"Electrical Output"	means the net electrical output of the Power Station at the

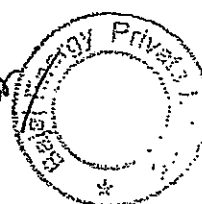
  
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Lucknow.



"Emergency"	Delivery Point, as expressed in kWh; means a condition or situation that, in the opinion of the Procurers or RLDC or SLDC or the agency responsible for operating and maintaining the Interconnection and Transmission Facilities or the transmission company, as the case may be, poses a significant threat to the Procurer's or the said agency's or transmission company's ability to maintain safe, adequate and continuous electricity supply to its customers, or seriously endangers the security of persons, plant or equipment;
"Energy Charges" or "Variable Charges"	Shall have the meaning ascribed to this term under Schedule 7;
"Expiry Date"	means the 25 <sup>th</sup> anniversary of the Commercial Operation Date of the Power Station. For the avoidance of doubt, in case the COD of the Power Station occurs on June 1, 2013, then the 25 <sup>th</sup> anniversary of the COD of the Power Station shall occur on June 1, 2038, i.e. in the Contract Year 2038-39;
"Final Test Certificate"	Means. a) a certificate of the Independent Engineer certifying and accepting the results of a Commissioning Test/s in accordance with Article 6.3.1 of this Agreement; or b) a certificate of the Independent Engineer certifying the result of a Repeat Performance Tests in accordance with Article 8.2.1 of this Agreement;
"Financial Closure" or "Financial Close"	Means the execution of all the Financing Agreements required for the Project and fulfilment of conditions precedents and waiver, if any, of any of the conditions precedent for the initial draw down of funds there under;
"Financing Agreements"	means all the loan agreements, notes, indentures, security agreements, letters of credit and other documents relating to the financing of the Project on or before the COD of the Power Station, as may be amended, modified, refinanced or replaced from time to time, but without in anyway increasing the liabilities of the Procurers therein;
"Force Majeure"	shall have the meaning ascribed thereto in Article 12.3;
"Forced Outage"	shall have the meaning ascribed thereto in Grid Code;

"Fuel" or "Primary Fuel"	means primary fuel used to generate electricity namely, domestic coal and/or imported coal;
"Fuel Supply Agreements"	means the agreement(s) entered into between the Seller and the Fuel Supplier for the purchase, transportation and handling of the Fuel, required for the operation of the Power Station. In case the transportation of the Fuel is not the responsibility of the Fuel Supplier, the term shall also include the separate agreement between the Seller and the Fuel Transporter for the transportation of Fuel in addition to the agreement between the Seller and the Fuel Supplier for the supply of the Fuel;
"Functional Specifications"	means the technical requirements and parameters described in Schedule 4 of this Agreement and as provided in Grid Code relating to the operation, maintenance and dispatch of Unit(s);
"Fuel Supplier"	Northern Coalfields Ltd or any other coal company as per coal allocation by Ministry of Coal, GoI including any domestic/international coal supplier(s) and/or traders within or outside India;
"GOI"	Shall mean Government of the Republic of India;
"GOUP"	Shall mean the Government of the State of Uttar Pradesh;
"Grid Code" or "IEGC"	means any set of regulations or codes issued by Appropriate Commission as amended and revised from time to time and legally binding on the Sellers' and Procurers' governing the operation of the Grid System or any succeeding set of regulations or code;
"Grid System"	means the Interconnection and Transmission Facilities and any other transmission or distribution facilities through which the Procurers supply electricity to their customers or the transmission company transmits electricity to the procurers;
"Gross Station Heat Rate or GHR"	means the heat energy input in kCal required to generate one kWh of electrical energy at generator terminals;
"Independent Engineer"	means an independent consulting engineering firm or group appointed by the Seller in consultation with the UPPCL/Lead Procurer six (6) months prior to Scheduled COD of the first Unit, to carry out the functions in accordance with Article 4.7.1

*[Signature]*  
CE (PPA.)  
UPPCL.  
Shakti Bhawan Bldg.  
Lucknow.





and Article 6, Article 12 and Article 8 herein.

Provided that separate Independent Engineer may be appointed for the purposes of Article 4.7.1, Article 6, Article 12 and Article 8;

Provided further that the separate Independent Engineer may be appointed for each financial year for the purposes of Article 8;

and in such case, such Independent engineer shall be appointed at least ninety (90) days prior to the beginning of the financial year;

"Indirect Non-Natural Force Majeure Event"

Shall have the meaning ascribed thereto in Article 12.3(ii)(2).

"Indian Governmental Instrumentality"

means the GOI, Government of Uttar Pradesh and any ministry or, department or board or agency other regulatory or quasi-judicial authority controlled by GOI or Government of States where the Procurers and Project are located and includes the Appropriate Commission;

"Infirm Power"

shall have the meaning ascribed thereto in Article 11.1;

"Initial Consents"

Shall mean the consents listed in Schedule 2;

"Initial Performance Retest Period"

shall have the meaning ascribed thereto in Article 6.3.3 of this Agreement;

"Installed Capacity"

means the summation of the name plate capacities of all the Units of the generating Station or the capacity of the generating station (reckoned at the generator terminals) as approved by the Commission time to time, provided that for the purpose of this Agreement in relation to the first Unit and, second Unit Installed Capacity means 45 MW rated gross name plate capacity each and in relation to the Power Station as a whole means 90 MW rated gross name plate capacity, or such capacities as may be determined in accordance with Article 6.3.4 or Article 6.3.5 of this Agreement;

"Interconnection Facilities" or

Means the facilities on the Procurers' side of the Interconnection Point for receiving and metering Electrical Output in accordance with this Agreement and which shall include, without limitation, all other transmission lines and

"Interconnection and Transmission Facilities"

*[Signature]*  
C.E. (P.P.A.)  
U. P. P. C. L.  
Shakti Bhawan Bata  
Lucknow.



associated equipment, transformers and associated equipment, relay and switching equipment and protective devices, safety equipment and, subject to Article 9, the Metering System required for the Project.

The Interconnection Facilities also include the facilities for receiving power at the Delivery Point where the transmission line from the Power Station Switchyard end is injecting power into the transmission network (including the dedicated transmission line connecting the Power Station with the transmission/CTU network);

"Invoice" or "Bill"

means either a Monthly Tariff Invoice, a Supplementary Invoice or a Procurer Invoice;

"Late Payment Surcharge"

shall have the meaning ascribed thereto in Article 11.3.4;

"Law"

means, in relation to this Agreement, all laws including Electricity Laws in force in India and any statute, ordinance, regulation, notification or code, rule, or any interpretation of any of them by an Indian Governmental Instrumentality and having force of law and shall further include all applicable rules, regulations, orders, notifications by an Indian Governmental Instrumentality pursuant to or under any of them and shall include all rules, regulations, decisions and orders of the Appropriate Commission;

"Lead Procurer"

shall have the meaning ascribed thereto in Article 2.5;


"Lenders"

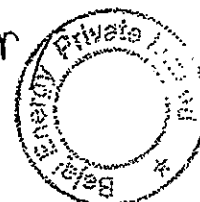
means the banks, other financial institutions, multilateral agencies, RBI registered non banking financial companies, mutual funds and agents or trustees of debenture / bond holders, including their successors and assignees, who have agreed as on or before COD of the Power Station to provide the Seller with the senior debt financing described in the Capital Structure Schedule, and any successor banks or financial institutions to whom their interests under the Financing Agreements may be transferred or assigned:

Provided that, such assignment or transfer shall not relieve the Seller of its obligations to the Procurers under this Agreement in any manner and shall also does not lead to an increase in the liability of any of the Procurers;

"Letter of Credit" or

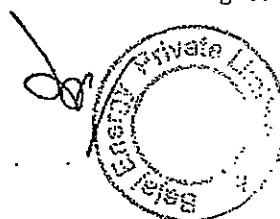
shall have the meaning ascribed thereto in Article 11.4.1;

  
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Lucknow.



"L/C"	
"Meters" or "Metering System"	Means meters used for accounting and billing of electricity in accordance with Central Electricity Authority (Installation and Operations of Meters) Regulations, 2006, Grid Code and ABT, as amended from time to time;
"Maintenance Outage"	shall have the meaning as ascribed to this term as per the provisions of the Grid Code;
"MCR"	means gross Power Station or Unit Maximum Continuous Rating as defined in the Grid Code;
"Minimum Offtake Guarantee"	means guaranteed offtake of sixty five per cent (65%) of the total Contracted Capacity for all Procurers taken together during a Contract Year.
"Month"	Means a period of thirty (30) days from (and excluding) the date of the event, where applicable, else a calendar month;
"Monthly Bill" or "Monthly Invoice"	Means a monthly invoice comprising Capacity Charges (applicable after COD of the first unit) and Energy Charges, including incentive and penalty, as per Schedule 7 hereof;
"MVA"	shall mean mega-volt ampere.
"MW"	shall mean megawatt.
"Notice to Proceed" or "NTP"	Means the date on which the Seller shall fulfill the condition as contained in Article 3.1.2 (iii) of this Agreement in accordance with the provisions of this Agreement
"Natural Force Majeure Event"	Shall have the meaning ascribed thereto in Article 12.3(i).
"Non-Natural Force Majeure Event"	Shall have the meaning ascribed thereto in Article 12.3(ii).
"Normative Availability" or "Target Availability"	Means equal to eighty five per cent (85%) Availability or the availability at the Delivery Point on Contract Year basis.
"Operating Period"	in relation to the Unit means the period from its COD and in relation to the Power Station the date by which all the Units achieve COD, until the expiry or earlier termination of this Agreement in accordance with Article 2 of this Agreement;
"O&M Contract" or "O&M Contracts"	Means the contract/s entered into by the Seller with the Operator or Operators, if any;
"Operating Month"	shall mean the period from the midnight following the

CE/PPA-3  
D. P. P. E.  
Shafiq Bawani Extn.  
Lucknow.



Commercial Operation Date till the end of 2400 hours on the last Day of that Month and thereafter the period commencing at 0000 hours on the first Day of the Month and ending at 2400 hours on the last Day of the Month;

"Operating Procedures"	Shall have the meaning ascribed thereto in Grid Code;
"Operator" or "Operators"	Means one or more contractors appointed as operator of power generation facilities of the Power Station pursuant to an O&M contract, if any;
"Party" and "Parties"	Shall have the meaning ascribed thereto in the recital to this Agreement;
"Performance Test "	Means the test carried out in accordance with Article 1.1 of Schedule 5 of this Agreement;
"Plant Load Factor" or "PLF"	for a given period, means the total sent out energy corresponding to Scheduled Generation during the period, expressed as a percentage of sent out energy corresponding to Contracted Capacity in that period and shall be computed in accordance with the following formula: $PLF (\%) = 10000 \times \sum_{i=1}^N SGi / \{ N \times CC \times (100 - AUX_n) \}$ <p style="text-align: center;">Where:</p> <p>(1) "CC" Contracted Capacity in MW;</p> <p>(2) "SGi" = Scheduled Generation in MW for the Settlement Period i (only for the Procurers);</p> <p>(3) "N" = Number of Settlement Periods during the period; and</p> <p>(4) "AUX<sub>n</sub>" = Normative Auxiliary Consumption (%)</p>
"Preliminary Default Notice"	Shall have the meaning ascribed thereto in Article 14 of this Agreement;
"Promoter"	Promoter means M/s Bajaj Hindusthan Limited.
"Power Station"	Means the: <ol style="list-style-type: none"> <li>(a) coal fired power generation facility comprising of any or all the Units;</li> <li>(b) any associated fuel handling, treatment or storage</li> </ol>

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facilities of the power generation facility referred to above;

- (c) any water supply, treatment or storage facilities required for the operation of the power generation facility referred to above;
- (d) the ash disposal system including ash dyke [as applicable];
- (e) township area for the staff colony; and
- (f) bay/s for transmission system in the switchyard of the power station,
- (g) all the other assets, buildings/structures, equipments, plant and machinery, facilities and related assets required for the efficient and economic operation of the power generation facility;

whether completed or at any stage of development and construction or intended to be developed and constructed as per the provisions of this Agreement;

"Project"

means the Power Station undertaken for design, financing, engineering, procurement, construction, operation, maintenance, repair, refurbishment, development and insurance by the Seller in accordance with the terms and conditions of this Agreement;

"Project Documents"

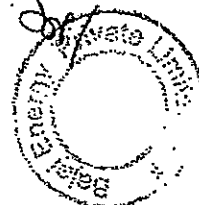
Mean

- a) MOU dated 22.04.2010;
- b) Construction Contracts;
- c) Fuel Supply Agreements including the Fuel Transportation Agreement, if any;
- d) Financing Agreements;
- e) O&M contracts;
- f) any other agreements designated in writing as such, from time to time, jointly by the Procurers and the Seller;

"Prudent Utility Practices"

means the practices, methods and standards that are generally accepted internationally from time to time by electric utilities for the purpose of ensuring the safe, efficient and economic design, construction, commissioning, operation and maintenance of and power generation equipment and mine of

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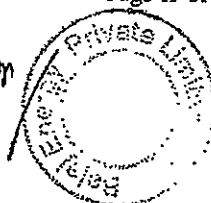


the type specified in this Agreement and which practices, methods and standards shall be adjusted as necessary, to take account of:

- a) operation and maintenance guidelines recommended by the manufacturers of the plant and equipment to be incorporated in the Project;
- b) the requirements of Indian Law; and
- c) the physical conditions at the Site;

"Repeat Performance Test "	Shall have the meaning ascribed thereto in Article 8.1 of this Agreement;
"Revised Scheduled COD"	Shall have the meaning as ascribed thereto in Article 3.1.2 (viii).
"RPC"	Means the relevant Regional Power Committee established by the Government of India for a specific Region in accordance with the Electricity Act, 2003 for facilitating integrated operation of the power system in that Region;
"RBI"	Means Reserve Bank of India;
"Regional Energy Accounts" or "REA"	Means as defined in the Grid Code and issued by the relevant RPC secretariat or other appropriate agency for each Week and for each Month (as per their prescribed methodology), including the revisions and amendments thereof;
"Return on Equity"	Shall have the meaning ascribed thereto in Schedule-7.
"RLDC"	Means the relevant Regional Load Dispatch Centre as defined in the Electricity Act, 2003, in the region in which the Project is located;
"Rupees" or "Rs."	Means the lawful currency of India;
"SBAR"	means the prime lending rate per annum applicable for loans with one (1) year maturity as fixed from time to time by the State Bank of India. In the absence of such rate, any other arrangement that substitutes such prime lending rate as mutually agreed to by the Parties;
"Secondary Fuel"	Shall mean fuel oil and / or any other liquid fuel;
"Selectee"	means a new company (i) proposed by the Lenders pursuant to Schedule 17 hereof and approved by the Procurers (ii) or proposed by the Procurer in accordance with Schedule 17 hereof and approved by the Lenders, for substituting the Seller

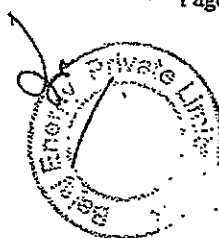
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for the residual period of the PPA by amendment of the PPA or by execution of a fresh PPA in accordance with the terms and conditions contained in the said Schedule;

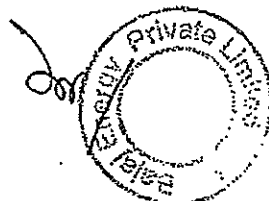
"SERC"	Means the State Electricity Regulatory Commission, as defined in the Electricity Act, 2003, or its successors;
"Scheduled COD" or "Scheduled Commercial Operation Date"	Means for the first Unit, 24 months from the date of MOU (22.04.2010) and for the second Unit, 28 months from the date of MOU, as determined and announced by the Seller to the Procurers, subject to the extension of time by Procurers or in accordance with the provisions herein or due to Force Majeure Events;
"Scheduled Connection Date"	Shall mean the date falling 120 days before the Scheduled COD of first Unit;
"Scheduled Energy"	Means the quantum of ex-bus energy in kWh scheduled to be injected into the grid by the Unit corresponding to Scheduled Generation;
"Scheduled Generation" or "SG"	At any time or for any period or time block means schedule of generation in MW ex-bus given by the State Load Despatch Centre;
"Scheduled Outage"	Shall have the meaning ascribed to this term as per the provisions of the Grid Code;
"Scheduled Synchronisation Date"	Means in relation to a Unit, the date, which shall be maximum of one hundred and eighty (180) days prior to the Scheduled COD of the respective Unit;
"Settlement Period"	Means the time block for issue of daily generation and drawal schedules as provided in ABT;
"Site"	Means the land over which the Project will be developed as provided in Annexure 1A;
"SLDC"	Means the relevant State Load Dispatch Centre as defined in the Electricity Laws, in the State where the Procurer's registered office is located;
"Stabilisation Period"	Shall mean, a period of One hundred Eighty (180) days commencing on the Commercial Operation Date of the each Unit;

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"State Transmission Utility" or "STU"	Shall have the meaning ascribed thereto in the Electricity Act 2003;
"Supercritical Technology"	Means technology with minimum steam parameters at steam turbine inlet as decided with the Construction Contractor;
"Supplementary Bill"	Means a bill other than a Monthly Bill raised by any of the Parties in accordance with Article 11;
"Tariff Payment"	Means the payments under Monthly Bills as referred to in Schedule 7 and the relevant Supplementary Bills;
"Tariff"	Means the tariff as computed in accordance with Schedule 7;
"Tariff Period"	means the period beginning on the COD of first Unit and ending on the immediately succeeding March 31 and thereafter each period of 12 months beginning on April 1 and ending on March 31 provided that the last Tariff Period shall end on the Expiry Date of this Agreement.
"Tested Capacity"	In relation to a Unit, or the Power Station as a whole (if all the Units of the Power Station have been Commissioned) means the results of the most recent Performance Test or Repeat Performance Test carried out in relation to the Power Station in accordance with Article 6, Article 8 and Schedule 5 of this Agreement;
"Termination Notice"	Shall mean the notice given before termination of this Agreement in accordance with relevant clauses of this Agreement;
"Term of Agreement"	Shall have the meaning ascribed thereto in Article 2.1;
"Total Debt Amount"	<p>Means the sum of the following amounts, expressed in Rupees (with all amounts denominated in currencies other than Rupees being converted to Rupees at the reference exchange rate, i.e. the selling rate in Rupees for the Foreign Currency on the relevant day, as notified by the State Bank of India as its TT Rate at 12:00 noon on the date of issuance of Substitution Notice by the Lenders</p> <p>(a) the principal amount of the senior debt incurred by the Seller (as per the terms of the Financing Agreements) to finance the Project according to the Capital Structure Schedule which remains outstanding on the date of issuance of Substitution Notice by the Lender after</p>

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- taking account of any senior debt repayments which could have been made out of the Monthly Tariff Payments received by the Seller on or before the date of issuance of Substitution Notice by the Lender as per the terms provided in the Financing Agreements ; and
- (b) all accrued interest and financing fees payable under the Financing Agreements on the amounts referred to in (a) above from the date of the Capacity Charge payment (as specified in Schedule 7 hereof) immediately preceding the date of issuance of Substitution Notice by the Lender or, if the Capacity Charges have not yet fallen due to be paid, from the most recent date when interest and financing fees were capitalised, and
  - (c) if this Agreement is terminated during the Construction Period, any amounts owed to the Construction Contractor for work performed but not paid for under the Construction Contract (other than amounts falling due by reason of the Seller's default);

"US \$ " or "USD" or "Dollar"	Means the lawful currency of United States of America;
"Unit"	Means one steam generator, steam turbine, generator and associated auxiliaries of the Power Station
"Unscheduled Interchange" or "UI"	Shall have the meaning ascribed thereto in Rule 24 of the UPERC (Terms and Conditions of Generation Tariff) Regulations 2009 as amended or revised from time to time;
"UPERC" "UPPTCL System"	Shall mean Uttar Pradesh Electricity Regulatory Commission; shall mean the electrical supply and transmission system owned, used or controlled by UP Power Transmission Corporation Ltd. or its successor in UP for the purpose of transmitting and distributing electricity to the Procurers
"Week"	Means a calendar week commencing from 00:00 hours of Monday, and ending at 24:00 hours of the following Sunday;
"Wheeling Charges" or "Transmission Charges"	Are the charges paid by the Procurers to the CTU or STU or any other agency for the transfer of power from the Power Station switchyard end to the Procurers' network;
"Working Capital"	Shall have the meaning ascribed to this term under Schedule 7;

"Year"

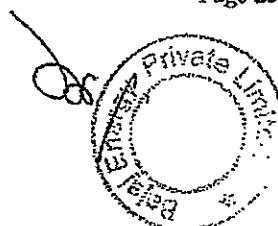
Means a financial year starting from 1<sup>st</sup> April of a year to 31<sup>st</sup> March of the next year.

## 1.2 Interpretation


Save where the contrary is indicated, any reference in this Agreement to:

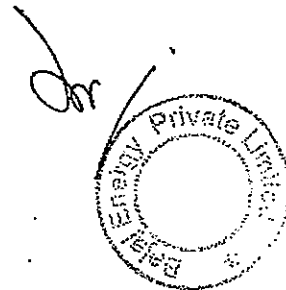
- 1.2.1 A "Recital", an "Article", a "Schedule" and a "paragraph/Clause" shall be construed as a reference to a Recital, an Article, a Schedule and a paragraph/clause respectively of this Agreement.
- 1.2.2 An "affiliate" of any party shall mean a company that either directly or indirectly controls or is controlled by or is under common control of the same person which controls the concerned party; and control means ownership by one company of at least twenty six percent (26%) of the voting rights of the other company.
- 1.2.3 A "crore" means a reference to ten million (10,000,000) and a "lakh" means a reference to one tenth of a million (1,00,000);
- 1.2.4 An "encumbrance" shall be construed as a reference to a mortgage, charge, pledge, lien or other encumbrance securing any obligation of any person or any other type of preferential arrangement (including, without limitation, title transfer and retention arrangements) having a similar effect.
- 1.2.5 "indebtedness" shall be construed so as to include any obligation (whether incurred as principal or surety) for the payment or repayment of money, whether present or future, actual or contingent;
- 1.2.6 A "person" shall be construed as a reference to any person, firm, company, corporation, society, trust, government, state or agency of a state or any association or partnership (whether or not having separate legal personality) of two or more of the above and a person shall be construed as including a reference to its successors, permitted transferees and permitted assigns in accordance with their respective interests.
- 1.2.7 The "winding-up", "dissolution", "insolvency", or "reorganization" of a company or corporation shall be construed so as to include any equivalent or analogous proceedings under the Law of the jurisdiction in which such company or corporation is incorporated or any jurisdiction in which such company or corporation carries on business including the seeking of liquidation, winding-up, reorganization, dissolution, arrangement, protection or relief of debtors.
- 1.2.8 Words importing the singular shall include the plural and vice versa.
- 1.2.9 This Agreement itself or any other agreement or document shall be construed as a reference to this or to such other agreement or document as it may have been, or may from time to time be, amended, varied, novated, replaced or supplemented.
- 1.2.10 A Law shall be construed as a reference to such Law including its amendments or re-enactments from time to time.

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- 1.2.11 A time of day shall, save as otherwise provided in any agreement or document be construed as a reference to Indian Standard Time.
- 1.2.12 Different parts of this Agreement are to be taken as mutually explanatory and supplementary to each other and if there is any inconsistency between or among the parts of this Agreement, they shall be interpreted in a harmonious manner so as to give effect to each part.
- 1.2.13 The tables of contents and any headings or sub-headings in this Agreement have been inserted for ease of reference only and shall not affect the interpretation of this Agreement.
- 1.2.14 All interest payable under this Agreement shall accrue from day to day and be calculated on the basis of a year of three hundred and sixty five (365) days.
- 1.2.15 The words "hereof" or "herein", if and when used in this Agreement shall mean a reference to this Agreement.
- 1.2.16 In case any thing in this Agreement is found in consistence with UPERC Regulations or orders passed by UPERC, then UPERC Regulations/Orders shall prevail over this Agreement.

  
CE. (P.P.A.)  
U P P. C. L.  
Shakti Bawan Extn.  
Lucknow.



## 2. ARTICLE 2 : TERM OF AGREEMENT

### 2.1 Effective Date and Term of Agreement

This Agreement shall come into effect from the Effective Date. This Agreement shall be valid for a term commencing from the Effective Date until the Expiry Date ("Term of Agreement") unless terminated earlier pursuant to Article 2.2. Upon the occurrence of the Expiry Date, this Agreement shall, subject to Article 18.9, automatically terminate, unless mutually, extended by all the Parties on mutually agreed terms and conditions, atleast one hundred and eighty (180) days prior to the Expiry Date, subject to approval of the Appropriate Commission, as necessary.

### 2.2 Early Termination

This Agreement shall terminate before the Expiry Date:

- i. if either all the Procurers (jointly) or Seller exercises a right to terminate, pursuant to Article 3.3, Article 4.5.3, Article 14.4.5 or Schedule 10 of this Agreement or any other provision of this Agreement; or
- ii. in such other circumstances as the Seller and all the Procurers (jointly) may agree, in writing.

### 2.3 Extension of term/Renewal

2.3.1 The Term of this Agreement can be extended beyond the Term of Agreement ("Renewal") by delivering written notice by either Party not later than one hundred and eighty (180) days prior to the end of the Term of Agreement, in which event the Term of this Agreement shall extend by mutual Agreement of the Parties for a mutually agreed period with such amendments as shall be mutually agreed by the Seller and the Procurers and approved by UPERC, as may be applicable; The extension in term of Agreement, as agreed by the Parties, would be allowed by the Commission after prudence check on a petition filed by the Developer before 90 days from the expiry of term of PPA.

2.3.2 Where either party signifies its intention to extend the term of this Agreement and negotiations between them commence, then this agreement shall be deemed to have been extended beyond the Term of Agreement until the negotiations are ended, provided that during this spill over period the terms

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and conditions for supply and purchase of power and other matters incidental thereto, will remain unchanged;

2.3.3 Notwithstanding anything to the contrary contained herein, if either Party exercises its right of renewal as aforesaid and if the Seller and the Procurers are unable to agree on the terms and conditions applicable during the mutually agreed period of the extended term within a period of one hundred and eighty (180) days from the Expiry Date, then the Term of Agreement shall end on the date of expiry of the Term of Agreement as automatically extended by spill over period.

#### 2.3.4 Consequences on non-extension

##### 2.3.4.1 Sale of Energy to third party

If at the expiry of the Term of Agreement, the Agreement is not extended pursuant to the above provisions, then the Seller may, subject to applicable laws, sell the Contracted Capacity under this Agreement to any third party. In such case, the Procurers/UPPCL/SLDC/STU shall have no objection in wheeling such power, subject, however, to the payment of wheeling charges by the Seller or the third party buyer, as determined by the UPERC.

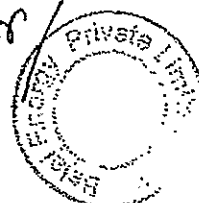
##### 2.3.4.2 Sale of the Power Station

If at the expiry of the Term of Agreement, the Agreement is not extended, the Seller may also exercise its option to sell the Power Station as it may decide and in such event the Seller shall have discretion to sell the Power Station to any third party or the Procurer(s).

#### 2.3.5 Extension on Force Majeure

Notwithstanding anything to the contrary contained in this Agreement, the Scheduled Commercial Operation Date of any Unit shall be extended by the duration of any Force Majeure Event occurring during the Construction Period and as approved by the Commission.

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**2.4 Survival**

- 2.4.1 The expiry or termination of this Agreement shall not affect accrued rights and obligations of the Parties under this Agreement, including the right to receive Liquidated Damages as per the terms of this Agreement, nor shall it affect any continuing obligations for which this Agreement provides, either expressly or by necessary implication, the survival of, post its expiry or termination.

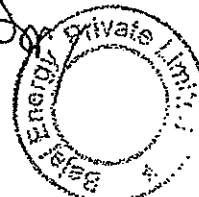
**2.5 Lead Procurer**

- 2.5.1 The Procurers hereby appoint and authorise "Procurer No. 3\_\_" [Madhyanchal Vidyut Vitran Nigam Ltd [hereinafter referred to as the "Lead Procurer"] to represent all the Procurers for discharging the rights and obligations of the Procurers, which are required to be undertaken by the Procurers jointly as mentioned in Schedule 12 of this Agreement. Accordingly, all the Procurers shall follow and be bound by the decisions of the Lead Procurer on all such matters. Each Procurer agrees that any decision, communication, notice, action or inaction of the Lead Procurer on such matters shall be deemed to have been on its/his behalf and shall be binding on each of the Procurers. The Seller shall be entitled to rely upon any such action, decision or communication from the Lead Procurer. It is clarified that this Article 2.5 is not intended to and shall not render the Lead Procurer liable to discharge individual Tariff payments of the other Procurers.

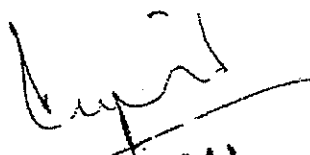
The Procurers hereby also appoint and authorise "Procurer No. YY" [Insert name of the Alternate Lead Procurer] (hereinafter referred to as the "Alternate Lead Procurer"), to act as Lead Procurer as per the provisions of this Article 2.5.1, on the occurrence of any Event of Default specified in Article 14.2 by the Lead Procurer. In such an event, the Seller may, at its option, within a period of fifteen (15) days from the date of issue of the Preliminary Default Notice referred to in Article 14.4.2 and if the said default by the Lead Procurer subsists, specify in writing to all the Procurers that the Alternate Lead Procurer shall thereafter act as the Lead Procurer. In such a case, if the Seller so notifies, the Alternate Lead Procurer shall, thereafter, act as Lead Procurer for the purposes of this Agreement, and the Lead Procurer earlier appointed under this Article 2.5.1 shall automatically cease to be the Lead Procurer. It is clarified that all decisions taken by the Procurer 2 in its capacity as Lead Procurer before such change, shall continue to be valid, in accordance with this Agreement.

In the event of Procurer YY becoming the Lead Procurer as per this Article, all the Procurers shall also appoint any of Procurers, other than Procurer 2, as an Alternate Lead Procurer and thereafter the provisions of this Article 2.5.1 shall be applicable.

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- 2.5.2 Notwithstanding anything contained above, any decision which is required to be taken by the Procurers jointly under the provisions of Article 14 shall be taken by all the Procurers and in case of difference amongst the Procurers, the said decision shall be taken by the Majority Procurers as defined in Article 2.5.3 below.
- 2.5.3 Any decision taken by Procurers who taken together constitute minimum sixty five per cent (65%) of the Contracted Capacity of the Power Station and constitute in number atleast fifty per cent (50%) of the total number of Procurers ("Majority Procurers"), shall be binding on the Lead Procurer and all other Procurers. The Majority Procurers shall also have the right to replace the Lead Procurer by any other Procurer of their choice.

  
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3. **ARTICLE 3 : CONDITIONS SUBSEQUENT TO BE SATISFIED BY THE SELLER AND THE PROCURERS**

3.1 **Satisfaction of conditions subsequent by the Seller and the Procurers**

Prior to the Effective Date, Promoter has provided to GOUP, the Bank Guarantee of an aggregate amount of Rupees 22.5 crores in accordance with the provisions of Clause 16 of the MOU dated 22.04.2010. The MOU is valid till 18 months from the date of execution and the Bank Guarantee shall remain valid beyond six months of the period of the MOU. In case of breach of the MOU or any part thereof by above said company the said Bank Guarantee can be invoked by GOUP.

The Promoter shall provide for the same aggregate amount of Bank Guarantee as provided with GoUP with the procurers having validity before 3 months from scheduled COD to after 3 months from scheduled COD. In case the actual COD is different from the scheduled COD then the validity of performance guarantee shall be adjusted accordingly so that it remains with the procurers upto after 3 months from actual COD.

3.1.1A Not Used.

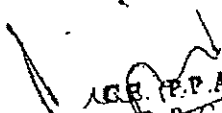
3.1.2 The Seller agrees and undertakes to duly perform and complete the following activities within six [6] Months from the Effective Date unless such completion is affected due to the Procurers' failure to comply with their obligations under Article 3.1.2A of this Agreement or by any Force Majeure event or if any of the activities is specifically waived in writing by the Procurers jointly:

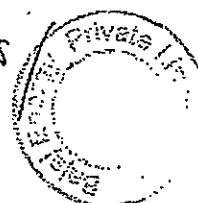
i) the Seller shall have received the Initial Consents as mentioned in Schedule 2, either unconditionally or subject to conditions which do not materially prejudice its rights or the performance of its obligations under this Agreement;

ii) the Seller shall have obtained coal linkage from Standing Linkage Committee (Long Term), GOI and provided the copies of the same to the Procurer;

iii) the Seller shall have

a) awarded the Engineering, Procurement and Construction contract ("EPC contract) or main plant contract for boiler, turbine and generator ("BTG"),

  
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for the Project and shall have given to such contractor an irrevocable notice to proceed ; and

b) Not used.

c) Seller shall have achieved Financial Closure;

iv) the Seller shall have made available to the Procurer the data with respect to the Project for design of Interconnection Facilities and Transmission Facilities, if required;

v) The Seller shall have finalised the specific delivery point for supply of power in consultation with the Procurer;

vi) The Seller shall have provided an irrevocable letter to the Lenders duly accepting and acknowledging the rights provided to the Lenders under the terms of this Agreement.

vii) the Seller shall have sent a written notice to all the Procurer(s) indicating that

a) the Scheduled COD shall be as per the original Scheduled COD i.e 24months for the first Unit and 28 months for the second Unit from the MOU date or

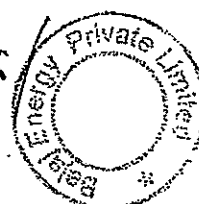
b) that it intends to prepone the Scheduled COD to be (i) for the first Unit, [Insert Date]; for the second Unit [Insert Date] (hereinafter referred to as "Revised Scheduled COD"). Provided that, the Revised Scheduled COD of any Unit shall not be earlier than [Insert months] months from the MOU date

ix) Not Used.

3.1.2A The Procurers agrees and undertakes to duly perform and complete the following activities within six [6] Months from the Effective Date unless such completion is affected due to the Seller's failure to comply with their obligations under Article 3.1.2 of this Agreement or by any Force Majeure event or if any of the activities is specifically waived in writing by the Seller

1. To the extent same are within their respective jurisdiction of, GOUP and/or Procurers shall have provided or caused to be provided all necessary permits and shall have provided Governmental Approvals for the electricity, and water supply required for the construction of the Units.

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2. UPPCL/the Procurers shall also have reasonably assisted the Company in obtaining coal linkage from GoI, by providing appropriate recommendations

3.1.3 Not used

**3.2 Progress Reports**

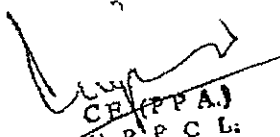
The Seller and the Procurers shall notify one another in writing at least once a Month on the progress made in satisfying the conditions in Articles 3.1.2 and 3.1.2A.

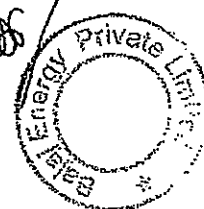
**3.3 Consequences of non-fulfillment of conditions under Article 3.1**

3.3.1 If the conditions specified in Article 3.1 are not duly fulfilled within the relevant stipulated time or after extended time, the Procurer or the Seller shall have the right to terminate this Agreement by giving a Termination Notice to the Seller/ Procurers in writing of at least seven (7) days to explain and/or perform

3.3.2 In case of inability of the Seller to perform the activities specified in Article 3.1 within the relevant stipulated time period or during extended period, otherwise than for the reasons directly attributable to the Procurers/ UPPCL/GOUP or Force Majeure event, this Agreement may be terminated by the UPPCL/the Lead Procurer at its option, by giving a Termination Notice of at least seven (7) days, in writing to the Seller and in such case, the Seller shall be liable to pay liquidated damages, as may be determined by UPERC; provided that the amount of liquidated damages shall in no case exceed the amount of bank guarantee given by the Promoter as stated under Article 3.1.1

3.3.3 Similarly, in case of inability of UPPCL/Procurers to perform the activities specified in Article 3.1 within the relevant stipulated time period or during extended period, otherwise than for the reasons directly attributable to the Seller or Force Majeure event, this Agreement may be terminated by the Seller at its option, by giving a Termination Notice of at least seven (7) days, in writing to UPPCL/the Lead Procurer and in such case, the Procurer shall be liable to pay liquidated damages, as may be determined by UPERC, against site development and other charges, to Seller. Bank Guarantee of the Promoter shall be released forthwith

  
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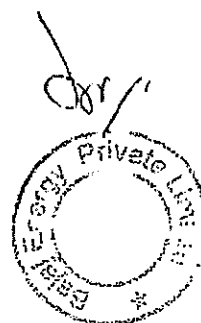


3.3.4 Any extension/increase in time period provided hereinabove shall also lead to equal increase in the time period of Bank Guarantee provided by the seller under clause 3.1.1. The new scheduled COD shall be decided with the approval of Commission accordingly.

3.4 Not used

3.5 Not used

  
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**ARTICLE 4 : DEVELOPMENT OF THE PROJECT****4.1 The Seller's obligation to build, own and operate the Project**


4.1.1 Subject to the terms and conditions of this Agreement, the Seller undertakes to be responsible, at Seller's own cost and risk, for:

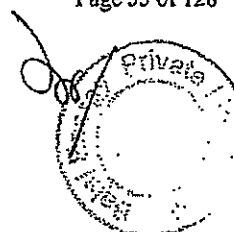
- a) obtaining (other than Initial Consents) and maintaining in full force and effect all Consents required by it pursuant to this Agreement and Indian Law;
- b) executing the Project in a timely manner so as to enable each of the Units and the Power Station as a whole to be Commissioned no later than its Scheduled Commercial Operations Date and such that as much of the Contracted Capacity as can be made available through the use of Prudent Utility Practices will be made available reliably to meet the Procurers' scheduling and dispatch requirements throughout the term of this Agreement;
- c) owning the Project throughout the term of this Agreement free and clear of encumbrances, except those expressly permitted by Article 16;
- d) procure the requirements of electricity at the Project (including construction, commissioning and start-up power) and to meet in a timely manner all formalities for getting such a supply of electricity;
- e) provide on a timely basis relevant information on Power Station specifications which may be required for interconnecting system with the transmission system;
- f) fulfilling all other obligations undertaken by him under this Agreement.

**4.2 Procurers' obligation**

Subject to the terms and conditions of this Agreement; the Procurers:

- a) shall be responsible for procuring the Interconnection and Transmission Facilities to enable the Power Station to be connected to the Grid System not later than the Scheduled Connection Date;
- b) shall ensure that the Seller is provided an electrical connection for reasonable construction, commissioning and start up power at the Project as reasonably requisitioned by the Seller by written intimation to the Procurers, on the then prevalent terms and conditions as applicable to such consumers.;
- c) shall be responsible for payment of the Transmission Charges and RLDC and SLDC charges in proportion to the contracted capacity;
- d) shall make all reasonable arrangements for the evacuation of the Infirm Power from the Power Station; and

  
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- e) fulfilling obligations undertaken by them under this Agreement.

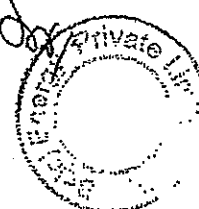
**4.3 Purchase and sale of Available Capacity and Scheduled Energy**

- 4.3.1 Subject to the terms and conditions of this Agreement, the Seller undertakes to sell to the Procurers, and the Procurers undertake to pay the Tariff for ninety percent (90%) of the Available Capacity and Scheduled Energy of the Power Station, according to their then existing Allocated Contract Capacity, throughout the term of this Agreement.
- 4.3.2 Unless otherwise instructed by all the Procurers (jointly), the Seller shall sell ninety percent (90%) of the Available Capacity of the Power Station to each Procurer in proportion of each Procurer's then existing Allocated Contract Capacity pursuant to Dispatch Instructions.
- 4.3.3 The Scheduled Generation and Electrical Output attributable to ninety percent (90%) of Available Capacity shall be provided to each Procurer in proportion of each Procurer's then existing Allocated Contract Capacity pursuant to Dispatch Instructions.
- 4.3.4 The Seller shall be entitled to sell the Scheduled Generation and Electrical Output attributable to ten percent (10%) of Available Capacity to third party consumers, other licencies, traders, etc.

**4.4 Right to Available Capacity and Scheduled Energy**

- 4.4.1 Subject to other provisions of this Agreement, the entire Contracted Capacity shall at all times be for the exclusive benefit of the Procurers and the Procurers shall have the exclusive right to purchase the entire Contracted Capacity from the Seller. The Seller shall not grant to any third party or allow any third party to obtain any entitlement to the Available Capacity and/or Scheduled Energy attributable to Procurers then existing Allocated Contract Capacity.
- 4.4.2 Notwithstanding Article 4.4.1, the Seller shall be permitted to sell power, being a part of the Available Capacity of the Power Station to third parties if:
- (a) there is a part of Available Capacity which has not been Dispatched by the Procurer, ordinarily entitled to receive such part ('Concerned Procurer'); and
  - (b) such part has first been offered, at the same Tariff, to the other Procurers (by the RLDC and/or the Seller), who were not ordinarily entitled to receive such part and they have chosen to waive or not to exercise their first right to receive such part of the Available Capacity within two (2) hours of being so offered the opportunity to receive such part.
  - (c) Lead procurer has rejected seller's proposal to procure coal from any source other than coal linkage as per clause - 6.5
- 4.4.3 If any one or more than one Procurer do not avail power upto the Available Capacity provided by the Seller corresponding to such Procurer's or Procurers's Allocated Contracted Capacity, and the provisions of Article 4.4.2 have been complied with, the Seller shall be entitled to sell such Available Capacity not procured, to any person without losing the right to receive the Capacity Charges from the Concerned

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Procurer(s) for such un-availed Available Capacity. In such a case the surplus amount received over variable charge shall be adjusted against the Fixed Charge liability of such Procurer(s) in respect of quantum of such capacity and/or power sold to third parties as provided below.

In case the surplus amount over variable charge is higher than the Fixed Charge liability of such Procurer(s) in respect of quantum of such capacity and/or power sold by Seller to third parties, such excess amount shall be retained by Seller. In case the surplus amount over Variable Charges is lower than the Fixed Charge liability of such Procurer(s) in respect of the quantum of such capacity and/or power sold by Seller to third parties, such short fall amount shall be payable by the respective Procurer(s). Provided that in such case, if the power is sold to its affiliate Company then it should not be sold at a tariff less than the agreed in this PPA. In such case, the Procurers/UPPCL/SLDC/STU shall have no objection in wheeling such power

4.4.4 The Seller shall not itself use any of the electricity generated by the Power Station during the term of this Agreement, except for the purpose of meeting the Power Station's auxiliary load requirements, as per the norms laid down by the Appropriate Commission and housing colony for the staff and other incidental usage of the same category.

4.4.5 The sale under Unscheduled Interchange shall not be considered as sale to third party for the purposes of this Agreement.

#### 4.5 Extensions of time

##### 4.5.1 In the event that:

- (a) the Seller is prevented from performing its obligations under Article 4.1.1(b) by the stipulated date, due to any Procurer Event of Default; or
- (b) Unit cannot be Commissioned by its Scheduled Commercial Operations Date because of Force Majeure Events, the Scheduled Commercial Operations Date, the Scheduled Connection Date and the Expiry Date shall be deferred, subject to the limit prescribed in Article 4.5.3, for a reasonable period but not less than 'day for day' basis, to permit the Seller through the use of due diligence; to overcome the effects of the Force Majeure Events affecting the Seller or in the case of the Procurer's or Procurers' Event of Default, till such time such default is rectified by the Procurer(s).

4.5.2 If the Parties have not agreed, within thirty (30) days after the affected Party's performance has ceased to be affected by the relevant circumstance, on how long the Scheduled Commercial Operations Date, the Scheduled Connection Date or the

Expiry Date should be deferred by, any Party may raise the Dispute to be resolved in accordance with Article 17.

- 4.5.3 In case of extension occurring due to reasons specified in Article 4.5.1(a), the original Scheduled Commercial Operations Date of any Unit or the original Scheduled Commercial Date of the Power Station as a whole, would not be extended by more than two (2) years or the date on which the Seller elects to terminate this Agreement, whichever is earlier.

As a result of such extension, the date newly determined shall be deemed to be the Scheduled Commercial Operations Date for the purposes of this Agreement.

#### 4.6 Liquidated damages for delay in providing Contracted Capacity

- 4.6.1 If any Unit is not Commissioned by its Scheduled Commercial Operation Date other than for the reasons specified in Article 4.5.1, the Seller shall pay to each Procurer liquidated damages, proportionate to their then existing Allocated Contracted Capacity, for the delay in such Commissioning or making the Unit's Contracted Capacity available for dispatch by such date. The sum total of the liquidated damages payable by the Seller to the Procurers for such delayed Unit shall be calculated as follows:

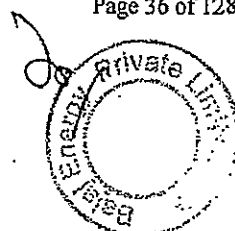
$$SLDb = [CCun \times dn \times DR1], \text{ if } dn \leq 180$$

$$SLDb = [CCun \times 180 \times DR1] + [CCun \times (dn - 180) \times DR2], \text{ if } dn > 180$$

Where:

- a) "SLDb" are the liquidated damages payable by the Seller during the period beginning with the day from the Scheduled Commercial Operation Date of the Unit up to and including the day on which Unit is actually Commissioned;
- b) "CCun" is the Contracted Capacity of the Unit "n";
- c) "dn" is the number of days in the period beginning with the day after the Scheduled Commercial Operation Date of the Unit "n" up to and including the day on which such Unit is actually Commissioned;
- d) "DR1" is Rs. Five Hundred Fifty (550) of damages per MW per day of delay in case "dn" is less than 180 days and "DR2" is Rs. Five thousand five hundred sixty (5,560) of damages per MW per day of delay in case "dn" is equal to or more than 180 days
- 4.6.2 The Seller's maximum liability under this Article 4.6 shall be limited to the amount of liquidated damages calculated in accordance with Article 4.6.1 for and upto twelve

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(12) Months of delay for the Unit, provided that the amount of such Liquidated damages shall in no case for each Unit exceed Rupees 2.25 crores. Provided that in case of failure of the Seller to Commission the Unit even after expiry of twelve (12) Months from its Scheduled Commercial Date, the provisions of Article 14 shall apply.

4.6.3 The Seller shall pay the amount calculated pursuant to Article 4.6.1 to the Procurers within ten (10) days of the earlier of:

- (a) the date on which the Unit is actually Commissioned; or
- (b) expiry of the twelve (12) month period mentioned in Article 4.6.2.

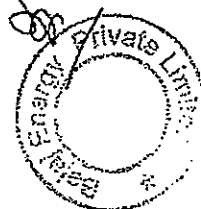
If the Seller fails to pay the amount of damages within the said period of ten (10) days, the Procurers shall be entitled to recover the said amount of the liquidated damages by invoking the Bank Guarantee. If the then existing Bank Guarantee is for an amount which is less than the amount of the liquidated damages payable by the Seller to the Procurers under this Article 4.6, then the Seller shall be liable to forthwith pay the balance amount.

4.6.4 The Parties agree that the formula specified in Article 4.6.1 for calculation of liquidated damages payable by the Seller under this Article 4.6, read with Article 14 is a genuine and accurate pre-estimation of the actual loss that will be suffered by the Procurers in the event of Seller's delay in achieving Commissioning of a Unit by its Scheduled COD.

4.6.5 If any Unit is not Commissioned by its Revised Scheduled COD other than for the reasons specified in Article 4.5.1, the Seller shall pay to each Procurer liquidated damages, proportionate to their then existing Allocated Contracted Capacity, for the delay in such Commissioning or making the Unit's Contracted Capacity available for dispatch by such date. The sum total of the liquidated damages payable by the Seller to the Procurers for such delayed Unit shall be equivalent to the damages payable by the Procurers to the CTU/STU (as the case may be) for the period of delay, as per the terms of agreement proposed to be entered into by the Procurers with CTU/STU for establishment of transmission system. Provided however, the liquidated damages payable by the Seller to the Procurers in case of delay under this Article 4.6.5 shall not be more than twenty percent (20%) of liquidated damages computed in the manner mentioned in Article 4.6.1. Provided further, in case of delay beyond Scheduled Commercial Operation Date, the provisions of Article 4.6.1 to 4.6.4 will apply for such delay beyond Scheduled Commercial Operation Date.

4.7 Liquidated damages for delay due to Procurer Event of Default and Non Natural Force Majeure Events and Natural Force Majeure Event (affecting the Procurer)

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## 4.7.1 If

- a) a Unit cannot be commissioned by its Scheduled Commercial Operations Date, due to a Procurer Event of Default or due to Non Natural Force Majeure Event (or Natural Force Majeure affecting the Procurer/s) provided such Non Natural Force Majeure Event (or Natural Force Majeure affecting the Procurer/s) has continued for a period of more than three (3) continuous or non-continuous Months; or
- b) a Unit is available for conducting Commissioning Tests and is anticipated to be capable of duly completing the Commissioning Tests as certified by the Independent Engineer, but the said Commissioning Tests are not undertaken or completed due to such Procurer Event of Default or due to Non Natural Force Majeure Event (or Natural Force Majeure affecting the Procurer/s) provided such Non Natural Force Majeure Event (or Natural Force Majeure affecting the Procurer/s) has continued for a period of more than three (3) continuous or non-continuous Months:

such Unit shall, until the effects of the Procurer Event of Default or of Non Natural Force Majeure Event (or Natural Force Majeure affecting the Procurer/s) no longer prevent the Seller from undertaking a Commissioning Test/s, be deemed to have a Tested Capacity equal to the Installed Capacity and to this extent, be deemed to have been Commissioned with effect from the Scheduled COD without taking into account delay due to such Procurer Event of Default or Non Natural Force Majeure Event (or Natural Force Majeure affecting the Procurer/s) and shall be treated as follows.

a) In case of delay on account of the Procurer Event of Default, the Procurers shall make payment to the Seller of Capacity Charges calculated on Normative Availability of Contracted Capacity of such Unit for and during the period of such delay. Provided however, if any Unit is not Commissioned by its Revised Scheduled COD due to unavailability of transmission system, the Procurer(s) shall make payment to the Seller of an amount equivalent to the amounts paid by the CTU/STU (as the case may be) to the Procurers as per the terms of agreement proposed to be entered into by the Procurers with CTU/STU for establishment of transmission system for the period of delay up to Scheduled Commercial Operation Date.

b) In case of delay on account of Direct Non Natural Force Majeure Event, the Procurers shall make payment to the Seller of Capacity Charges calculated on Normative Availability of Contracted Capacity of such Unit for the period of such events in excess of three (3) continuous or non-continuous Months in the manner provided in (d) below.

c) In case of an Indirect Non Natural Force Majeure Event (or Natural Force Majeure affecting the Procurer/s), the Procurers shall make payments for amounts

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("Debt Service") relating to such Unit, which are due under the Financing Agreements, subject to a maximum of Capacity Charges based on Normative Availability, for the period of such events in excess of three (3) continuous or non-continuous Months in the manner provided in (d) below.

d) In case of delay due to Direct and Indirect Non Natural Force Majeure Events (or Natural Force Majeure affecting the Procurer/s), the Procurer shall be liable to make payments mentioned in (b) and (c) above, after Commissioning of the Unit, in the form of an increase in Capacity Charges. Provided such increase in Capacity Charges shall be determined by Appropriate Commission on the basis of putting the Seller in the same economic position as the Seller would have been in case the Seller had been paid amounts mentioned in (b) and (c) above in a situation where the Direct Non Natural Force Majeure or Indirect Non Natural Force Majeure Event, as the case may be, had not occurred.

For the avoidance of doubt, it is specified that the charges payable under this Article 4.7.1 shall be paid by the Procurers in proportion to their then Allocated Contracted Capacity.

4.7.2 In every case referred to in Article 4.7.1 hereinabove, the Seller shall undertake a Commissioning Test/s as soon as reasonably practicable [and in no event later than two (2) weeks or such longer period as mutually agreed between the Seller and the Procurers (jointly)] after the point at which it is no longer prevented from doing so by the effects of Force Majeure Events or Procurer Event of Default (as appropriate) and if such Commissioning Test/s is not duly completed and / or demonstrate/s a Tested Capacity of a Unit which is less than ninety five (95) percent of its Installed Capacity, then:

- a) The Unit which fails the Commissioning Tests, shall be deemed to have not been Commissioned from the deemed COD referred to in Article 4.7.1;
- b) The Seller shall repay to the Procurers, all sums received by way of Capacity Charge for such Unit along with interest at the same rate as Late Payment Surcharge; and
- c) If the Seller fails to achieve Commissioning by the Scheduled Commercial Operation Date, it shall also pay liquidated damages to the Procurer for such Unit calculated in accordance with Article 4.6.

#### 4.8 Limit on amounts payable due to default

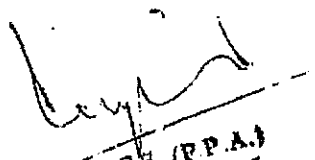
4.8.1 The Parties expressly agree that the Procurers' only liability for any loss of profits or any other loss of any other kind or description whatsoever (except claims for indemnity under Article 15), suffered by the Seller by reason of the Procurers' failure

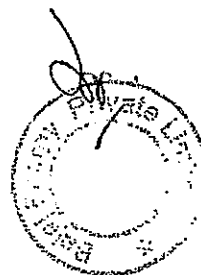
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to meet its obligations under Article 4.2(a) to Article 4.2(d) shall be to pay the Seller the amounts specified in Article 4.7 and Article 14.

- 4.8.2 Similarly, Seller's only liability for any loss suffered by the Procurers of any kind or description whatsoever (except claims for indemnity under Article 15), by reason of the Seller's failure to meet its obligations of Commissioning the various Units on their Scheduled COD, shall be as per Article 4.6 and Article 14.

  
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**ARTICLE 5 : CONSTRUCTION****5.1 Seller's Construction Responsibilities**

The Seller shall be responsible for designing, constructing, erecting, commissioning, completing and testing the Power Station in accordance with the following, it being clearly understood that in the event of inconsistency between two or more of the following, the order of priority as between them shall be the order in which they are placed, with 'applicable law' being the first:

- a) applicable Law;
- b) the Grid Code;
- c) the terms and conditions of this Agreement;
- d) the Functional Specifications; and
- e) Prudent Utility Practices.

Notwithstanding anything to the contrary contained in this PPA, the Seller shall ensure that the technical parameters or equipment limits of the Project shall always be subject to the requirements as specified in points (a) to (e) above and under no event shall over-ride or contradict the provisions of this Agreement and shall not excuse the Seller from the performance of his obligations under this Agreement.

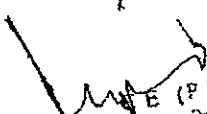
**5.2 The Site**

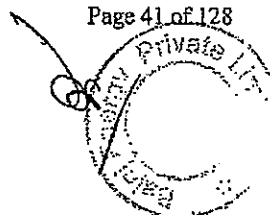
The Seller acknowledges that, before entering into this Agreement, it has had sufficient opportunity to investigate the Site and accepts full responsibility for its condition (including but not limited to its geological condition, on the Site, the adequacy of the road and rail links to the Site and the availability of adequate supplies of water) and agrees that it shall not be relieved from any of its obligations under this Agreement or be entitled to any extension of time or financial compensation by reason of the unsuitability of the Site for whatever reason.

The cost of R&R if any shall be borne by Seller as per GOUP direction.

**5.3 Information Regarding Interconnection Facilities**

The Lead Procurer shall provide the Seller, on a timely basis, all information with regard to the Interconnection and Transmission Facilities as is reasonably necessary to enable the Seller to design, install and operate all interconnection plant and apparatus on the Seller's side of the Interconnection Point.

  
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**5.4 Quality of Workmanship**

The Seller shall ensure that the Power Station is designed, built and completed in a good workmanlike manner using sound engineering construction practices and using only materials and equipment that are new and of international utility grade quality such that, the useful life of the Power Station will be till the Expiry Date.

The Seller shall ensure that design, construction and testing of all equipment, facilities, components and systems of the Project shall be in accordance with Indian Standards and Codes issued by Bureau of Indian Standards and/or internationally recognised Standards and Codes.,

**5.5 Consents**

The Seller shall be responsible for obtaining all Consents (other than those required for the Interconnection and Transmission Facilities and the Initial Consents) required for developing, financing, constructing, operating and maintenance of the Project and maintaining/ renewing all such Consents in order to carry out its obligations under this Agreement in general and this Article 5 in particular and shall supply to the Lead Procurer (or Procurer, as applicable) promptly with copies of each application that it submits, and copy/ies of each consent/approval/license which it obtains. For the avoidance of doubt, it is clarified that the Seller shall also be responsible for maintaining/renewing the Initial Consents and for fulfilling all conditions specified therein.

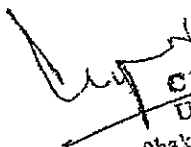
**5.6 Construction Documents**

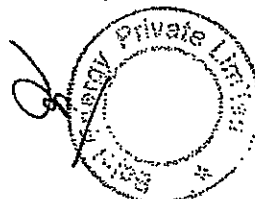
The Seller shall retain at the Site and make available for inspection to the Procurers at all reasonable times copies of the results of all tests specified in Schedule 5 hereof.

**5.7 Co-ordination of Construction Activities****5.7.1 Before the tenth (10th) day of each Month, during the Construction Period:**

- (a) the Seller shall prepare and submit to the Lead Procurer (or Procurer, as applicable) a monthly progress report, in the Agreed Form; and
- (b) The Procurers shall jointly prepare and submit to the Seller a monthly progress report, in the Agreed Form, regarding the Interconnection and Transmission Facilities

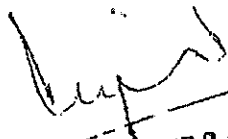
The Seller individually and all the Procurers (jointly) shall designate from time to time, by giving a written notice to the other party up to five (5) of its/their employees who shall be responsible for coordinating all construction activities relating to the Project and who shall

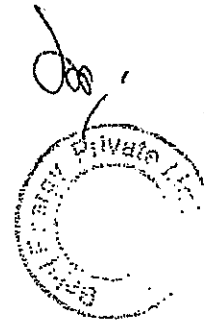
  
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have access at all reasonable times to the other party's land for the purpose of apprising the progress of the work being carried on, subject to such designated persons or the party appointing them giving reasonable notice to the other party of such visit and subject to their complying with all reasonable safety procedures.

For the avoidance of doubt, it is clarified that the total number of the representatives of all the Procurers shall not exceed five (5).

  
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**ARTICLE 6 : SYNCHRONISATION, COMMISSIONING AND COMMERCIAL OPERATION****6.1 Synchronization**

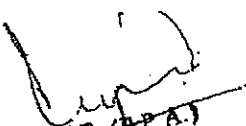
- 6.1.1 The Seller shall give the Procurers and RLDC/SLDC at least sixty (60) days advance preliminary written notice and at least thirty (30) days advance final written notice, of the date on which it intends to synchronise a Unit to the Grid System.
- 6.1.2 Subject to Article 6.1.1, Unit may be synchronised by the Seller to the Grid System when it meets all connection conditions prescribed in any Grid Code then in effect and otherwise meets all other Indian legal requirements for synchronisation to the Grid System

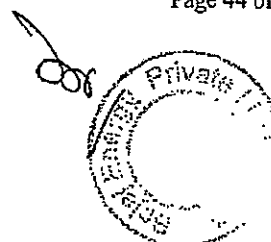
**6.2 Commissioning**

- 6.2.1 The Seller shall be responsible for ensuring that each Unit is Commissioned in accordance with Schedule 5 at its own cost, risk and expense.
- 6.2.2 The Seller shall give all the Procurers and the Independent Engineer not less than ten (10) days prior written notice of Commissioning Test of each Unit.
- 6.2.3 The Seller (individually), the Procurers (jointly) and the Independent Engineer (individually) shall each designate qualified and authorised representatives to witness and monitor Commissioning Test of each Unit.
- 6.2.4 Testing and measuring procedures applied during each Commissioning Test shall be in accordance with the codes, practices and procedures mentioned in Schedule 5 of this Agreement.
- 6.2.5 Within five (5) days of a Commissioning Test, the Seller shall provide the Procurers (jointly) and the Independent Engineer with copies of the detailed Commissioning Test results. Within five (5) days of receipt of the Commissioning Test results, the Independent Engineer shall provide to the Procurers and the Seller in writing, his findings from the evaluation of Commissioning Test results, either in the form of Final Test Certificate certifying the matters specified in Article 6.3.1 or the reasons for non-issuance of Final Test Certificate.


**6.3 Commercial Operation**

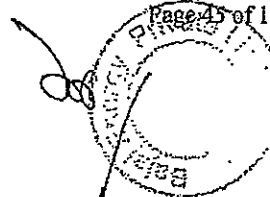
- 6.3.1 Unit shall be Commissioned on the day after the date when all the Procurers receive a Final Test Certificate of the Independent Engineer stating that:
- a) the Commissioning Tests have been carried out in accordance with Schedule 5; and are acceptable to him; and
  - b) the results of the Performance Test show that the Unit's Tested Capacity, is not less than ninety five (95) percent of its Installed Capacity ( as existing on the Effective Date) .

  
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- 6.3.2 If Unit fails a Commissioning Test, the Seller may retake the relevant test, within a reasonable period after the end of the previous test, with three (3) day's prior written notice to the Procurers and the Independent Engineer. Provided however, the Procurers shall have a right to require deferment of any such re-tests for a period not exceeding fifteen (15) days, without incurring any liability for such deferment, if the Procurers are unable to provide evacuation of power to be generated, due to reasons outside the reasonable control of the Procurers or due to inadequate demand in the Grid.
- 6.3.3 The Seller may retake the Performance Test by giving at least fifteen (15) days advance notice in writing to the Procurers, up to eight (8) times, during a period of one hundred and eighty (180) days ("Initial Performance Retest Period") from a Unit's COD in order to demonstrate an increased Tested Capacity over and above as provided in Article 6.3.1 (b). Provided however, the Procurers shall have a right to require deferment of any such re-tests for a period not exceeding fifteen (15) days, without incurring any liability for such deferment, if the Procurers are unable to provide evacuation of power to be generated, due to reasons outside the reasonable control of the Procurers or due to inadequate demand in the Grid.
- 6.3.4 (i) If Unit's Tested Capacity after the most recent Performance Test mentioned in Article 6.3.3 has been conducted, is less than its Installed Capacity (as existing on the Effective Date) the Unit shall be de-rated with the following consequences in each case with effect from the date of completion of such most recent test:
- a) the Unit's Installed Capacity shall be reduced to its Tested Capacity, as existing at the most recent Performance Test referred to in Article 6.3.3 and Capacity Charges shall be paid with respect to such reduced Contracted Capacity;
  - b) Not Used
  - c) the Seller shall not be permitted to declare the Available Capacity of the Unit at a level greater than its Tested Capacity;
  - d) the Availability Factor of the derated Unit shall be calculated by reference to the reduced Installed Capacity; and
  - e) the Capital Cost and each element of the Capital Structure Schedule shall be reduced in proportion to the reduction in the Installed Capacity of the Power Station as a result of that derating (taking into account the contracted capacity of any Unit which has yet to be commissioned).

  
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(ii) If at the end of Initial Performance Retest Period or the date of the eighth Performance Test mentioned in Article 6.3.3, whichever is earlier, the Tested Capacity is less than the Installed Capacity (as existing on the Effective Date) the consequences mentioned in Article 8.2.2 shall apply for a period of one year. Provided that such consequences shall apply with respect to the Tested Capacity existing at the end of Initial Performance Retest Period or the date of the eighth Performance Test mentioned in Article 6.3.3, whichever is earlier


6.3.5 If Unit's Tested Capacity as at the end of the Initial Performance Retest Period or the date of the eighth Performance Test mentioned in Article 6.3.3, whichever is earlier, is found to be more than its Installed Capacity (as existing on the Effective Date), the Tested Capacity shall be deemed to be the Unit's Installed Capacity, if any Procurer/s agrees and intimates the same to the Seller within thirty (30) days of receipt of the results of the last Performance Test to purchase ninety percent (90%) of such excess Tested Capacity and also provide to the Seller additional Letter of Credit and Collateral Arrangement (if applicable) for payments in respect of ninety percent (90%) of such excess Tested Capacity agreed to be purchased by such Procurer/s. In case the Procurer/s decide not to purchase ninety percent (90%) of such excess Tested Capacity, the Seller shall be free to sell such excess Tested Capacity to any third party and the Unit's Contracted Capacity shall remain unchanged, notwithstanding that the Tested Capacity exceeded the Installed Capacity.

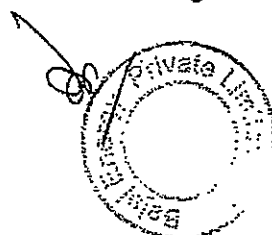
Provided that in all the above events, the Seller shall be liable to obtain/maintain all the necessary consents (including Initial Consents), permits and approvals including those required under the environmental laws for generation of such excess Tested Capacity.

#### 6.4

#### Costs Incurred

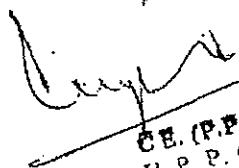
The Seller expressly agrees that all costs incurred by him in synchronising, connecting, Commissioning and / or Testing or Retesting of a Unit shall be solely and completely to his account and the Procurer's or Procurers' liability shall not exceed the amount of the Energy Charges payable for such power output, as set out in Schedule 7.

  
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## 6.5 Fuel

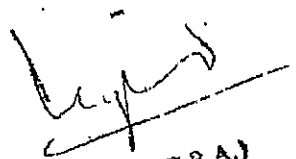
The responsibility for arrangement of Fuel shall be with the Developer who shall procure the Fuel under coal linkage granted to the Seller by the Central Government on the recommendations of GoUP. In case of any short supply, procurement of fuel indigenous / imported preferably through long term contract or on spot purchase / short-term contract / E-auction basis from domestic and/or international suppliers /traders shall be within or outside India. The Seller shall obtain the prior consent of Lead Procuree about procurement of coal from any source other than coal linkage. In case the permission is not granted by the Lead Procuree within seven (7) working days from the date of receiving the application, it would be considered as deemed permission and if rejected then it would be considered as procuree's inability to procure which would make conditions of clause 4.4.3 of the agreed PPA applicable and loss of availability due to rejected fuel quantity shall be taken in to account while computing availability and fixed charges.

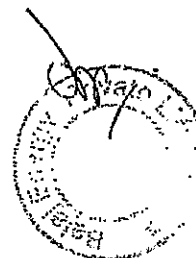
  
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**ARTICLE 7 : OPERATION AND MAINTENANCE**

The Parties shall comply with the provisions of the applicable Law including, in particular, Grid Code as amended from time to time regarding operation and maintenance of the Power Station and all matters incidental thereto. Provided however the Seller shall not schedule the Maintenance Outage of a Unit when another Unit of the Project is shutdown or expected to be shut down except under Force Majeure or when the operation of the Unit is not permissible due to technical consideration.


  
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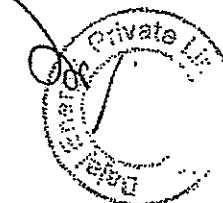


## ARTICLE 8 : CAPACITY, AVAILABILITY AND DISPATCH

## 8.1 Repeat Performance Tests

- 8.1.1 The Procurers (jointly) may from time to time during the Operating Period, but only if the Available Capacity has not been one hundred per cent (100%) of the Installed Capacity of the commissioned units (excluding the unit(s) under planned outage for capital maintenance in consultation with the Regional Power Committee or SLDC) even for one continuous period of at least three (3) hours during any three continuous months, require the Seller to demonstrate a Unit's or (if all the Units have been Commissioned, the Power Station's) Tested Capacity by carrying out a further Performance Test (a "Repeat Performance Test") in accordance with this Article 8.1. A Repeat Performance Test shall be carried out in accordance with Schedule 5, save that the test shall last twenty-four (24) hours instead of seventy two (72) hours. Provided that if the Tested Capacity after such test is less than one hundred percent (100%) of the Installed Capacity (as existing on the Effective Date) of the Commissioned Unit, the Seller shall also have a right to conduct not more than two (2) Repeat Performance Test within a period six (6) months, by giving a notice of not less than fifteen (15) days to the Procurers for each such test. Provided that the Procurers shall have a right to require deferment of each such re-tests for a period not exceeding five (5) days, without incurring any liability for such deferment, if the Procurers are unable to provide evacuation of power to be generated, due to reasons outside the reasonable control of the Procurers or due to inadequate demand in the Grid.
- 8.1.2 The Procurers (jointly) shall give the Seller not less than seven (7) days' advance written notice of the time when a Repeat Performance Test of a Unit (or if all the Units have been Commissioned, of the Power Station's) is to begin. A Repeat Performance Test may not be scheduled for any period when the Unit to be tested is due to undergo a Scheduled Outage.
- 8.1.3 The Procurers (jointly) and Seller shall jointly appoint the Independent Engineer to monitor the Repeat Performance Test and to certify the results in accordance with Article 8.2.
- 8.1.4 If the Seller wishes to take Unit, out of service for repair before a Repeat Performance Test, it shall inform all the Procurers in writing before its scheduled start of the repairs and the estimated time required to complete the repairs. The Parties shall then schedule a Maintenance Outage in accordance with the Grid Code to enable the Seller to carry out those repairs and in such a case, the Procurers (jointly), requiring the Repeat Performance Test, shall defer the Repeat Performance Test until such Unit is returned to service following that Maintenance Outage. Provided however the Seller shall not schedule the Maintenance outage of a unit when another unit of project is

  
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shut down or expected to be shut down except under force majeure or when the operation of unit is not permissible due to technical consideration.

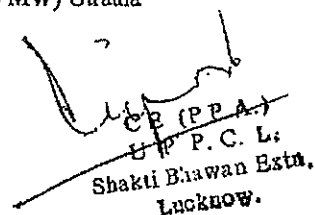
- 8.1.5 The Procurers requiring the Repeat Performance Test, may jointly, for reasonable cause, defer any Repeat Performance Test for up to fifteen (15) days from the date originally notified to the Seller in accordance with Article 8.1.2 if such Procurers jointly notify the Seller in writing at least one (1) day before the Repeat Performance Test starts of the reason for the deferral and when the test is to be rescheduled.

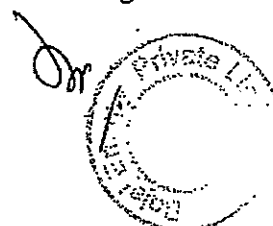
Provided that, such deferment at the joint request of the Procurers shall be permitted only once in respect of each of the Repeat Performance Tests.

- 8.1.6 The Seller (individually), the Procurers (jointly) and the Independent Engineer (individually) shall each have the right to designate qualified and authorised representatives (but not more than three each) to monitor the Repeat Performance Test.
- 8.1.7 Testing and measurement procedures applied during the Repeat Performance Test shall be in accordance with the codes, practices of procedures as generally/normally applied for the Performance Tests.
- 8.1.8 Within five (5) days of a Repeat Performance Test, the Seller shall provide each of the Procurers and the Independent Engineer with copies of the detailed test results.
- 8.1.9 Within one (1) Month of the date by which all the Units have been Commissioned; the Seller shall conduct a Performance Test of the Power Station (hereinafter referred to as "Power Station Performance Test") whereafter the provisions of Article 8.2 shall apply. A Power Station Performance Test shall be carried out in accordance with Article 1.1 of Schedule 5, save that the test shall last twenty-four (24) hours instead of seventy two (72) hours.

## 8.2 Derating

- 8.2.1 A Repeat Performance Test shall be concluded when all the Procurers receive the Final Test Certificate of the Independent Engineer stating that the Repeat Performance Test has been carried out satisfactorily in accordance with Schedule 5 and certified the Unit's (or if all the Units have been Commissioned, the Power Station's) then current Tested Capacity as demonstrated by the results of the Repeat Performance Test.
- 8.2.2 (i) If a Unit's (or if all the Units have been Commissioned, of the Power Station's) then current Tested Capacity as established by the Repeat Performance Test and the Final Test Certificate issued by the Independent Engineer, is less than its Installed Capacity as existing on the Effective Date, the Seller shall not be permitted to declare the Available Capacity of the Unit (or if all the Units have been Commissioned, of the Power Station's) at a level greater than its Tested Capacity, in which case:

  
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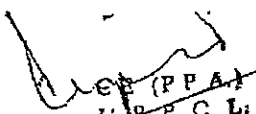
- a) the Unit's (or if all the Units have been Commissioned, of the Power Station's) Installed Capacity shall be reduced to its most recent Tested Capacity.
- b) Not Used;
- c) the Availability Factor of the derated Unit (or if all the Units have been Commissioned, of the Power Station's ) shall be calculated by reference to the reduced Installed Capacity, and;
- d) the Capital Cost and each element of the Capital Structure Schedule shall be reduced in proportion to the reduction in the Installed Capacity of the Power Station as a result of that derating (taking into account the Installed Capacity of any Unit which has yet to be Commissioned);

(ii) The consequences mentioned in sub-Article (i) above shall apply from the completion date of each Repeat Performance Test. If at the end of second Repeat Performance Test conducted by the Seller or the last date of the end of the six month period referred to in Article 8.1.1, whichever is earlier, the Tested Capacity is less than the Installed Capacity (as existing on the Effective Date ), the consequences mentioned in Article 8.2.2 shall apply for a period of at least one year after which the Seller shall have the right to undertake a Repeat Performance Test. Provided that such consequences shall apply with respect to the Tested Capacity existing at the end of second Repeat Performance Test conducted by the Seller or the last date of the end of the six month period referred to in Article 8.1.1, whichever is earlier

- 8.2.3 If the Independent Engineer certifies that it is unable to give a Final Test Certificate because events or circumstances beyond the Seller's reasonable control have prevented the Repeat Performance Test from being carried out in accordance with Schedule 5, the Procurers shall reschedule a Repeat Performance Test as soon as reasonably practicable.
- 8.2.4 If a Unit's—or if all the Units have been Commissioned, of the Power Station's , Tested Capacity is found to be more than it's Installed Capacity, the provisions of Article 6.3.5 shall apply mutatis mutandis.

### 8.3 Availability

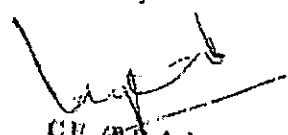
The Seller shall comply with the provisions of the applicable Law regarding Availability including, in particular, to the provisions of the ABT and Grid Code relating to intimation of Availability and the matters incidental thereto.

  
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## 8.4 Dispatch

The Seller shall comply with the provisions of the applicable Law regarding Dispatch Instructions, in particular, to the provisions of the ABT and Grid Code relating to Dispatch and the matters incidental thereto.

  
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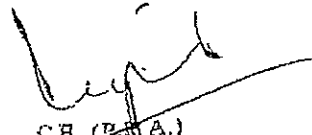


**ARTICLE 9 : METERING AND ENERGY ACCOUNTING****9.1 Meters**

For installation of Meters, Meter testing, Meter calibration and Meter reading and all matters incidental thereto, the Seller and the Procurers shall follow and be bound by the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, the Grid Code and ART as amended and revised from time to time. In addition, the Seller shall also allow and facilitate STU in installation of one set of required main and standby special energy meters for accurate recording of energy supplied by Seller. For these STU meters (110V, 1A, 4-wire), the Seller shall provide the required connection from EHV current transformers/ bushing CTs/ voltage transformers/ CVTs on EHV side of all generator-transformers, station transformers and outgoing lines, of meter accuracy of 0.2 class or better. The Seller may install any further meters for its own comfort at its own cost.

**9.2 RLDC / SLDC Charges**

All scheduling and RLDC / SLDC charges applicable shall be borne by the Procurers.

  
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**ARTICLE 10 : INSURANCES****10.1 Insurance**

The Seller shall effect and maintain or cause to be effected and maintained during the Construction Period and Operating Period, Insurances against such risks, with such deductibles and with such endorsements and co-insured(s), which the Prudent Utility Practices would ordinarily merit maintenance of and as required under the Financing Agreements.


**10.2 Application of Insurance Proceeds**

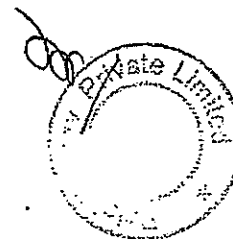
Save as expressly provided in this Agreement or the Insurances, the proceeds of any insurance claim made due to loss or damage to the Project or any part of the Project shall be first applied to reinstatement, replacement or renewal of such loss or damage.

If a Natural Force Majeure Event renders the Project no longer economically and technically viable and the insurers under the Insurances make payment on a "total loss" or equivalent basis, the Procurer(s) shall have no claim on such proceeds of such Insurance

**10.3 Effect on liability of the Procurers**

Notwithstanding any liability or obligation that may arise under this Agreement, any loss, damage, liability, payment, obligation or expense which is insured or for which the Seller can claim compensation, under any Insurance shall not be charged to or payable by the Procurers.

  
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**ARTICLE 11 : BILLING AND PAYMENT****11.1 General**

From the COD of the Unit, Procurers shall pay the Seller the Monthly Tariff Payment, on or before the Due Date, comprising of Tariff for every Contract Year, determined in accordance with this Article 11 and Schedule 7. All Tariff payments by Procurers shall be in Indian Rupees.

Provided however, if Procurers avails of any Electrical output from the Seller prior to the Commercial Operation Date ("Infinum Power") of the Unit, then the cost of Infinum Power shall be the energy charge calculated on the basis of cost of Fuel and the norms of Gross Station Heat Rate, Secondary Fuel consumption and Normative Auxiliary Consumption specified for calculation of Variable Charges during Stabilization Period.

Provided that the Seller shall inform to the Control Centre about its schedule for supply of such power two hrs ahead (as a special case) to testing of the Unit.

Provided also that the start up power drawn by the Unit from the grid shall be adjusted with ex-bus energy and such energy shall be billed to Procurers proportion to its percentage share in Installed Capacity

**11.2 Delivery and content of Monthly Bills**

11.2.1 The Seller shall issue to Procurer a signed Monthly Bill for the immediately preceding Month.


Provided that:

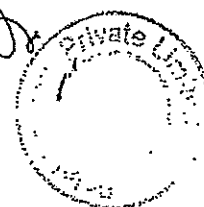
- i. If the COD of the first Unit falls during the period between the first (1st) day and up to and including the fifteenth (15th) day of a Month, the first Monthly Bill shall be issued for the period until the last day of such Month, or
- ii. If the COD of the first Unit falls after the fifteenth (15th) day of a Month, the first Monthly Bill shall be issued for the period commencing from the COD of the first Unit until the last day of the immediately following Month.

Provided further that if a Monthly Bill is received on or before the second (2nd) day of a Month, it shall be deemed to have been received on the second (2nd) Business Day of such Month.

11.2.2 Each Monthly Bill and Provisional Bill shall include:

- i. Availability and energy account for the relevant Month as per REA for Monthly

  
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- Bill and RLDC / SLDC's daily energy account for Provisional Bill,
- ii. The Seller's computation of various components of the Monthly Tariff Payment in accordance with Schedule 7; and
  - iii. Supporting data, documents and calculations in accordance with this Agreement.

### 11.3 Payment of Monthly Bills

11.3.1 Procurees shall pay the amount payable under Monthly Bill on the Due Date to such account of the Seller, as shall have been previously notified by the Seller to Procurees in accordance with Article 11.3.3 below.

In case of payment default, all payments made by the Procurees shall be appropriated by the Seller in the following order of priority:


1. Towards Late Payment Surcharge, payable by the Procurees, if any;
2. Towards earlier unpaid Monthly Bill, if any; and
3. Towards the then current Monthly Bill.

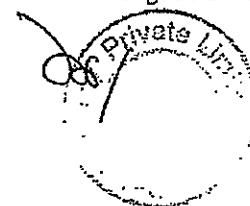
11.3.2 All payments required to be made under this Agreement shall only include any deduction or set off for:

- i. Deductions required by the Law; and
- ii. Amounts claimed by the Procurees from the Seller, through an invoice duly acknowledged by the Seller, to be payable by the Seller, and not disputed by the Seller within thirty (30) days of receipt of the said invoice and such deduction or set-off shall be made to the extent of the amounts not disputed. It is clarified that the Procurees shall be entitled to claim any set off or deduction under this Article, after expiry of the said 30 day period.

Provided further, the maximum amounts that can be deducted or set-off by all the Procurees taken together (proportionate to their then existing Allocated Contracted Capacity in case of each Procuree) under this Article in a Contract Year shall not exceed Rupees [Insert amount calculated as Rs. 2.5 lacs per MW of Contracted Capacity] only, except on account of payments under sub Article (i) above.

11.3.3 The Seller shall open a bank account at Lucknow (the "Designated Account") for all Tariff Payments to be made by Procurees to the Seller, and notify Procurees of the details of such account at least ninety (90) days before the dispatch of the first Monthly Bill to Procurees. Procurees shall instruct their respective bankers to make all payments under this Agreement to the Designated Account and shall notify the Seller of such instructions on the same day. Procurees shall also designate a bank account at Lucknow for payments to be made by the Seller (including Supplementary Bills) to

  
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Lucknow.



Procurers and notify the Seller of the details of such account ninety (90) days before the COD of the first Unit.

11.3.4 In the event of delay in payment of a Monthly Bill by any Procurer beyond its Due Date month billing, a Late Payment Surcharge shall be payable by such Procurer to the Seller at the rate of one point two five percent (1.25%) per month as per UPERC Regulations.

11.3.5 For payment of Bills of capacity charge and energy charges through the letter of credit on presentation, a rebate of two percent (2%) shall be allowed. If the payments are made other than through a Letter of Credit but within a period of one months from the date of presentation of bills by seller a rebate of 1% shall be allowed as per UPERC Regulations.

The above rebate will be allowed only to those Procurers who credit to Seller's account the full Monthly Bill.

However, no rebate shall be payable on the bills raised on account of Change in Law relating to taxes, duties and cess.

#### 11.4 Payment Mechanism

##### 11.4.1 Letter of Credit:

Each Procurer shall provide to the Seller, in respect of payment of its Monthly Bills, a monthly unconditional, revolving and irrevocable letter of credit ("Letter of Credit"), opened and maintained by each Procurer for presentation of L/C documents in terms of Article 11.3.5, which may be drawn upon by the Seller in accordance with Articles 11.4.1.1 through 11.4.1.5. The Procurers shall provide the Seller draft of the Letter of Credit proposed to be provided to the Seller before the NTP. Further, the Letter of Credit shall be provided from the bank which is appointed as Default Escrow Agent under the Default Escrow Agreement.

11.4.1.1 Not later than one (1) Month prior to the the Scheduled COD or the Revised Scheduled COD (as applicable) of the first Unit, each Procurer shall through a scheduled bank at Lucknow open a Letter of Credit in favour of the Seller, to be made operative from a date prior to the Due Date of its first Monthly Bill under this Agreement. The Letter of Credit shall have a term of twelve (12) Months and shall be renewed annually, for an amount equal to:

- i) For the first Contract Year, equal to one point one (1.1) times the estimated average monthly billing based on Normative Availability;

- ii) For each subsequent Contract Year, equal to the one point one (1.1) times the estimated average monthly billing based on Normative Availability.

Provided that the Seller shall not draw upon such Letter of Credit prior to the Due Date of the relevant Monthly Bill, and shall not make more than one drawal in a Month

Provided further that if at any time, such Letter of Credit amount falls short of the amount specified in Article 11.4.1.1 or 11.4.1.8 otherwise than by reason of drawal of such Letter of Credit by the Seller, the relevant Procurer shall restore such shortfall within fifteen (15) days.


11.4.1.2 Procurers shall cause the scheduled bank issuing the Letter of Credit to intimate the Seller, in writing regarding establishing of such irrevocable Letter of Credit.

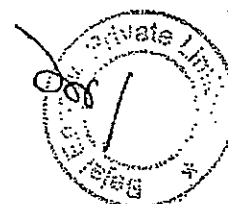
11.4.1.3 In case of drawal of the Letter of Credit by the Seller in accordance with the terms of this Article 11.4.1, the amount of the Letter of credit shall be reinstated in the manner stated in Article 11.4.2.3 of this Agreement.

11.4.1.4 If any Procurer fails to pay a Monthly Bill or part thereof within and including the Due Date, then, subject to Article 11.6.7, the Seller may draw upon the Letter of Credit, and accordingly the bank shall pay without any reference or instructions from the Procurer, an amount equal to such Monthly Bill or part thereof plus Late Payment Surcharge, if applicable, in accordance with Article 11.3.4 above, by presenting to the scheduled bank issuing the Letter of Credit, the following documents:

- i) A copy of the Monthly Bill which has remained unpaid by such Procurer;
- ii) A certificate from the Seller to the effect that the bill at item (i) above, or specified part thereof, is in accordance with the Agreement and has remained unpaid beyond the Due Date; and
- iii) Calculations of applicable Late Payment Surcharge, if any.

Further, on the occurrence of such an event as envisaged herein, the Seller shall immediately inform all the Procurers of the said failure of the Procurer to pay the Monthly Bill or part thereof and shall send regular updates to all the Procurers, which shall not be less than one (1) in every two (2) days, containing details of the amount claimed by the Seller as per the provisions of this Article and payments made by the Procurer pursuant to such claim.

  
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Lucknow.




For the avoidance of doubt it is clarified that the Seller shall not be entitled to drawdown on the Letter of Credit for any failure of any Procurer to pay a Supplementary Bill.

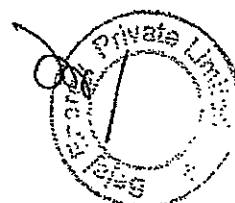
- 11.4.1.5 Procurers shall ensure that the Letter of Credit shall be renewed not later than forty five (45) days prior to its expiry.
- 11.4.1.6 All costs relating to opening and maintenance of the Letter of Credit shall be borne by the Procurers, however, Letter of Credit negotiation charges shall be borne and paid by the Seller.
- 11.4.1.7 Where necessary, the Letter of Credit may also be substituted by an unconditional and irrevocable bank guarantee or an equivalent instrument as mutually agreed by the Procurers and the Seller.
- 11.4.1.8 Upon fulfilment of the conditions mentioned under Article 11.4.2.2 the Letter of Credit amount as mentioned in Article 11.4.1.1 shall be changed to one (1) time the average of the Monthly Tariff Payments of the previous Contract Year instead of one point one (1.1) times the average of the Monthly Tariff Payments of the previous Contract Year.

#### 11.4.2 Collateral Arrangement

- 11.4.2.1 As further support for each Procurer's obligations, on or prior to the Effective Date, each Procurer and the Seller shall execute separate Tripartite Default Escrow Agreement (referred as "Default Escrow Agreement") along with the Banker(s) designated as Escrow Agent for the establishment and operation of the Default Escrow Account in favour of the Seller, through which the revenues of the relevant Procurer shall be routed and used as per the terms of the Default Escrow Agreement. Each of the Procurers and the Seller shall contemporaneously with the execution of the Default Escrow Agreement enter into a separate Agreement to Hypothecate Cum Deed of Hypothecation, whereby each Procurer shall agree to hypothecate, to the Seller, effective from forty five (45) days prior to the Scheduled COD or Revised Scheduled COD of the First Unit (as applicable), the amounts to the extent as required for the Letter of Credit as per Article 11.4.1.1 routed through the Default Escrow Account in accordance with the terms of the Agreement to Hypothecate Cum Deed of Hypothecation. The Default Escrow Agreements and the Agreement to Hypothecate Cum Deed of Hypothecation are collectively referred to as the "Collateral Arrangement". The minimum revenue flow in any Month in the Default Escrow Account shall be at least equal to the amount required for the Letter of Credit as per Article 11.4.1.1.

Provided that the Procurers shall ensure that the Seller has paripassu charge with the LC Banker on the revenues routed through the Default Escrow Account in accordance with the terms of the Agreement to Hypothecate Cum Deed of Hypothecation. However, such charge shall be on the amounts, in excess of amounts,

  
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Lucknow.



which have already been charged or agreed to be charged prior to the date of the execution of the Default Escrow Agreement.

11.4.2.2 On the occurrence of all of the following events in respect of any Procurer:

(i) A period of not less than two (2) years from COD of Power Station, has elapsed; and

(ii) Such Procurer has achieved, for its ability to honour its Tariff Payment obligations to the Seller under this Agreement, a credit rating of 'A' or better, from a SEBI registered Indian credit rating agency mutually agreed between Seller and the Lender/s, consistently for a period of at least three (3) years; and

(iii) Immediately prior to the three (3) year period mentioned in sub-clause (ii) above, for a period of at least two (2) years there has been no Procurer Event of Default under Article 14 of the PPA, by such Procurer,


Such Procurer shall intimate the Seller in writing of the occurrence of the same and its intention to discontinue the Collateral Arrangement. If the Seller desires to continue with the Collateral Arrangement, it shall intimate the same to the concerned Procurer in writing within thirty (30) days of receipt of intimation from the concerned Procurer and in such case the Seller shall be liable to bear the costs of continuation of the Collateral Arrangement with effect from such date. In case the Seller fails to respond or agrees to discontinue, the Collateral Arrangement shall forthwith cease and the Default Escrow Agreement and the routed through the Default Escrow Account and the 'Receivables' in accordance with the terms of the Agreement to Hypothecate Cum Deed of Hypothecation shall stand terminated as per terms thereof.

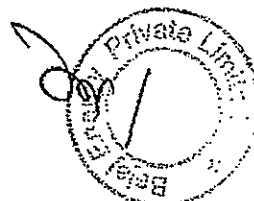
Provided that in case of any of conditions mentioned under (i), (ii) or (iii) in Article 11.4.2.2 ceases to be true, then within 90 days of the occurrence of such event, the Procurer shall reinstate the Collateral Arrangement, at its own cost.

11.4.2.3 Letter of Credit will be replenished for the drawals made, before the next due date from the date drawl of the Letter of Credit occurs, the Letter of Credit shall be reinstated to the requisite amount specified in this Agreement, and in the manner specified in the Default Escrow Agreement.

**11.5 Third Party Sales on default**

11.5.1 Notwithstanding anything to the contrary contained in this Agreement, upon the occurrence of an event where the Procurer has not made payment by the Due Date of an Invoice through the payment mechanism provided in this Agreement, the Seller shall follow the steps as enumerated in Articles 11.5.2 and 11.5.3.

  
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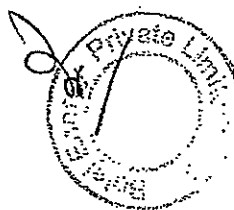
11.5.2 On the occurrence of the event mentioned in Article 11.5.1 and after giving a notice of at least seven (7) days to the defaulting Procurer(s), the Seller shall have the obligation to offer twenty five (25) per cent of the Contracted Capacity pertaining to such defaulting Procurer ("Default Electricity") to the other non - defaulting Procurers. The non defaulting Procurers have the right to receive the whole or any part of such Default Electricity by giving a notice within a further two (2) Business Days, in the following manner:

- a) In ratios equal to their then existing Allocated Contracted Capacities at the same Tariff as would have been applicable to the defaulting Procurer. Provided that, if any of the non-defaulting Procurer(s) does not elect to receive the Default Electricity so offered, the Seller shall offer the balance of the Default Electricity to other non-defaulting Procurer(s) at the same Tariff in proportion to their additional requirement as intimated.
- b) At a lower tariff as may be specified by non-defaulting Procurer(s) to the extent of their capacity requirements, in descending order of the tariff. Provided that, the Seller has the right to obtain tariff quotes from third party(s) for sale of Default Electricity not requisitioned under (a) above. The tariff quotes received from non-defaulting Procurer(s) and such third party(s) shall be ranked in descending order of the tariff and the Seller shall sell Default Electricity in such descending order and in compliance with Article 11.5.3, to the extent applicable.

In case of both (a) and (b) above if non- defaulting Procurer(s) receive Default Electricity, then, subject to applicability of Article 11.4.2.2 of this Agreement, such non defaulting Procurer(s) shall within seven (7) days of exercising the right of election, either open an additional Letter of Credit/enhance the existing Letter of Credit in accordance with the principles set forth in Article 11.4 or increase the value of escrow cover under the Default Escrow Agreement and related security under Agreement to Hypothecate cum deed of Hypothecation secure payment for that part of the Default Electricity as such non- defaulting Procurer elects to receive.

Provided further within two (2) Months of such election by the non-defaulting Procurer(s), unless the event outlined in Article 11.5.7 has occurred, such Procurer(s) shall open a Letter of Credit/enhance the existing Letter of Credit in accordance with the principles set forth in Article 11.4 and shall increase the value of escrow cover under the Default Escrow Agreement and related Agreement to Hypothecation cum Deed of Hypothecation. Provided that in case the events mentioned in Article 11.4.2.2 (i), (ii) and (iii) are true, then the requirement with respect to Default Escrow Agreement and Agreement to Hypothecate cum Deed of Hypothecation in this Article 11.5.2 shall be applicable as per Article 11.4.2.2.

  
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11.5.3 If all the non defaulting Procurers do not make the election to receive the Default Electricity or a part thereof, within two (2) Business Days of it being so offered under and as per Article 11.5.2, or all such Procurers expressly waive their first right to receive the same, the Seller shall have the right (but not the obligation) to make available and sell the Default Electricity or a part thereof to a third party, namely:

- (a) any consumer, subject to applicable Law; or
- (b) any licensee under the Electricity Act, 2003;

11.5.4 If the Collateral Arrangement is not fully restored by the Defaulting Procurer within thirty (30) days of the non-payment by a Procurer of a Invoice by its Due Date, the provisions of Article 11.5.2 and Article 11.5.3 shall apply with respect to one hundred (100) per cent of the Contracted Capacity. Provided that in case the events mentioned in Article 11.4.2.2 (i), (ii) and (iii) are true, then this Article 11.5.4 shall be applicable as per Article 11.4.2.2.


11.5.5 Provided that, in the case of Article 11.5.3 or 11.5.4, the Seller shall ensure that sale of power to the shareholders of the Seller or any direct or indirect affiliate of the Seller/shareholders of the Seller, is not at a price less than the Energy Charges.

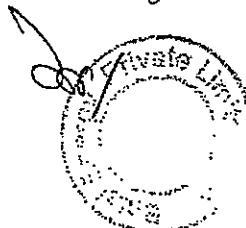
11.5.6 In case of third party sales or sales to any other non defaulting Procurers as permitted by this Article 11.5, the adjustment of the surplus revenue over Energy Charges (applicable to the defaulting Procurer) attributable to such electricity sold, shall be adjusted as under :

- (a) the surplus upto the Tariff shall be used towards the extinguishment of the subsisting payment liability of the defaulting Procurer towards the Seller; and
- (b) the surplus if any above the Tariff shall be retained by the Seller.

The liability of the defaulting Procurer towards making Capacity Charge payments to the Seller even for electricity sold to third parties or other non defaulting Procurers or remaining unsold during such periods will remain unaffected. Provided such Capacity Charge payment liability shall cease on the date which occurs on the Expiry of a period of three (3) years and hundred (100) days from the date of occurrence of a Procurer Event of Default under Article 14.2 (i), provided if prior to such date, such Procurer Event of Default has not ceased and regular supply of electricity for a period of at least ninety (90) continuous days has not occurred.

11.5.7 Sales to any person or Party, other than the defaulting Procurer under Article 11.5, shall cease and regular supply of electricity to the defaulting Procurer in accordance with all the provisions of this Agreement shall commence and be restored on the later of the two following dates or any date before this date at the option of Seller:


  
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- (a) the day on which the defaulting Procurer pays the amount due to the Seller and renews the Letter of Credit and restores Default Escrow Account (if applicable) as mentioned in Article 11.4.2.1 ; or
- (b) the date being "x" days from the date on which the defaulting Procurer pays the amount due to the Seller, where "x" days shall be calculated in accordance with Schedule 3.

## 11.6 Disputed Bill

- 11.6.1 If a Party does not dispute a Monthly Bill, Provisional Bill or a Supplementary Bill raised by the other Party within thirty (30) days of receiving it, such bill shall be taken as conclusive.
- 11.6.2 If a Party disputes the amount payable under a Monthly Bill, Provisional Bill or a Supplementary Bill, as the case may be, that Party shall, within thirty (30) days of receiving such bill, issue a notice (the "Bill Dispute Notice") to the invoicing Party setting out:
- i) the details of the disputed amount;
  - ii) its estimate of what the correct amount should be; and
  - iii) all written material in support of its claim.
- 11.6.3 If the invoicing Party agrees to the claim raised in the Bill Dispute Notice issued pursuant to Article 11.6.2, the invoicing Party shall revise such bill within seven (7) days of receiving such notice and if the disputing Party has already made the excess payment, refund to the disputing Party such excess amount within fifteen (15) days of receiving such notice. In such a case excess amount shall be refunded along with interest at the same rate as Late Payment Surcharge which shall be applied from the date on which such excess payment was made to the invoicing Party and upto and including the date on which such payment has been received.
- 11.6.4 If the invoicing Party does not agree to the claim raised in the Bill Dispute Notice issued pursuant to Article 11.6.2, it shall, within fifteen (15) days of receiving the Bill Dispute Notice, furnish a notice to the disputing Party providing:
- i) reasons for its disagreement;
  - ii) its estimate of what the correct amount should be; and
  - iii) all written material in support of its counter-claim.
- 11.6.5 Upon receipt of notice of disagreement to the Bill Dispute Notice under Article 11.6.4, authorised representative(s) or a director of the board of directors/member of board of each Party shall meet and make best endeavours to amicably resolve such dispute within fifteen (15) days of receiving such notice of disagreement to the Bill Dispute Notice.
- 11.6.6 If the Parties do not amicably resolve the Dispute within fifteen (15) days of receipt of notice of disagreement to the Bill Dispute Notice pursuant to Article 11.6.4, the matter shall be referred to Dispute Resolution in accordance with Article 17.
- 11.6.7 In case of Disputed Bills, it shall be open to the aggrieved party to approach the Appropriate Commission for Dispute Resolution in accordance with Article 17 and

  
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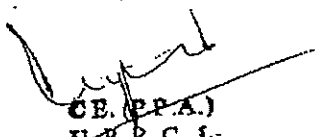


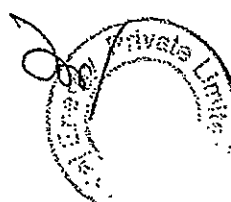
also for interim orders protecting its interest including for orders for interim payment pending Dispute Resolution and the Parties shall be bound by the decision of the Appropriate Commission, including in regard to interest or Late Payment Surcharge, if any directed to be paid by the Appropriate Commission.

- 11.6.8 If a Dispute regarding a Monthly Bill, Provisional Bill or a Supplementary Bill is settled pursuant to Article 11.6 or by Dispute resolution mechanism provided in this Agreement in favour of the Party that issues a Bill Dispute Notice, the other Party shall refund the amount, if any incorrectly charged and collected from the disputing Party or pay as required, within five (5) days of the Dispute either being amicably resolved by the Parties pursuant to Article 11.6.5 or settled by Dispute resolution mechanism along with interest at the same rate as Late Payment Surcharge from the date on which such payment had been made to the invoicing Party or the date on which such payment was originally due, as may be applicable.
- 11.6.9 For the avoidance of doubt, it is clarified that despite a Dispute regarding an Invoice, the concerned Procurer shall, without prejudice to its right to Dispute, be under an obligation to make payment, of the lower of (a) an amount equal to simple average of last three (3) Months invoices (being the undisputed portion of such three Months invoices) and (b) Monthly Invoice which is being disputed, provided such Monthly Bill has been raised based on the REA and in accordance with this Agreement.

#### 11.7 Quarterly and Annual Reconciliation

Parties acknowledge that all payments made against Monthly Bills, Provisional Bill and Supplementary Bills shall be subject to quarterly reconciliation at the beginning of the following quarter of each Contract Year and annual reconciliation at the end of each Contract Year to take into account REA, Tariff Adjustment Payments, Tariff Rebate Payments, Late Payment Surcharge, or any other reasonable circumstance provided under this Agreement. The Parties, therefore, agree that as soon as all such data in respect of any quarter of a Contract Year or a full Contract Year as the case may be has been finally verified and adjusted, the Seller and each Procurer shall jointly sign such reconciliation statement. Within fifteen (15) days of signing of a reconciliation statement, the Seller or Procurer, as the case may be, shall raise a Supplementary Bill for the Tariff Adjustment Payments for the relevant quarter/Contract Year and shall make payment of such Supplementary Bill for the Tariff Adjustment Payments for the relevant quarter/Contract Year. Late Payment Surcharge shall be payable in such a case from the date on which such payment had been made to the invoicing Party or the date on which any payment was originally due, as may be applicable. Any dispute with regard to the above reconciliation shall be dealt with in accordance with the provisions of Article 17.

  
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**11.8 Payment of Supplementary Bill**

11.8.1 Either Party may raise a bill on the other Party ("Supplementary Bill") for payment on account of:

- i) Adjustments required by the Regional Energy Account/ SLDC (if applicable);
- ii) Tariff Payment for change in parameters, pursuant to provisions in Schedule 7; or
- iii) Change in Law as provided in Article 13,  
and such Bill shall be paid by the other Party.

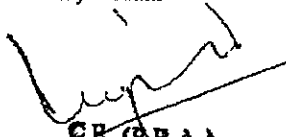
11.8.2 Procurers shall remit all amounts due under a Supplementary Bill raised by the Seller to the Seller's Designated Account by the Due Date and notify the Seller of such remittance on the same day. Similarly, the Seller shall pay all amounts due under a Supplementary Bill raised by Procurers by the Due Date to concerned Procurer's designated bank account and notify such Procurer/s of such payment on the same day. For such payments by a Procurer, rebates as applicable to Monthly Bills pursuant to Article 11.3.5 shall equally apply.

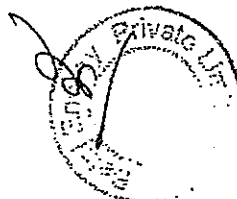
11.8.3 In the event of delay in payment of a Supplementary Bill by either Party beyond its Due Date, a Late Payment Surcharge shall be payable at the same terms applicable to the Monthly Bill in Article 11.3.4.

**11.9 Payment for Start up Power**

As ascribed in Article 11.1.

11.10 The copies of all notices/offers which are required to be sent as per the provisions of this Article 11, shall be sent by either Party, simultaneously to all Parties.

  
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**ARTICLE 12 : FORCE MAJEURE****12.1 Definitions**

In this Article 12, the following terms shall have the following meanings:

**12.2 Affected Party**

An affected Party means any of the Procurers or the Seller whose performance has been affected by an event of Force Majeure.

An event of Force Majeure affecting the CTU/STU or any other agent of Procurer, which has affected the Interconnection Facilities, shall be deemed to be an event of Force Majeure affecting Procurer/s.

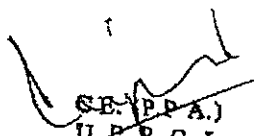
Any event of Force Majeure affecting the performance of the Seller's contractors, shall be deemed to be an event of Force Majeure affecting Seller only if the Force Majeure event is affecting and resulting in:

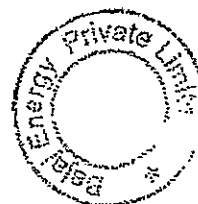
- a. Late delivery of plant, machinery, equipment, materials, spare parts, Fuel, water or consumables for the Project; or
- b. A delay in the performance of any of the Seller's contractors.

Similarly, any event of Force Majeure affecting the performance of the Procurers' contractor for the setting up or operating Interconnection Facilities shall be deemed to be an event of Force Majeure affecting Procurer/s only if the Force Majeure event is resulting in a delay in the Performance of Procurer's contractors.

**12.3 Force Majeure**

A 'Force Majeure' means any event or circumstance or combination of events and circumstances including those stated below that wholly or partly prevents or unavoidably delays an Affected Party in the performance of its obligations under this agreement, but only if and to the extent that such events or circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided if the Affected Party had taken reasonable care or complied with Prudent Utility Practices:

  
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**i. Natural Force Majeure Events:**

Act of God, including, but not limited to lightning, drought, fire and explosion (to the extent originating from a source external to the Site), earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred (100) years,

**ii. Non-Natural Force Majeure Events:****1. Direct Non - Natural Force Majeure Events**

- a) Nationalization or compulsory acquisition by any Indian Governmental Instrumentality of any material assets or rights of the Seller or the Seller's contractors; or
- b) The unlawful, unreasonable or discriminatory revocation of, or refusal to renew, any Consent required by the Seller or any of the Seller's contractors to perform their obligations under the Project Documents or any unlawful, unreasonable or discriminatory refusal to grant any other consent required for the development/operation of the Project. Provided that an appropriate court of law declares the revocation or refusal to be unlawful, unreasonable and discriminatory and strikes the same down.
- c) Any other unlawful, unreasonable or discriminatory action on the part of an Indian Government Instrumentality which is directed against the Project. Provided that an appropriate court of law declares the revocation or refusal to be unlawful, unreasonable and discriminatory and strikes the same down.

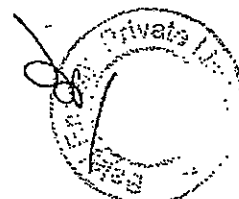
**2. Indirect Non - Natural Force Majeure Events**

- a) Any act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action; or
- b) Radio active contamination or ionising radiation originating from a source in India or resulting from another Indirect Non Natural Force Majeure Event excluding circumstances where the source or cause of contamination or radiation is brought or has been brought into or near the site by the Affected Party or those employed or engaged by the Affected Party.
- c) Industry wide strikes and labor disturbances having a nationwide impact in India.

**12.4 Force Majeure Exclusions**

Force Majeure shall not include (i) any event or circumstance which is within the reasonable control of the Parties and (ii) the following conditions, except to the extent that they are consequences of an event of Force Majeure:

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- a. Unavailability, late delivery, or changes in cost of the plant, machinery, equipment, materials, spare parts, Fuel or consumables for the Project;
- b. Delay in the performance of any contractor, sub-contractors or their agents excluding the conditions as mentioned in Article 12.2;
- c. Non-performance resulting from normal wear and tear typically experienced in power generation materials and equipment;
- d. Strikes or labour disturbance at the facilities of the Affected Party;
- e. Insufficiency of finances or funds or the agreement becoming onerous to perform; and
- f. Non-performance caused by, or connected with, the Affected Party's:
  - i) Negligent or intentional acts, errors or omissions;
  - ii) Failure to comply with an Indian Law; or
  - iii) Breach of, or default under this Agreement or any Project Documents.

#### 12.5 Notification of Force Majeure Event

The Affected Party shall give notice to the other Party of any event of Force Majeure as soon as reasonably practicable, but not later than seven (7) days after the date on which such Party knew or should reasonably have known of the commencement of the event of Force Majeure. If an event of Force Majeure results in a breakdown of communications rendering it unreasonable to give notice within the applicable time limit specified herein, then the Party claiming Force Majeure shall give such notice as soon as reasonably practicable after reinstatement of communications, but not later than one (1) day after such reinstatement. Provided that such notice shall be a precondition to the Seller's entitlement to claim relief under this Agreement. Such notice shall include full particulars of the event of Force Majeure, its effects on the Party claiming relief and the remedial measures proposed. The Affected Party shall give the other Party regular (and not less than monthly) reports on the progress of those remedial measures and such other information as the other Party may reasonably request about the situation.

The Affected Party shall give notice to the other Party of (i) the cessation of the relevant event of Force Majeure; and (ii) the cessation of the effects of such event of Force Majeure on the performance of its rights or obligations under this Agreement, as soon as practicable after becoming aware of each of these cessations.

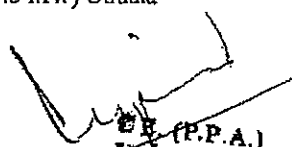
**12.6 Duty to perform and duty to mitigate**

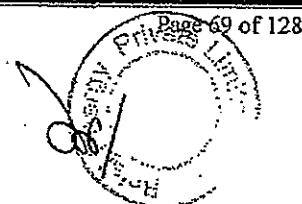
To the extent not prevented by a Force Majeure event pursuant to Article 12.3, the Affected Party shall continue to perform its obligations pursuant to this Agreement. The Affected Party shall use its reasonable efforts to mitigate the effect of any event of Force Majeure as soon as practicable.

**12.7 Available Relief for a Force Majeure Event**

Subject to this Article 12:

- (a) No Party shall be in breach of its obligations pursuant to this Agreement to the extent that the performance of its obligations was prevented, hindered or delayed due to a Force Majeure Event;
- (b) Every Party shall be entitled to claim relief in relation to a Force Majeure Event in regard to its obligations, including but not limited to those specified under Article 4.5.
- (c) For the avoidance of doubt, it is clarified that no Tariff shall be paid by the Procurers for the part of Contracted Capacity affected by a Natural Force Majeure Event affecting the Seller, for the duration of such Natural Force Majeure Event. For the balance part of the Contracted Capacity, the Procurer shall pay the Tariff to the Seller, provided during such period of Natural Force Majeure Event, the balance part of the Power Station is declared to be Available for scheduling and dispatch as per ABT for supply of power by the Seller to the Procurers.
- (d) If the average Availability of the Power Station is reduced below sixty (60) percent for over two (2) consecutive months or for any non consecutive period of four (4) months both within any continuous period of sixty (60) months, as a result of an Indirect Non Natural Force Majeure, then, with effect from the end of that period and for so long as the daily average Availability of the Power Station continues to be reduced below sixty (60) percent as a result of an Indirect Non Natural Force Majeure of any kind, the Procurers shall make payments for Debt Service, subject to a maximum of Capacity Charges based on Normative Availability, relatable to such Unit, which are due under the Financing Agreements and these amounts shall be paid from the date, being the later of a) the date of cessation of such Indirect Non Natural Force Majeure Event and b) the completion of sixty (60) days from the receipt of the Financing Agreements by the Procurer(s) from the Seller, in the form of an increase in Capacity Charge. Provided such Capacity Charge increase shall be determined by Appropriate Commission on the basis of putting the Seller in the same economic position as the Seller would have been in case the Seller had been paid Debt Service in a situation where the Indirect Non Natural Force Majeure had not occurred.


  
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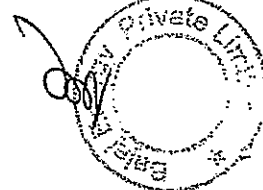




Provided that the Procurers will have the above obligation to make payment for the Debt Service only (a) after the Unit(s) affected by such Indirect Non Natural Force Majeure Event has been Commissioned, and (b) only if in the absence of such Indirect Non Natural Force Majeure Event, the Availability of such Commissioned Unit(s) would have resulted in Capacity Charges equal to Debt Service.

- e) If the average Availability of the Power Station is reduced below eighty five (85) percent for over two (2) consecutive months or for any non consecutive period of four (4) months both within any continuous period of sixty (60) months, as a result of a Direct Non Natural Force Majeure, then, with effect from the end of that period and for so long as the daily average Availability of the Power Station continues to be reduced below eighty five (85) percent as a result of a Direct Non Natural Force Majeure of any kind, the Seller may elect in a written notice to the Procurers, to deem the Availability of the Power Station to be eighty five (85) percent from the end of such period, regardless of its actual Available Capacity. In such a case, the Procurers shall be liable to make payment to the Seller of Capacity Charges calculated on such deemed Normative Availability, after the cessation of the effects of Direct Non Natural Direct Force Majeure in the form of an increase in Capacity Charge. Provided such Capacity Charge increase shall be determined by Appropriate Commission on the basis of putting the Seller in the same economic position as the Seller would have been in case the Seller had been paid Capacity Charges in a situation where the Direct Non Natural Force Majeure had not occurred.
- (f) For so long as the Seller is claiming relief due to any Non Natural Force Majeure Event (or Natural Force Majeure Event affecting the Procurer/s) under this Agreement, the Procurers may from time to time on one (1) days notice inspect the Project and the Seller shall provide Procurer's personnel with access to the Project to carry out such inspections, subject to the Procurer's personnel complying with all reasonable safety precautions and standards. Provided further the Procurers shall be entitled at all times to request Repeat Performance Test, as per Article 8.1, of the Unit Commissioned earlier and now affected by Direct or Indirect Non Natural Force Majeure Event (or Natural Force Majeure Event affecting the Procurer/s), where such Testing is possible to be undertaken in spite of the Direct or Indirect Non Natural Force Majeure Event (or Natural Force Majeure Event affecting the Procurer/s), and the Independent Engineer accepts and issues a Final Test Certificate certifying such Unit(s) being capable of delivering the Installed Capacity and being Available, had there been no such Direct or Indirect Non Natural Force Majeure Event (or Natural Force Majeure Event affecting the Procurer/s). In case, the Available Capacity as established by the said Repeat Performance Test (provided that for such Repeat Performance Test, the limitation imposed by Article 8.1.1 shall not

  
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apply) and Final Test Certificate issued by the Independent Engineer is less than the Available Capacity corresponding to which the Seller would have been paid Capacity Charges equal to Debt Service in case of Indirect Non Natural Force Majeure Event (or Natural Force Majeure Event affecting the Procurer/s), then the Procurers shall make pro-rata payment of Debt Service but only with respect to such reduced Availability. For the avoidance of doubt, if Debt Service would have been payable at an Availability of 60% and pursuant to a Repeat Performance Test it is established that the Availability would have been 40%, then Procurers shall make payment equal to Debt Service multiplied by 40% and divided by 60%. Similarly, the payments in case of Direct Non Natural Force Majeure Event (and Natural Force Majeure Event affecting the Procurer/s) shall also be adjusted pro-rata for reduction in Available Capacity.

- g) In case of a Natural Force Majeure Event affecting the Procurer/s which adversely affects the performance obligations of the Seller under this Agreement, the provisions of sub-proviso (d) and (f) shall apply.
- (h) For the avoidance of doubt, it is specified that the charges payable under this Article 12 shall be paid by the Procurers in proportion to their then existing Allocated Contracted Capacity.

#### 12.8 Additional Compensation and Procurers' Subrogation

If the Seller is entitled, whether actually or contingently, to be compensated by any person other than the Procurers as a result of the occurrence of a Non Natural Force Majeure Event (or Natural Force Majeure Event affecting the Procurer/s) for which it has received compensation from the Procurers pursuant to this Article 12, including without limitation, payments made which payments would not have been made in the absence of Article 4.7.1, the Procurers shall be fully subrogated to the Seller's rights against that person to the extent of the compensation paid by the Procurers to the Seller. Provided that in case the Seller has actually received compensation from the any person other than the Procurers as well as the Procurers as a result of the occurrence of a Non Natural Force Majeure Event (or Natural Force Majeure Event affecting the Procurer/s), then the Seller shall forthwith refund the compensation received by it from the Procurers but only to the extent of the compensation received by the Seller from any person other than the Procurers.

**ARTICLE 13 : CHANGE IN LAW****13.1 Definitions**

In this Article 13, the following terms shall have the following meanings:

**13.1.1 "Change in Law"** means the occurrence of any of the following events after the date, which is seven (7) days prior to the Effective Date:

(i) The enactment, bringing into effect, adoption, promulgation, amendment, modification or repeal, of any Law or (ii) a change in interpretation of any Law by a Competent Court of law, tribunal or Indian Governmental Instrumentality provided such Court of law, tribunal or Indian Governmental Instrumentality is final authority under law for such interpretation or (iii) change in any consents, approvals or licenses available or obtained for the Project, otherwise than for default of the Seller, which results in any change in any cost of or revenue from the business of selling electricity by the Seller to the Procurers under the terms of this Agreement, or (iv) any change in the cost of implementing Environmental Management Plan for the Power Station

But shall not include (i) any change in any withholding tax on income or dividends distributed to the shareholders of the Seller, or (ii) change in respect of UI Charges or frequency intervals by an Appropriate Commission.

**13.1.2 "Competent Court" means:**


The Supreme Court or any High Court, or any tribunal or any similar judicial or quasi-judicial body in India that has jurisdiction to adjudicate upon issues relating to the Project.

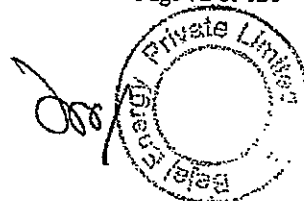
**13.2 Application and Principles for computing impact of Change in Law**

While determining the consequence of Change in Law under this Article 13, the Parties shall have due regard to the principle that the purpose of compensating the Party affected by such Change in Law, is to restore through Monthly Tariff payments, to the extent contemplated in this Article 13, the affected Party to the same economic position as if such Change in Law has not occurred.

**a) Construction Period**

As a result of any Change in Law, the impact of increase/decrease of Capital Cost of the Project in the Tariff shall be as approved by UPERC. In case of Dispute, Article 17 shall apply.

  
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**b) Operation Period**

As a result of Change in Law, the compensation for any increase/decrease in revenues or cost to the Seller shall be determined and effective from such date, as decided by Appropriate Commission whose decision shall be final and binding on both the Parties, subject to rights of appeal provided under applicable Law.

Provided that the above mentioned compensation shall be payable only if and for increase/ decrease in revenues or cost to the Seller is in excess of an amount equivalent to 1% of the Letter of Credit in aggregate for a Contract Year.

**13.3 Notification of Change in Law**

13.3.1 If the Seller is affected by a Change in Law in accordance with Article 13.2 and wishes to claim a Change in Law under this Article, it shall give notice to the Procurers of such Change in Law as soon as reasonably practicable after becoming aware of the same or should reasonably have known of the Change in Law.

13.3.2 Notwithstanding Article 13.3.1, the Seller shall be obliged to serve a notice to all the Procurers under this Article 13.3.2 if it is beneficially affected by a Change in Law. Without prejudice to the factor of materiality or other provisions contained in this Agreement, the obligation to inform the Procurers contained herein shall be material. Provided that in case the Seller has not provided such notice, the Procurers shall jointly have the right to issue such notice to the Seller.

13.3.3 Any notice served pursuant to this Article 13.3.2 shall provide, amongst other things, precise details of:


- (a) The Change in Law; and
- (b) The effects on the Seller of the matters referred to in Article 13.2.

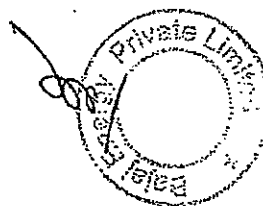
**13.4 Tariff Adjustment Payment on account of Change in Law**

13.4.1 Subject to Article 13.2, the adjustment in Monthly Tariff Payment shall be effective from:

- (i) The date of adoption, promulgation, amendment, re-enactment or repeal of the Law or Change in Law; or
- (ii) The date of order/judgment of the Competent Court or tribunal or Indian Governmental Instrumentality, if the Change in Law is on account of a change in interpretation of Law.

13.4.2 The payment for Changes in Law shall be through Supplementary Bill as mentioned in Article 11.8. However, in case of any change in Tariff by reason of Change in Law, as determined in accordance with this Agreement, the Monthly Invoice to be raised by the Seller after such change in Tariff shall appropriately reflect the changed Tariff.

  
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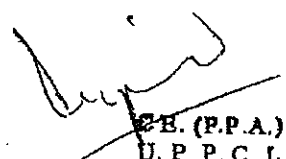


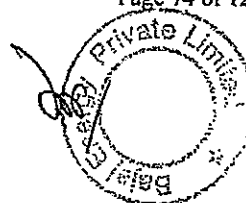
## ARTICLE 14 : EVENTS OF DEFAULT AND TERMINATION

## 14.1 Seller Event of Default

The occurrence and continuation of any of the following events, unless any such event occurs as a result of a Force Majeure Event or a breach by Procurers of their obligations under this Agreement, shall constitute a Seller Event of Default:

- i) The failure to Commission any Unit by the date falling twelve (12) Months after its Scheduled Commercial Operation Date, or
- ii) After the commencement of construction of the Project, the abandonment by the Seller or the Seller's Construction Contractors of the construction of the Project for a continuous period of two (2) Months and such default is not rectified within thirty (30) days from the receipt of first notice from any of the Procurers or Procurers (jointly) in this regard, or
- iii) If at any time following a Unit being Commissioned and during its retest, as per Article 8, such Unit's Tested Capacity is less than ninety two (92) percent of its Installed Capacity, as existing on the Effective Date, and such Tested Capacity remains below ninety two (92) percent even for a period of three (3) Months thereafter; or
- iv) After Commercial Operation Date of all the Units of the Power Station, the Seller fails to achieve Average Availability of sixty five percent (65%), for a period of twelve (12) consecutive Months or within a non-consecutive period of twelve (12) Months within any continuous aggregate period of thirty six (36) Months, or
- v) The Seller fails to make any payment (a) of an amount exceeding Rupees One (1) Crore required to be made to Procurer/s under this Agreement, within three (3) Months after the Due Date of an undisputed invoice /demand raised by the said Procurer/s on the Seller or (b) of an amount upto Rupees One (1) Crore required to be made to Procurer/s under this Agreement within six (6) Months after the Due Date of an undisputed invoice/demand, or
- vi) Any of the representations and warranties made by the Seller in Schedule 10 of this Agreement; being found to be untrue or inaccurate. Provided however, prior to considering any event specified under this sub-article to be an Event of Default, the Procurers shall give a notice to the Seller in writing of at least thirty (30) days, or
- vii) If the Seller:
  - a) Assigns or purports to assign any of its assets or rights in violation of this Agreement; or
  - b) Transfers or novates any of its rights and/or obligations under this agreement, in violation of this Agreement; or
- viii) If (a) the Seller becomes voluntarily or involuntarily the subject of any bankruptcy or insolvency or winding up proceedings and such proceedings remain uncontested for a period of thirty (30) days, or (b) any winding up or bankruptcy or insolvency order is passed against the Seller, or (c) the Seller goes into liquidation or dissolution or has a

  
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receiver or any similar officer appointed over all or substantially all of its assets or official liquidator is appointed to manage its affairs, pursuant to Law,


**Provided that a dissolution or liquidation of the Seller will not be an Event of Default** if such dissolution or liquidation is for the purpose of a merger, consolidation or reorganization and retains creditworthiness similar to the Seller and expressly assumes all obligations of the Seller under this Agreement and is in a position to perform them; or

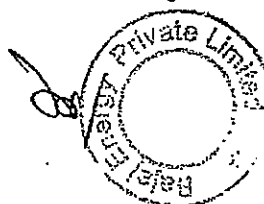
- ix) The Seller repudiates this Agreement and does not rectify such breach even within a period of thirty (30) days from a notice from the Procurers (jointly) in this regard; or
- x) Except where due to any Procurer's failure to comply with its material obligations, the Seller is in breach of any of its material obligations pursuant to this Agreement and such material breach is not rectified by the Seller within thirty (30) days of receipt of first notice in this regard given by any of the Procurers or Procurers (jointly) the Procurers to the Seller or by the Procurers.
- xi) The Seller fails to complete/fulfill the activities/conditions specified in Article 3.1.2, beyond a period of 8 Months from the specified period in Article 3.1.2 and the right of termination under Article 3.3.2 is invoked by the Procurers (jointly); or
- xii) Not Used
- xiii) Not Used
- xiv) Occurrence of any other event which is specified in this Agreement to be a material breach/default of the Seller.

#### 14.2 Procurer Event of Default

The occurrence and the continuation of any of the following events, unless any such event occurs as a result of a Force Majeure Event or a breach by the Seller of its obligations under this Agreement, shall constitute the Event of Default on the part of defaulting Procurer:

- i) A defaulting Procurer fails to pay (with respect to a Monthly Bill or a Supplementary Bill) an amount exceeding fifteen (15%) of the undisputed part of the most recent Monthly/Supplementary Bill for a period of ninety (90) days after the Due Date and the Seller is unable to recover the amount outstanding to the Seller through the Collateral Arrangement and Letter of Credit; or
- ii) The defaulting Procurer repudiates this Agreement and does not rectify such breach even within a period of thirty (30) days from a notice from the Seller in this regard; or
- iii) Except where due to any Seller's failure to comply with its obligations, the defaulting Procurer(s) is in material breach of any of its obligations pursuant to this Agreement and such material breach is not rectified by the defaulting Procurer within thirty (30) days of receipt of notice in this regard from the Seller to all the Procurers; or

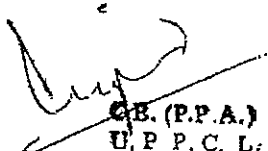
  
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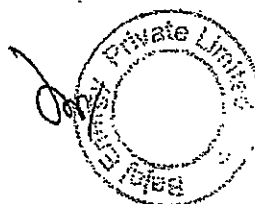


- iv) Any representation and warranties made by any of the Procurer in Schedule 10 of this Agreement being found to be untrue or inaccurate. Provided however, prior to considering any event specified under this sub-article to be an Event of Default, the Seller shall give a notice to the concerned Procurer in writing of at least thirty (30) days; or
- v) If (a) any Procurer becomes voluntarily or involuntarily the subject of any bankruptcy or insolvency or winding up proceedings and such proceedings remain uncontested for a period of thirty (30) days, or (b) any winding up or bankruptcy or insolvency order is passed against the Procurer, or (c) the Procurer goes into liquidation or dissolution or has a receiver or any similar officer appointed over all or substantially all of its assets or official liquidator is appointed to manage its affairs, pursuant to Law, except where such dissolution or liquidation of such Procurer is for the purpose of a merger, consolidation or reorganization and where the resulting entity has the financial standing to perform its obligations under this Agreement and has creditworthiness similar to such Procurer and expressly assumes all obligations of such Procurer under this Agreement and is in a position to perform them; or
- vi) Occurrence of any other event which is specified in this Agreement to be a material breach or default of the Procurers.

#### 14.3 Procedure for cases of Seller Event of Default

- 14.3.1 Upon the occurrence and continuation of any Seller Event of Default under Article 14.1, the Procurers jointly shall have the right to deliver to the Seller a Procurer Preliminary Default Notice, which shall specify in reasonable detail, the circumstances giving rise to the issue of such notice.
- 14.3.2 Following the issue of Procurer Preliminary Default Notice, the Consultation Period of ninety (90) days or such longer period as the Parties may agree, shall apply.
- 14.3.3 During the Consultation Period, the Parties shall, save as otherwise provided in this Agreement, continue to perform their respective obligations under this Agreement.
- 14.3.4 Within a period of seven (7) days following the expiry of the Consultation Period unless the Parties shall have otherwise agreed to the contrary or the Seller Event of Default giving rise to the Consultation Period shall have been remedied, the Lenders may exercise or the Procurers may require the Lenders to exercise their substitution rights and other rights provided to them, if any, under Financing Agreements and the Procurers would have no objection to the Lenders exercising their rights if it is in

  
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consonance with provisions of Schedule 17. Alternatively, in case the Lenders do not exercise their rights as mentioned herein above, the Capacity Charge of the Seller shall be reduced by 20% for the period of Seller Event of Default.

#### 14.4 Termination for Procurer Events of Default


14.4.1 Upon the occurrence and continuation of any Procurer Event of Default pursuant to Article 14.2 (i), the Seller shall follow the remedies provided under Articles 11.5.2.

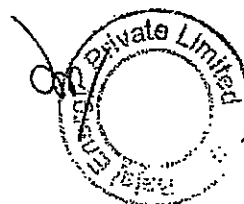
14.4.2 Without in any manner affecting the rights of the Seller under Article 14.4.1, on the occurrence of any Procurer Event of Default specified in Article 14.2 the Seller shall have the right to deliver to all the Procurers a Seller Preliminary Default Notice, which notice shall specify in reasonable detail the circumstances giving rise to its issue.

14.4.3 Following the issue of a Seller Preliminary Default Notice, the Consultation Period of ninety (90) days or such longer period as the Parties may agree, shall apply.

14.4.4 During the Consultation Period, the Parties shall continue to perform their respective obligations under this Agreement.


14.4.5 (i) After a period of seven (7) days following the expiry of the Consultation Period and unless the Parties shall have otherwise agreed to the contrary or the Procurer Event of Default giving rise to the Consultation Period shall have been remedied, the Seller shall be free to sell the then existing Allocated Contracted Capacity and associated Available Capacity of Procurer/s committing Procurer/s Event of Default to any third party of his choice. Provided such Procurer shall have the liability to make payments for Capacity Charges based on Normative Availability to the Seller for the period three (3) years from the eighth day after the expiry of the Consultation Period. Provided further that in such three year period, in case the Seller is able to sell electricity to any third party at a price which is in excess of the Energy Charges, then such excess realization will reduce the Capacity Charge payments due from such Procurer/s. For the avoidance of doubt, the above excess adjustment would be applied on a cumulative basis for the three year period. During such period, the Seller shall use its best effort to sell the Allocated Contracted Capacity and associated Available Capacity of such Procurer generated or capable of being generated to such third parties at the most reasonable terms available in the market at such time, having due regard to the circumstances at such time and the pricing of electricity in the market at such time. Provided further, the Seller shall ensure that sale of power to the shareholders of the Seller or any direct or indirect affiliate of the Seller/shareholders of the Seller, is not at a price less than the Tariff, without obtaining the prior written

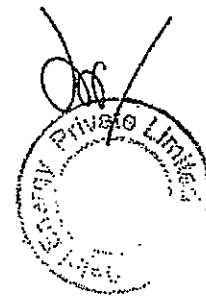
  
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consent of such Procurer/s. Such request for consent would be responded to within a maximum period of 3 days failing which it would be deemed that the Procurer has given his consent. Provided further that at the end of the three year period, this Agreement shall automatically terminate but only with respect to such Procurer/s and thereafter, such Procurer/s shall have no further Capacity Charge liability towards the Seller. Provided further, the Seller shall have the right to terminate this Agreement with respect to such Procurer/s even before the expiry of such three year period provided on such termination, the future Capacity Charge liability of such Procurer/s shall cease immediately.

  
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**ARTICLE 15 : LIABILITY AND INDEMNIFICATION****15.1 Indemnity**

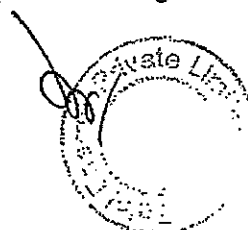
The Seller shall indemnify, defend and hold each Procurer harmless against:

- (a) Any and all third party claims, actions, suits or proceedings against the Procurer/s for any loss of or damage to property of such third party, or death or injury to such third party, arising out of a breach by the Seller of any of its obligations under this Agreement, except to the extent that any such claim, action, suit or proceeding has arisen due to a negligent act or omission, breach of this Agreement or breach of statutory duty on the part of Procurers, its contractors, servants or agents; and
- (b) Any and all losses, damages, costs and expenses including legal costs, fines, penalties and interest actually suffered or incurred by Procurer /s from third party claims arising by reason of (i) breach by the Seller of any of its obligations under this Agreement, (provided that this Article 15 shall not apply to such breaches by the Seller, for which specific remedies have been provided for under this Agreement) except to the extent that any such losses, damages, costs and expenses including legal costs, fines, penalties and interest (together to constitute "Indemnifiable Losses") has arisen due to a negligent act or omission, breach of this Agreement or breach of statutory duty on the part of Procurers, its contractors, servants or agents or (ii) any of the representations or warranties of the Seller under this Agreement being found to be inaccurate or untrue.

Procurer shall indemnify, defend and hold the Seller harmless against:

- (a) Any and all third party claims, actions, suits or proceedings against the Seller, for any loss of or damage to property of such third party, or death or injury to such third party, arising out of a breach by Procurer of any of its obligations under this Agreement except to the extent that any such claim, action, suit or proceeding has arisen due to a negligent act or omission, breach of this Agreement or breach of statutory duty on the part of the Seller, its contractors, servants or agents; and
- (b) Any and all losses, damages, costs and expenses including legal costs, fines, penalties and interest ("Indemnifiable Losses") actually suffered or incurred by the Seller from third party claims arising by reason of (i) a breach by Procurer of any of its obligations under this Agreement (Provided that this Article 15 shall not apply to such breaches by Procurer, for which specific remedies have

  
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been provided for under this Agreement.), except to the extent that any such Indemnifiable Losses have arisen due to a negligent act or omission, breach of this Agreement or breach of statutory duty on the part of the Seller, its contractors, servants or agents or (ii) any of the representations or warranties of the Procurers under this Agreement being found to be inaccurate or untrue.

### 15.2 Monetary Limitation of liability

A Party ("Indemnifying Party") shall be liable to indemnify the other Party ("Indemnified Party") under this Article 15 for any indemnity claims made in a Contract Year only upto an amount of Rupees [Insert amount]. With respect to each Procurer, the above limit of Rupees [Insert amount] shall be divided in the ratio of their Allocated Contract Capacity existing on the date of the indemnity claim.

### 15.3 Procedure for claiming indemnity

#### 15.3.1 Third party claims


(a) Where the Indemnified Party is entitled to indemnification from the Indemnifying Party pursuant to Article 15.1.1(a) or 15.1.2(a), the Indemnified Party shall promptly notify the Indemnifying Party of such claim, proceeding, action or suit referred to in Article 15.1.1(a) or 15.1.2(a) in respect of which it is entitled to be indemnified. Such notice shall be given as soon as reasonably practicable after the Indemnified Party becomes aware of such claim, proceeding, action or suit. The Indemnifying Party shall be liable to settle the indemnification claim within thirty (30) days of receipt of the above notice. Provided however that, if:

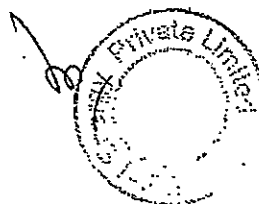
(i) The Parties choose to contest, defend or litigate such claim, action, suit or proceedings in accordance with Article 15.3.1(b) below; and

(ii) The claim amount is not required to be paid/deposited to such third party pending the resolution of the Dispute,

The Indemnifying Party shall become liable to pay the claim amount to the Indemnified Party or to the third party, as the case may be, promptly following the resolution of the Dispute, if such Dispute is not settled in favour of the Indemnified Party.

(b) The Indemnified Party may contest, defend and litigate a claim, action, suit or proceeding for which it is entitled to be indemnified under Article 15.1.1(a) or 15.1.2(a) and the indemnifying Party shall reimburse to the indemnified Party all reasonable costs and expenses incurred by the indemnified party. However, such indemnified Party shall not settle or compromise such claim, action, suit or

  
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proceedings without first getting the consent of the indemnifying Party, which consent shall not be unreasonably withheld or delayed.

An Indemnifying Party may, at its own expense, assume control of the defence of any proceedings brought against the Indemnified Party if it acknowledges its obligation to indemnify such Indemnified Party, gives such Indemnified Party prompt notice of its intention to assume control of the defence, and employs an independent legal counsel at its own cost that is reasonably satisfactory to the Indemnified Party.

#### 15.4 Indemnifiable Losses

Where an Indemnified Party is entitled to Indemnifiable Losses from the Indemnifying Party pursuant to Article 15.1.1(b) or 15.1.2(b), the Indemnified Party shall promptly notify the Indemnifying Party of the Indemnifiable Losses actually incurred by the Indemnified Party. The Indemnifiable Losses shall be reimbursed by the Indemnifying Party within thirty (30) days of receipt of the notice seeking Indemnifiable Losses by the Indemnified Party. In case of non payment of such losses after a valid notice under this Article 15.4, such event shall constitute a payment default under Article 14.

#### 15.5 Limitation on Liability

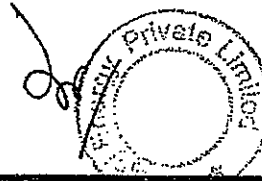
Except as expressly provided in this Agreement, neither the Seller nor Procurers nor their respective officers, directors, agents, employees or Affiliates (or their officers, directors, agents or employees), shall be liable or responsible to the other Party or its Affiliates, officers, directors, agents, employees, successors or permitted assigns (or their respective insurers) for incidental, indirect or consequential damages, connected with or resulting from performance or non-performance of this Agreement, or anything done in connection herewith, including claims in the nature of lost revenues, income or profits (other than payments expressly required and properly due under this Agreement), any increased expense of, reduction in or loss of power generation production or equipment used therefore, irrespective of whether such claims are based upon breach of warranty, tort (including negligence, whether of the Procurers, the Seller or others), strict liability, contract, breach of statutory duty, operation of law or otherwise. Procurers shall have no recourse against any officer, director or shareholder of the Seller or any Affiliate of the Seller or any of its officers, directors or shareholders for such claims excluded under this Article. The Seller shall have no recourse against any officer, director or shareholder of Procurers, or any affiliate of Procurers or any of its officers, directors or shareholders for such claims excluded under this Article.



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**ARTICLE 16 : ASSIGNMENTS AND CHARGES****16.1 Assignments**

This Agreement shall be binding upon, and inure to the benefit of the Parties and their respective successors and permitted assigns. Subject to Article 16.2, this Agreement shall not be assigned by any Party (and no Party shall create or permit to subsist any encumbrance over all or any of its rights and benefits under this Agreement) other than by mutual consent between the Parties to be evidenced in writing:

Provided that, such consent shall not be withheld if any of the Procurers seeks to transfer to any transferee all of its rights and obligations under this Agreement; and

- (a) Such transferee is either the owner or operator of all or substantially all of the distribution system of such Procurer and /or such transferee is a successor entity of any of the Procurers; and
- (b) This Agreement shall continue to remain valid and binding on such successor.

Seller shall be entitled to assign its rights and obligations under this Agreement in favor of the Selectee duly appointed pursuant to the terms of Schedule 17 of this Agreement.


**16.2 Permitted Charges**

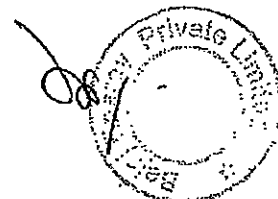
16.2.1 Notwithstanding anything contained in Article 16.1, the Seller may create any encumbrance over all or part of the receivables, Payment Mechanism or the other assets of the Project in favour of the Lenders or the Lender's Representative on their behalf, as security for:

- (a) Amounts payable under the Financing Agreements; and
- (b) Any other amounts agreed by the Parties,

Provided that:

- I The Lenders or the Lender's Representative on their behalf shall have agreed in writing to the provisions of Schedule 17 of this Agreement; and
- II Any encumbrances granted by the Seller in accordance with this Article 16.2.1 shall contain provisions pursuant to which the Lenders or the Lender's Representative on their behalf agrees unconditionally with the Seller acting for itself and as trustee of the Procurers to release from such encumbrances all of the right, title and interest to Additional Compensation so as to enable the Procurers to claim its right of subrogation. For the purposes of this Article, Additional Compensation shall mean the compensation that the Seller is entitled, whether actually or contingently, to receive from the Procurers as

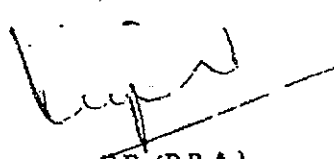
  
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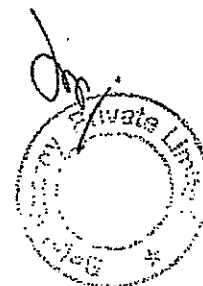


well as compensated by any person other than the Procurers for the same event.

16.2.2 Article 16.1 does not apply to:

- (a) Liens arising by operation of law (or by an agreement evidencing the same) in the ordinary course of the Seller carrying out the Project,
- (b) Pledges of goods, the related documents of title and / or other related documents, arising or created in the ordinary course of the Seller carrying out the Project; or
- (c) Security arising out of retention of title provisions in relation to goods acquired in the ordinary course of the Seller carrying out the Project.

  
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**ARTICLE 17 : GOVERNING LAW AND DISPUTE RESOLUTION****17.1 Governing Law**

This Agreement shall be governed by and construed in accordance with the Laws of India.

**17.2 Amicable Settlement**

17.2.1 Either Party is entitled to raise any claim, dispute or difference of whatever nature arising under, out of or in connection with this Agreement including its existence or validity or termination (collectively "Dispute") by giving a written notice to the other Party, which shall contain:

- (i) A description of the Dispute;
- (ii) The grounds for such Dispute; and
- (iii) All written material in support of its claim.

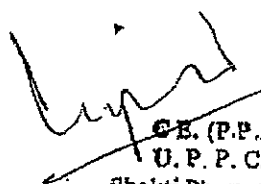
17.2.2 The other Party shall, within thirty (30) days of issue of dispute notice issued under Article 17.2.1, furnish:

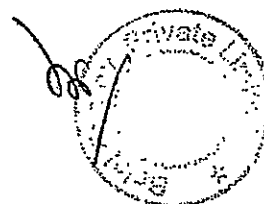
- (i) Counter-claim and defences, if any, regarding the Dispute; and
- (ii) All written material in support of its defences and counter-claim.

17.2.3 Within thirty (30) days of issue of notice by any Party pursuant to Article 17.2.1 or Article 17.2.2, both the Parties to the Dispute shall meet to settle such Dispute amicably. If the Parties fail to resolve the Dispute amicably within thirty (30) days of receipt of the notice referred to in the preceding sentence, the Dispute shall be referred to Dispute Resolution in accordance with Article 17.3.

**17.3 Dispute Resolution**

17.3.1 Where any Dispute arises from a claim made by any Party for any change in or determination of the Tariff or any matter related to Tariff or claims made by any Party which partly or wholly relate to any change in the Tariff or determination of any of such claims could result in change in the Tariff or (ii) relates to any matter agreed to be referred to the Appropriate Commission under Articles 4.7.1, 13.2, 18.1 or clause 10.1.3 of Schedule 17 hereof, such Dispute shall be submitted to adjudication by the Appropriate Commission. Appeal against the decisions of the Appropriate Commission shall be made only as per the provisions of the Electricity Act, 2003, as amended from time to time.

  
G.E. (P.P.A.)  
U.P.P.C.L.  
Shakti Bhawan Bldg.  
Lucknow.




The obligations of the Procurers under this Agreement towards the Seller shall not be affected in any manner by reason of inter-se disputes amongst the Procurers.

17.3.2 If the Dispute arises out of or in connection with any claims not covered in Article 17.3.1, such Dispute shall be resolved by arbitration under the Indian Arbitration and Conciliation Act, 1996 and the Rules of the Indian Council of Arbitration, in accordance with the process specified in this Article. In the event of such Dispute remaining unresolved as referred to in Article 17.2.3 hereof, any party to such Dispute may refer the matter to registrar under the Rules of the Indian Council of Arbitration.

- (i) The Arbitration tribunal shall consist of three (3) arbitrators to be appointed in accordance with the Indian Council of Arbitration Rules
- (ii) The place of arbitration shall be Lucknow, Uttar Pradesh. The language of the arbitration shall be English.
- (iii) The arbitration tribunal's award shall be substantiated in writing. The arbitration tribunal shall also decide on the costs of the arbitration proceedings and the allocation thereof.
- (iv) The award shall be enforceable in any court having jurisdiction, subject to the applicable Laws.
- (v) The provisions of this Clause shall survive the termination of this PPA for any reason whatsoever.

#### 17.4 Parties to Perform Obligations

Notwithstanding the existence of any Dispute and difference referred to the Appropriate Commission or the arbitral tribunal as provided in Article 17.3 and save as the Appropriate Commission or the arbitral tribunal may otherwise direct by a final or interim order, the Parties hereto shall continue to perform their respective obligations (which are not in dispute) under this Agreement.

  
CE. (P.P.A.)  
U. P. P. C. L.  
Shakti Bhawan Extn.  
Lucknow.





**ARTICLE 18 : MISCELLANEOUS PROVISIONS****18.1 Amendment**

This Agreement may only be amended or supplemented by a written agreement between the Parties and after duly obtaining the approval of the Appropriate Commission, where necessary.

**18.2 Third Party Beneficiaries**

This Agreement is solely for the benefit of the Parties and their respective successors and permitted assigns and shall not be construed as creating any duty, standard of care or any liability to, any person not a party to this Agreement.

**18.3 No Waiver**

A valid waiver by a Party shall be in writing and executed by an authorized representative of that Party. Neither the failure by any Party to insist on the performance of the terms, conditions, and provisions of this Agreement nor time or other indulgence granted by any Party to the other Parties shall act as a waiver of such breach or acceptance of any variation or the relinquishment of any such right or any other right under this Agreement, which shall remain in full force and effect.

**18.4 Entirety**


18.4.1 This Agreement and the Schedules are intended by the Parties as the final expression of their agreement and are intended also as a complete and exclusive statement of the terms of their agreement.

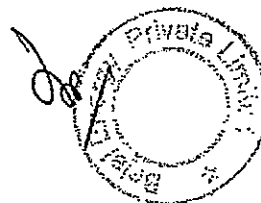
18.4.2 Except as provided in this Agreement, all prior written or oral understandings, offers or other communications of every kind pertaining to this Agreement or the sale or purchase of Electrical Output and Contracted Capacity under this Agreement to the Procurers by the Seller shall stand superseded and abrogated.

**18.5 Confidentiality**

The Parties undertake to hold in confidence this Agreement and not to disclose the terms and conditions of the transaction contemplated hereby to third parties, except:

- (a) To their professional advisors;
- (b) To their officers, contractors, employees, agents or representatives, financiers, who need to have access to such information for the proper performance of their activities; or

  
P.E. (P.P.A.)  
U. P. P. C. L.  
Shakti Bhawan Bldg.  
Lucknow.



## (c) Disclosures required under Law.

without the prior written consent of the other Parties.

Provided that the Seller agrees and acknowledges that any of the Procurers may at any time, disclose the terms and conditions of the Agreement and the Project Documents to any person, to the extent stipulated under the Law.

**18.6 Affirmation**

The Seller and Procurers, each affirm that:

- (i) Neither it nor its respective directors, employees, or agents has paid or undertaken to pay or shall in the future pay any unlawful commission, bribe, pay-off or kick back; and
- (ii) It has not in any other manner paid any sums, whether in Indian currency or foreign currency and whether in India or abroad to the other Party to procure this Agreement, and the Seller and Procurer hereby undertake not to engage in any similar acts during the Term of Agreement.

**18.7 Severability**

The invalidity or enforceability, for any reason, of any part of this Agreement shall not prejudice or affect the validity or enforceability of the remainder of this Agreement, unless the part held invalid or unenforceable is fundamental to this Agreement.

**18.8 No Partnership**

None of the provisions of this Agreement shall constitute a partnership or agency or any such similar relationship between the Seller and Procurers.

**18.9 Survival**


Notwithstanding anything to the contrary herein, the provisions of this Agreement, including, Article 10.2 (Application of Insurance Proceeds), Article 12 (Force Majeure), Article 14 (Events of Default and Termination), Article 15 (Liability and Indemnification), Article 17 including Article 17.3.2 (Governing Law and Dispute Resolution), Article 18 (Miscellaneous), and other Articles and Schedules of this Agreement which expressly or by their nature survive the term or termination of this Agreement shall continue and survive any expiry or termination of this Agreement.

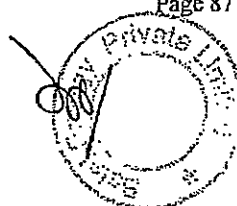
**18.10 Counterparts**

This Agreement may be executed in one or more counterparts, each of which shall be deemed an original and all of which collectively shall be deemed one and the same instrument.

Bajaj (2 X 45 MW) Utraula

Page 87 of 128

  
CE. (P.P.A.)  
U.P.P.C.L.  
Shakti Bhawan Bldg.  
Lucknow.



**18.11 . Notices**

All notices to be given under this Agreement shall be in writing and in the English Language.

All notices must be delivered personally, by registered post or any method duly acknowledged or facsimile to the addresses below:

**Seller :**

**Bajaj Energy Private Limited**

**Registered Office :** 2<sup>nd</sup> Floor, Bajaj Bhawan, Janna Lal Bajaj Marg, Nariman Point, Mumbai-400021

**Corporate Office :** B-10 Sector 3, Noida, Gautam Budh Nagar (U.P.)  
Pin - 201301

**Procurer 1:**

**Managing Director**

**Paschimanchal Vidyut Vitran Nigam Limited**

**Hydel Inspection House, Hydel Colony, Victoria Park, Meerut-250001**

**Fax: 0121-2666062**

**Phone: 0121-2665734**

**Procurer 2:**

**Managing Director**

**Poorvanchal Vidyut Vitran Nigam Limited**

**Vidyut Nagar, Bhikharipur, P.O. DLW, Varanasi-221010**

**Fax: 0542-2319158**

**Phone: 0542-2318437**

**Procurer 3:**

**Managing Director**

**Madhyanchal Vidyut Vitran Nigam Limited**

**4A Ghokle Marg, Lucknow-226001**

**Fax: 0522-2208769**

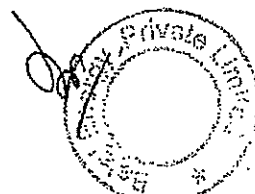
**Phone: 0522-2208737**



**B.E. (P.P.A.)**

**H.P.P.C.E.**

**Bajaj (2 X 45 MW) Usha Bhawan Extra,  
Lucknow.**



## Procurer 4:

Managing Director  
Dakshinanchal Vidyut Vitran Nigam Limited  
Urja Bhavan, NH - 2 (Agra - Delhi Bypass Road), Sikandra, Agra - 282002  
Fax: 0522-2208769  
Phone: 0522-2208737

All notices or communications given by facsimile shall be confirmed by sending a copy of the same via post office in an envelope properly addressed to the appropriate Party for delivery by registered mail. All Notices shall be deemed validly delivered upon receipt evidenced by an acknowledgement of the recipient, unless the Party delivering the notice can prove in case of delivery through the registered post that the recipient refused to acknowledge the receipt of the notice despite efforts of the post authorities..

Any Party may by notice of at least fifteen (15) days to the other Parties change the address and / or addresses to which such notices and communications to it are to be delivered or mailed.

**18.12 Language**

The language of this Agreement and all written communication between the Parties relating to this Agreement shall be in English.

**18.13 Breach of Obligations**

The Parties acknowledge that a breach of any of the obligations contained herein would result in injuries. The Parties further acknowledge that the amount of the liquidated damages or the method of calculating the liquidated damages specified in this Agreement is a genuine and reasonable pre-estimate of the damages that may be suffered by the non-defaulting party in each case specified under this Agreement.

**18.14 Nomination Restriction**

Notwithstanding anything contained to the contrary in this Agreement, wherever a reference is made to the right of a Procurer to nominate a third Party to receive benefits under this Agreement, such Third Party shall have a financial standing comparable to that of the Procurer in question.

**18.15 Commercial Acts**

The Procurers and Seller unconditionally and irrevocably agree that the execution, delivery and performance by each of them of this Agreement and those agreements included in the Collateral Arrangement to which it is a Party constitute private and commercial acts rather than public or governmental acts;

**18.16 Restriction of Shareholders/Owners Liability**

Parties expressly agree and acknowledge that none of the shareholders of the Parties hereto shall be liable to the other Parties for any of the contractual obligations of the concerned party under this Agreement. Further, the financial liabilities of the shareholder/s of each Party to this Agreement, in such Party, shall be restricted to the extent provided in Section 426 of the Indian Companies Act, 1956.

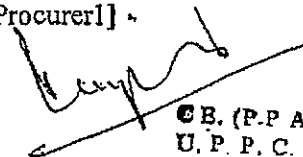
The provisions of this Article shall supercede any other prior agreement or understanding, whether oral or written, that may be existing between the Procurers, Seller, shareholders/ owners of the Seller, shareholders/ owners of the Procurers or the Seller before the date of this Agreement, regarding the subject matter of this Agreement.


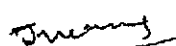
**18.17 No Consequential or Indirect Losses**

The liability of the Seller and the Procurers shall be limited to that explicitly provided in this Agreement. Provided that notwithstanding anything contained in this Agreement, under no event shall the Procurers or the Seller claim from one another any indirect or consequential losses or damages.

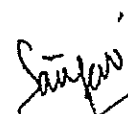
IN WITNESS WHEREOF the Parties have executed these presents through their authorized representatives at Lucknow.


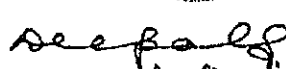
For and on behalf of  
[Procurer1] -

  
S. B. (P.P.A.)  
U. P. P. C. L.  
Shakti Bhawan Extn.  
Lucknow.  
Signature with seal

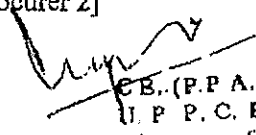
Witness:   
1. (S. P. PANDEY) EE, PPA  
2.   
(Jayant Sharma)  
EE (PPA)

For and on behalf of  
[THE Seller]

  
Signature with seal DR. SATISH KUMAR  
AUTHORIZED SIGNATORY.


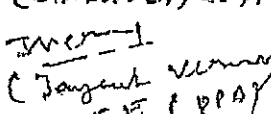
Witness:   
1. Anant Anand  
2.   
(Seepal Sharma)

For and on behalf of  
[Procurer 2]

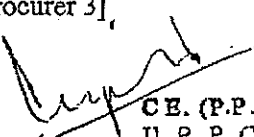
  
CE. (P.P.A.)  
U. P. P. C. L.  
Shakti Bhawan Extn.  
Lucknow.

Signature with Seal

Witness:

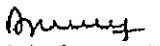
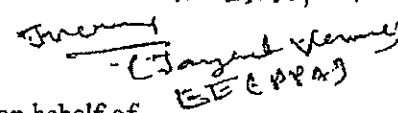
1.   
(S.P. PANDAY) LE, PPA
2.   
(Jagad Vemay)  
EE (PPA)

For and on behalf of  
[Procurer 3],

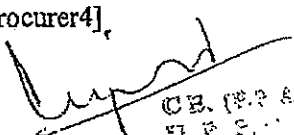
  
CE. (P.P.A.)  
U. P. P. C. L.  
Shakti Bhawan Extn.  
Lucknow.

Signature with seal

Witness:

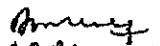
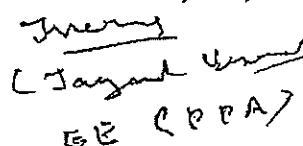
1.   
(S.P. PANDAY) LE, PPA
2.   
(Jagad Vemay)  
EE (PPA)

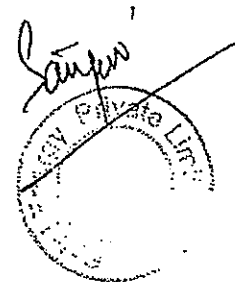
For and on behalf of  
[Procurer 4],

  
CE. (P.P.A.)  
U. P. P. C. L.  
Shakti Bhawan Extn.  
Lucknow.

Signature with seal

Witness:

1.   
(S.P. PANDAY) LE, PPA
2.   
(Jagad Vemay)  
EE (PPA)



**SCHEDULE 1 : NAMES AND DETAILS OF THE PROCURERS****Procurer 1:**

Managing Director  
Paschimanchal Vidyut Vitran Nigam Limited  
Hydel Inspection House, Hydel Colony, Victoria Park, Meerut-250001  
Fax: 0121-2666062  
Phone: 0121-2665734

**Procurer 2:**

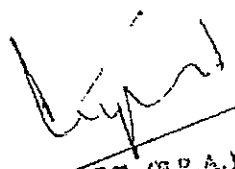
Managing Director  
Poorvanchal Vidyut Vitran Nigam Limited  
Vidyut Nagar, Bhikharipur, P.O. DLW, Varanasi-221010  
Fax: 0542-2319158  
Phone: 0542-2318437

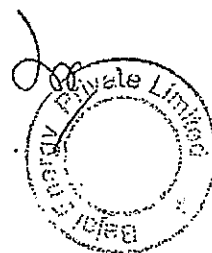
**Procurer 3:**

Managing Director  
Madhyanchal Vidyut Vitran Nigam Limited  
4A Ghokle Marg, Lucknow-226001  
Fax: 0522-2208769  
Phone: 0522-2208737

**Procurer 4:**

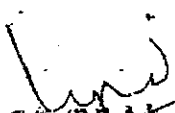
Managing Director  
Dakshinanchal Vidyut Vitran Nigam Limited  
Urja Bhavan, NH - 2 (Agra - Delhi Bypass Road), Sikandra, Agra - 282002  
Fax: 0522-2208769  
Phone: 0522-2208737

  
CE. (F.P.A.)  
U. P. P. C. L.  
Shakti Bhawan Bldg.  
Lucknow.



## 1A SCHEDULE 1A: SITE

2x45 MW Thermal Power Plant is being set up by M/s Bajaj Energy Private Ltd. on the surplus land, measuring about 41.40 acres, of Sugar Mill - Itainaida (Utraula) situated in Village - Itainaida, Post Office Mahuwa Ibrahim, Tehsil Utraula, District - Balrampur. The site is about 22.0 KM from Balrampur and 12.0 KM from Utraula. Nearest Railway Station is Balrampur which is situated at about 24.0 KM from the site.

  
C.E. (P.P.A.)  
U.P.P.C. L.  
Shakti Bhawan Bldg.  
Lucknow.





**SCHEDULE 2 : INITIAL CONSENTS**

The following clearances have been / will be obtained with respect to the Unit: -

Sl. No.	Clearances	Clearing Authority
1	Signing of MOU	GoUP
2	Water availability	Ground water shall be used
3	State Government Clearance approval of Feasibility Report	GoUP / UPPCL.
4	Pollution Clearance (Water & Air)	U.P. Pollution Control Board
5	Environmental Clearance	Ministry of Environment and Forests (GoI) / U.P. Agency
6	Forest Clearance	GoUP / Department of Forests
7	Civil Aviation Clearance for Chimney Height	National Airport Authority / Indian Air Force
8	Company Registration	Registrar of Companies
9	Approval of PPA and various project agreements	UPPCL / UPERC
10	Project Cost / Tariff Approval	UPPCL / UPERC
11	Rehabilitation & Resettlement of displaced Families by Land Acquisition	Not Required
12	Land Availability	Surplus Land of Sugar Mill
13	Fuel Linkage	Ministry of Coal (GoI)
14	Financing	Financial Institutions
15	Transportation of Fuel	Ministry of Railways /other transporter

 **CE (P.P.A.)**  
**U. P. P. C. L.**  
**Shakti Bhawan Bata**

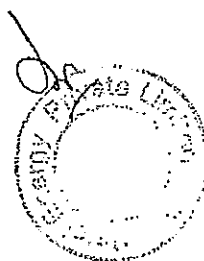


## SCHEDULE 3: CALCULATION OF 'X' DAYS

(Refer Article 11.5.7)

Percentage of Monthly Invoice which is the subject of default under Article 11.4 as notified in the Notice (Issued under Article 11.5.2) relating to the present occurrence	Number of times a Notice has been issued under Article 11.5.2 to the defaulting Procurer prior to present occurrence			
	1 <sup>st</sup> time	2 <sup>nd</sup> time	3 <sup>rd</sup> time	4 <sup>th</sup> time and onwards
Less than 25%	x = 20 days	x = 25 days	x = 40 days	x = 60 days
25% to 30%	x = 20 days	x = 30 days	x = 45 days	x = 65 days
More than 30% to 35%	x = 20 days	x = 35 days	x = 50 days	x = 70 days
More than 35% to 40%	x = 20 days	x = 40 days	x = 55 days	x = 75 days
More than 40%	x = 20 days	x = 45 days	x = 60 days	x = 90 days

*[Signature]*  
**G.R. (P.P.A.)**  
**U. P. P. C. L.**  
 Shakti Bhawan Extn  
 Lucknow.



**SCHEDULE 4 : FUNCTIONAL SPECIFICATION****MECHANICAL**

**Coal Handling Plant -** Capacity : 160 TPH ( 12 Hrs working )  
**Plant Requirement :** 72 TPH  
**Execution Type :** Turn Key ( excluding Civil work )  
**Siesmic Zone :** 4 for all the sites.  
**Coal -** F Grade  
**GCV -** 3865 kcal/kg

**Boiler -**

CFBC Boiler, 190 TPH steam, pressure 110(a) bar,  
Temperature - 540 Deg C at super heater outlet.

**Turbine -**

STG nominally rated 45 MW gross output each with four uncontrolled extraction for HP heaters (2 nos), deareator and a LP heater respectively as per manufacturers standard.

**Ash Handling Plant -**

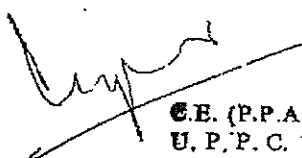
The coal consumption per Boiler is 35 tones/hr. and the ash content of coal is 44% and thus the total ash generated per boiler is 15.4 TPH. The ash handling system is pressure type pneumatic conveying for handling for both bed ash and fly ash from bed ash hopper.

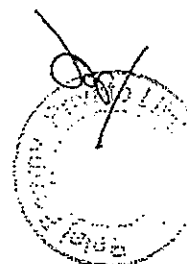
**DM Plant -**

RO + DM and softener plant, Capacity - 12 M3/hr

**Cooling Tower -**

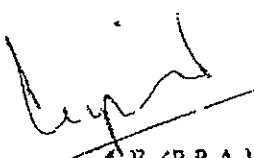
Induced draught counter flow cooling tower, Capacity -  
16000 M3/hr. No. of cells (6)

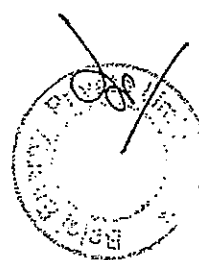
  
**C.E. (P.P.A.)**  
**U. P. P. C. L.**  
Shakti Bhawan Extn.  
Lucknow.



**B. ELECTRICAL**

S No.	Description	Unit	Particulars
<b>(a) Grid Conditions at Interconnection Point</b>			
(i) Voltage	Nominal	kV	[ 132 ]
	Variation	%	[ (+)5%]
(ii) Frequency	Nominal	Hz.	[ 50 ]
	Variation	%	[ (+)3% to ( )5%]
(iii) Combined Voltage and Frequency variation for Contracted Capacity		%	[10% ]
(iv) Power Factor	Nominal		[0.85] lag
	Variation		[0.85] to [ 0.95] lag lead
(v) Basic Impulse Level (Peak)		kV	[ 1425]
<b>(b) Fault Levels:</b>			
(i) 3 Phase	Maximum	kA	[ 40 ]
(ii) Clearance time	Maximum	ms	[ 1000 ]

  
 C.E. (P.P.A.)  
 U. P. P. C. L.  
 Shakti Bhawan Extn  
 Lucknow.



**SCHEDULE 5 : COMMISSIONING AND TESTING****1.1 Performance Test**

- (i) (a) The Performance Test shall be conducted under any and all ambient conditions (temperature, humidity etc.) and any and all Fuel qualities that may exist during the time of the Performance Test and no corrections in final gross output of the Unit will be allowed as a result of prevailing ambient conditions or Fuel quality.
- (b) The correction curves will only be used if the Grid System operation during the Performance Test exceeds electrical system limits.
- (c) The Performance Test shall be deemed to have demonstrated the Installed Capacity of the Unit under all designed conditions and therefore no adjustments shall be made on account of fuel quality or ambient conditions.
- (d) The Seller shall perform in respect of each Unit a Performance Test, which such Unit shall be deemed to have passed if it operates continuously for seventy two consecutive hours at or above ninety five (95) percent of its Installed Capacity as existing on the Effective Date and within the electrical system limits and the Functional Specifications.
- (ii) For the purposes of any Performance Test pursuant to this sub-article 1.1, the electrical system limits to be achieved shall be as follows:

(a) **Voltage**

The Unit must operate within the voltage levels described in the Functional Specification for the duration of the Performance Test. If, during the Performance Test, voltage tests cannot be performed due to Grid System, data supplied from tests of the generator step-up transformers and generators supplied by the manufacturers shall be used to establish the ability of the Unit to operate within the specified voltage limits.

(b) **Grid System Frequency**

The Unit shall operate within the Grid System frequency levels described in the Functional Specification for the duration of the Performance Test.

(c) **Power Factor**

The Unit shall operate within the power factor range described in the Functional Specification for the duration of the Performance Test. If, during the Performance Test, power factor tests cannot be performed due to the Grid System, data supplied from tests of the

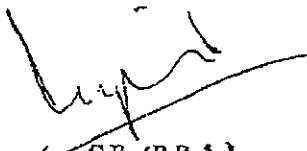
generators and the generator step-up transformers supplied by the manufacturers shall be used to establish the ability of the Unit to operate within the specified power factor range.

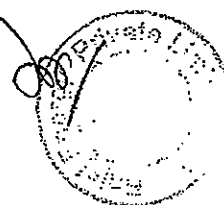
(d) **Fuel quality and cooling water temperature**

The Unit must operate to its Installed Capacity with Fuel quality and water temperature available at the time of Testing and no adjustment shall be allowed for any variation in these parameters.

- iii As a part of the Performance Test, the Seller shall demonstrate that the Unit meets the Functional Specifications for Ramping rate as mentioned in Schedule 4. For this purpose, representative samples of ramp rates shall be taken, by ramping up or down the gross turbine load while maintaining the required temperatures and temperature differences associated with each ramp rate within the turbine while maintaining all other operational parameters within equipment limits.
- iv Further, as a part of the Performance Test, the Unit shall be tested for compliance with parameters of Supercritical Technology

- 1.2 Testing and Measurement procedures applied during Performance Test shall be in accordance with codes, practices or procedures as generally/ normally applied for the Performance Tests.
- 1.3 The Seller shall comply with the prevalent Laws, rules and regulations as applicable to the provisions contained in this Schedule from time to time.

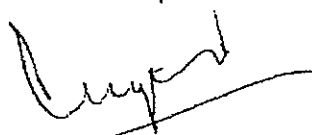
  
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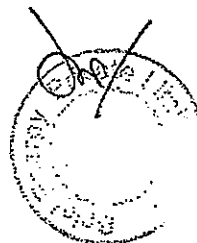
**SCHEDULE 6 : AVAILABILITY FACTORS**

The following matters shall be determined as per the provisions of the Grid Code and ABF:

- a. Availability declaration and calculation of Availability or Availability Factor;
- b. Not used;
- c. Procedure for revision of Availability;
- d. Consequences of failure to demonstrate capacity or misdeclarations of capacity; and
- e. Other matters which may be related to Availability or Availability Factor.



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## SCHEDULE 7 : TARIFF

## 7.1 General

7.1.1 Procurers shall pay to the Seller the Tariff and Incentive Charge for each Tariff Period as set out in this Agreement. Tariff will be determined on a two-part basis comprising Fixed Charge (Capacity Charge) and Variable Charges (Energy Charges) and shall be computed for each Tariff Period. The Tariff (Fixed Charge, Variable Charges) and Incentive shall be determined by Appropriate Commission.

7.1.2 The Seller shall make an appropriate application to Appropriate Commission for determination of provisional tariff and/or final tariff or revision thereof from time to time, in accordance with the UPERC Regulations.

## 7.2 Not used

## 7.3 Capacity Charge Payment

7.3.1 The Fixed Charge or Capacity Charge shall mean with respect to any Tariff Period during the Term of this Agreement the aggregate of the following for such Tariff Period :

Interest on loan capital;

Depreciation, including Advance Against Depreciation;

Return on Equity;

Operation and Maintenance expenses including insurance;

Interest on working capital; and

Contribution towards R&M or any compensation allowance, whichever permitted.



### 7.3.2 Debt-Equity Ratio

For determination of Tariff, the debt-equity ratio as on the date of COD shall be 70:30. In case equity employed is more than 30%, the amount of equity for determination of Tariff shall be limited to 30% and the balance amount shall be considered as the normative loan. However, where actual equity employed is less than 30%, the actual debt and equity shall be considered for determination of tariff. The debt and equity amount so arrived at shall be used for calculating interest on loan, return on equity, Advance Against Depreciation and Foreign Exchange Rate Variation.

### 7.3.3 Interest on Debt/Loan Capital

Interest on Debt/loan capital shall be computed on all outstanding loans in accordance with UPERC Regulations.

### 7.3.4 Depreciation

7.3.4.1 For the purpose of tariff, Depreciation shall be computed in the following manner, namely:

- i) The value base for the purpose of depreciation shall be the historical cost of the asset.
- ii) Depreciation shall be calculated annually, based on straight line method over the useful life of the asset and at the rates prescribed in UPERC Regulations.

The residual life of the asset shall be considered as 10% and depreciation shall be allowed the upto maximum of 90% of the historical capital cost of the asset. Land is not a depreciable asset (except leasehold land if any) and its cost shall be excluded from the capital cost while computing 90% of the historical cost of the asset.

- iii) On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.
- iv) Depreciation shall be chargeable from the first Year of operation. In case of operation of the asset for part of the Year, depreciation shall be charged on pro rata basis

#### 7.3.5 Advance against Depreciation (AAD)

In addition to allowable Depreciation, the Seller shall be entitled to Advance against Depreciation, computed in the manner given hereunder:

**AAD = Debt Repayment amount subject to a ceiling of 1/10<sup>th</sup> of Debt minus Depreciation.**

Provided that Advance against Depreciation shall be permitted only if the cumulative Debt Repayment upto a particular Year exceeds the cumulative Depreciation upto that Year;

Provided further that Advance against Depreciation in a Year shall be restricted to the extent of difference between cumulative Debt Repayment and cumulative Depreciation upto that Year.

#### 7.3.6 Return on Equity

Return on equity shall be computed on the equity base determined in accordance with UPERC Regulations @ 15.50% per annum. Provided that in case the Unit(s) of the Seller is Commissioned within the timelines as specified in UPERC Regulations, the Seller shall also be entitled to an additional return of 0.5%.

Provided that equity invested in foreign currency shall be allowed a return up to the prescribed limit in the same currency and the

payment on this account shall be made in Indian Rupees based on the exchange rate prevailing on the Due Date

#### Explanation

The premium raised by the Seller while issuing share capital and investment of internal resources created out of free reserve of the Seller, if any, for the funding of the Power Station, shall also be reckoned as paid up capital for the purpose of computing Return on Equity, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the Seller and forms part of the approved financial package

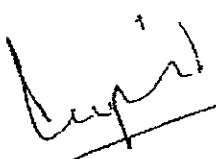
#### 7.3.7 Operation and Maintenance expenses (O & M Expenses)

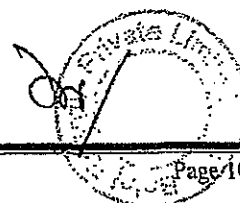
- (a) O&M expenses for each Tariff Period shall be computed based on the UPERC Regulations as applicable in the relevant Tariff Period
- (b) The expenses on regulatory fee, payment to pollution control board, fringe benefit tax, impact of pay revision, cost of water and water cess shall be paid additionally at actuals.
- (c) Compensation Allowance shall be paid as per provisions of UPERC Regulations

#### 7.3.8 Working Capital

##### 7.3.8.1 Working Capital shall be the aggregate of the following:

- (i) Cost of coal for 1½ months for pit-head generating stations and 2 months for non-pit-head generating stations, corresponding to the Target Availability;
- (ii) Cost of Secondary Fuel oil for two months corresponding to the Target Availability;
- (iii) Operation and Maintenance expenses for one Month;

  
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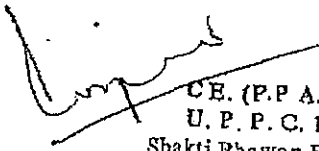
- (iv) Maintenance spares @ 20% of Operation and Maintenance expenses; and
- (v) Receivables equivalent to two months or actual, whichever is lower, comprising of Fixed Charge and Variable Charges calculated on the Target Availability.

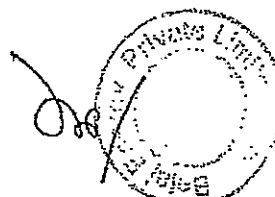
## 7.3.8.2

The rate of interest on Working Capital shall be on normative basis and shall be equal to the short term Prime Lending Rate of State Bank of India (notwithstanding the rate of interest actually paid by the Seller) as on 1<sup>st</sup> April of the Year in which the COD of Unit is occurred. Interest on working capital shall be payable on normative basis notwithstanding that the Seller has not taken working capital loan from any outside agency or such other rate as may be determined/approved by UPERC from time to time."

## 7.3.9 Recovery of Fixed Charge (Capacity Charge)

- (a) The recovery of full Fixed Charge (Capacity Charge) will be allowed at Target Availability as per UPERC Regulations. Recovery of Fixed Charge below the level of Target Availability shall be on pro rata basis.
- (b) The Fixed Charge shall be payable every month as per prevalent UPERC Regulations.
- (c) Each Procurer shall pay Fixed Charge in proportion to its percentage share in Installed Capacity of the Power Station.
- (d) While calculating Availability the extent of backing down as ordered by SLDC/RLDC shall be deemed as Availability achieved.

  
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## 7.3.10 Taxes, duties, levies and impositions etc.

Statutory taxes, levies, duties, royalty, cess or any other kind of imposition(s) imposed/levied/charged by the Government (Central/State) and/or any other local authorities/bodies on generation of electricity including auxiliary consumption or any other type of consumption including water, environment protection, sale or on supply of power/electricity and/or in respect of any of its installations associated with the Power Station payable by the Seller to the authorities concerned shall be governed by the Regulation and orders of UPERC applicable from time to time.

## 7.3.11 Tax on Income

Tax on the income streams of the Seller from its core business shall be computed as an expense and shall be permitted to be recovered from Procurers in proportion to its percentage share in Installed Capacity of the Power Station in accordance with UPERC Regulations.

## 7.3.12 Extra Rupee Liability

Extra rupee liability towards interest payment and loan repayment corresponding to normative foreign debt or actual foreign debt, as the case may be in the relevant Year shall be permissible provided it directly arises out of Foreign Exchange rate variation and is not attributable to the Seller or its suppliers or contractors. The Seller shall be entitled to recover Foreign Exchange Rate Variation on Year to Year basis as income or expense in accordance with UPERC Regulations.

## 7.4 Energy Charges

7.4.1 Energy Charges (Variable Charges) of Tariff shall cover the fuel cost; both the cost of Primary Fuel (i.e. landed cost of coal) and the cost of Secondary Fuel (landed cost of fuel oil etc.)

## 7.4.2 Computation of Variable /Energy Charges

Energy Charges (Variable Charges) shall cover fuel costs and shall be worked out on the basis of ex-bus energy scheduled to be sent out from the Units corresponding to Scheduled Generation as per the following formula:

Energy Charges (Rs) = Rate of Energy Charges in Rs/kWh  
X Scheduled Energy (ex-bus) for the Month in kWh  
corresponding to Scheduled Generation

Where,

Rate of Energy Charges (REC) shall be the sum of the cost of normative quantities of primary and secondary fuel for delivering ex-bus one kWh of electricity in Rs/kWh and shall be computed as under:

$$REC = \frac{100\{P_p \times (Q_p)_n + P_s \times (Q_s)_n\}}{(100 - (AUX)_n)} \text{ (Rs/kWh)}$$

Where,

$P_p$  = Price of primary fuel namely coal in Rs/Kg.

$(Q_p)_n$  = Quantity of primary fuel required for generation of one kWh of electricity at generator terminals in Kg, and shall be computed on the basis of normative Gross Station Heat Rate (less heat contributed by secondary fuel oil) and gross calorific value of coal as fired.

$P_s$  = Price of Secondary Fuel oil in Rs./ml,

$(Q_s)_n =$  Normative Quantity of Secondary Fuel oil in ml/kWh, and

$AUX_n =$  Normative Auxiliary Consumption as % of gross generation.

#### 7.4.3 Adjustment of Rate of Energy Charges (REC) on account of variation in price or heat value of fuels

Initially, Gross Calorific Value of coal shall be taken as per actual of the preceding three months. Any variation shall be adjusted on month to month basis on the basis of Gross Calorific Value of coal received and burnt and landed cost incurred by the Seller for procurement of coal. No separate petition need to be filed with the Appropriate Commission for Fuel price adjustment. In case of any dispute, an appropriate application in accordance with UP Electricity Regulatory Commission (Conduct of Business Regulations), 1999, as amended from time to time or any statutory re-enactment thereof, shall be made before UPERC.

#### 7.4.4 Landed Cost of Coal

The landed cost of coal shall include price of coal corresponding to the grade/quality of coal inclusive of royalty, taxes, cess and duties as applicable, processing, handling and transportation cost by rail/road or any other means, and, for the purpose of computation of energy charges, shall be arrived at after considering normative transit and handling losses as percentage of the quantity of coal dispatched by the Fuel Supplier during the month as per UPERC Regulations. .

#### 7.5 Incentive Charge

7.5.1 Incentive shall be payable at a flat rate of 25 paise per KWH for ex-bus Scheduled Energy corresponding to Scheduled Generation in excess of ex-bus energy corresponding to Target PLF. This Incentive shall be paid on annual basis and shall be paid in the

Monthly Tariff Payment for the first month of the next Contract Year

7.5.2 In case of commissioning of Power Station ahead of schedule, as setout in the approval of Appropriate Commission, the Seller shall be eligible for incentive of an amount equivalent to reduction of interest during construction. However actual interest during construction shall be considered for calculation of final and completed project cost for tariff determination. The incentive shall be recovered through tariff in twelve equal monthly installments during first year of operation of the Unit. In case of delay in commissioning, as setout by the Appropriate Commission, interest during construction for the period of delay shall not be allowed to be capitalized for determination of tariff, unless it is shown that the delay is on account of force majeure conditions

7.5.3 The obligation to pay incentive Charge will be supported by Letter of Credit.

7.6 Unscheduled Interchange (UI) Charges

Variation between Scheduled Energy and actual energy at the Delivery Point shall be accounted for through Unscheduled Interchange (UI) Charges as detailed in the Grid Code and ABT.

7.7 Transmission/Wheeling Charges and Scheduling Charges

The payment of transmission/wheeling charges shall be settled between the CTU/STU and the respective Procurer. The payment of scheduling charges to the respective nodal agency (RI,DC or SLDC) shall be the responsibility of Procurers.

7.8 Penalty and rights relating to Minimum Guaranteed Quantity of Fuel

In case Seller has to pay penalty to the Fuel supplier for not purchasing the minimum guaranteed quantity of Fuel mentioned in the Fuel Supply Agreement and if during that Contract Year Availability of the Commissioned Unit is greater than the Minimum Offtake Guarantee but



all Procurers taken together have not Scheduled Energy corresponding to such Minimum Off-take Guarantee during that Contract Year, then Seller will raise an invoice for the lower of the following amount, on Procurers, who have individually not achieved Minimum Off-take Guarantee during that Contract Year, in proportion to their difference between Scheduled Energy assuming offtake corresponding to Minimum Offtake Guarantee and Scheduled Energy (as applicable to such Procurer/s) for the following amount::

- (a) Penalty paid to the Fuel Supplier under the Fuel Supply Agreements in that Contract Year, along with documentary proof for payment of such penalty, or
- (b) An amount corresponding to twenty percent (20%) of cumulative Monthly Capacity Charge Payment (in Rs.) for all Procurers made for all the months in that Contract Year multiplied by  $(1 - x/y)$  where:

Where:

X is the Scheduled Energy during the Contract Year for all Procurers (in kwh); and

Y is the Scheduled Energy corresponding to Minimum Offtake Guarantee for all Procurers during the Contract Year (in kwh).

Provided, within ten (10) days of the end of each Month after the COD of the Unit, the Seller shall provide a statement to all Procurers, providing a comparison of the cumulative dispatch for all previous Months during the Contract Year with the Minimum Offtake Guarantee of Procurers. Further, such statement shall also list out the deficit, if any, in the Fuel offtake under the Fuel supply agreement, due to cumulative dispatch being less than the Minimum Offtake Guarantee. In case of a Fuel offtake deficit, within a period of fifteen (15) days from the date of receipt of the above statement from the Seller and after giving a prior written notice of at least seven (7) days to the Seller and all the other Procurers, the concerned Procurer(s) shall have the right to avail themselves such deficit at the same price at which such deficit fuel was available to the Seller under the Fuel supply agreement and to sell such deficit to third parties. Such right of Procurers with regard to deficit fuel shall be in proportion to their respective shortfall in Minimum Offtake Guarantee

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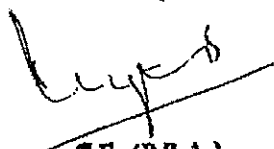
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### 7.9 Records

For the purposes of this Agreement, the assets, liabilities, Equity, revenue and expenses of the Seller shall be recorded and maintained in the accounts of the Seller in Rupees. Either Party shall have the right, upon reasonable prior written notice to the other Party, to examine and/ or make copies of the records and data of the other Party relating to this Agreement

### 7.10 Norms of Operation

For the purpose of tariff determination, the Norms of Operation shall be decided by UPERC separately.

  
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**SCHEDULE 8 : DETAILS OF INTERCONNECTION POINT AND FACILITIES**

The Interconnection Point or Delivery Point shall be point from where the power from the Power Station Switch Yard Bus is being injected into the Transmission Network.

The Seller shall be required to provide the following facilities in the Power Station Switch Yard

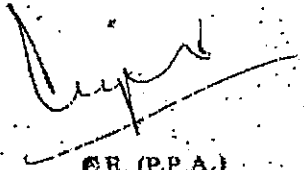
Note: These details shall be provided at a later stage.

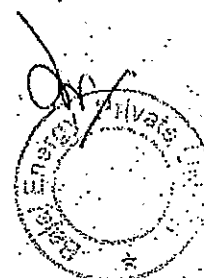
  
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**SCHEDULE 9 : DETAILS OF POWER EVACUATION  
ARRANGEMENTS TO BE PROVIDED BY UPTCL**

S.NO.	Particulars
1.	Power shall be Evacuated by the procurers from the 132 KV Switch Yard of the B.E.P.L. Power Generating Station, Utraula to 132 KV Utraula Sub station through 132 KV Lines.

  
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U.P. P. C. L.  
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**SCHEDULE 10 : REPRESENTATION AND WARRANTIES****1. Representations and Warranties by the Procurers**

Each Procurer through UPPCL hereby represents and warrants to and agrees with the Seller as follows and acknowledges and confirms that the Seller is relying on such representations and warranties in connection with the transactions described in this Agreement:

1.1 The said Procurer has all requisite powers authorising and has been duly authorised to execute and consummate this Agreement ;

1.1.a That UPPCL, has been duly authorized on behalf of all the Procurers to act as their co-ordinating agency and represent, sign and execute this Agreement on their behalf and to do all other relevant things as may be required;

1.2 This Agreement is enforceable against the said Procurer in accordance with its terms;

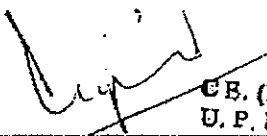
1.3 The consummation of the transactions contemplated by this Agreement on the part of the said Procurer will not violate any provision of nor constitute a default under, nor give rise to a power to cancel any charter, mortgage, deed of trust or lien, lease, agreement, license, permit, evidence of indebtedness, restriction, or other contract to which the said Procurer is a party or to which said Procurer is bound, which violation, default or power has not been waived;

1.4 The said Procurer is not insolvent and no insolvency proceedings have been instituted, nor threatened or pending by or against the said Procurer;

1.5 There are no actions, suits, claims, proceedings or investigations pending or, to the best of the said Procurer's knowledge, threatened in writing against the said Procurer at law, in equity, or otherwise, and whether civil or criminal in nature, before or by, any court, commission, arbitrator or governmental agency or authority, and there are no outstanding judgements, decrees or orders of any such courts, commission, arbitrator or governmental agencies or authorities, which materially adversely affect its ability to comply with its obligations under this Agreement.

1.6 The quantum of Allocated Contracted Capacity of said Procurer does not exceed the projected additional demand forecast for the next three (3) years.

Each of the Procurers makes all the representations and warranties above to be valid as on the date of this Agreement.

  
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## 2. Representation and Warranties of the Seller

The Seller hereby represents and warrants to and agrees with the Procurers as follows and acknowledges and confirms that the Procurers are relying on such representations and warranties in connection with the transactions described in this Agreement:

2.1 The Seller has all requisite power authorising and has been duly authorised to execute and consummate this Agreement;

2.2 This Agreement is enforceable against the Seller in accordance with its terms;

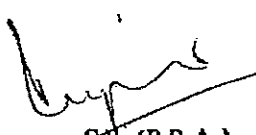
2.3 The consummation of the transactions contemplated by this Agreement on the part of the Seller will not violate any provision of nor constitute a default under, nor give rise to a power to cancel any charter, mortgage, deed of trust or lien, lease, agreement, license, permit, evidence of indebtedness, restriction, or other contract to which the Seller is a party or to which the Seller is bound which violation, default or power has not been waived;

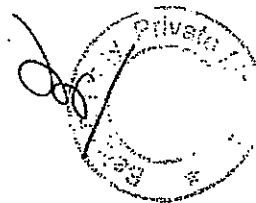
2.4 The Seller is not insolvent and no insolvency proceedings have been instituted, or not threatened or pending by or against the Seller;

2.5 There are no actions, suits, claims, proceedings or investigations pending or, to the best of Seller's knowledge, threatened in writing against the Seller at law, in equity, or otherwise, and whether civil or criminal in nature, before or by, any court, commission, arbitrator or governmental agency or authority, and there are no outstanding judgements, decrees or orders of any such courts, commission, arbitrator or governmental agencies or authorities, which materially adversely affect its ability to execute the Project or to comply with its obligations under this Agreement.

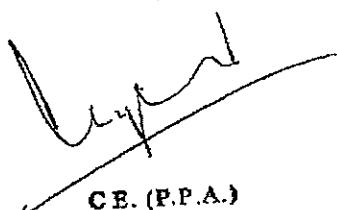
The Seller makes all the representations and warranties above to be valid as on the date of this Agreement, except as stated in sub-article 2.6 above.

The Seller makes all the representations and warranties above to be valid as on the date of this Agreement.

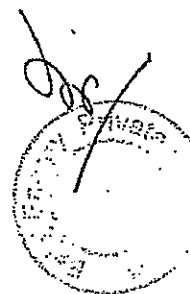
  
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SCHEDULE 11 : NOT USED



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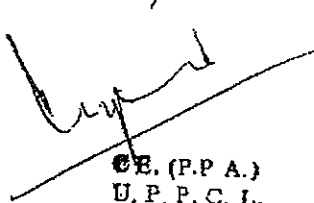
**SCHEDULE 12 : LIST OF ARTICLES**

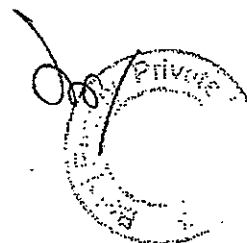
[applicable in case of procurement by more than one Procurers]

List of Articles under which rights and obligations of the Procurers (including all matters incidental thereto and related follow-up), which are required to be undertaken by the Procurers jointly, will be performed by Lead Procurer for and on behalf of all the Procurers

- Article 1.1
- Article 2.2
- Article 3.1.2
- Article 4.3.2
- Article 4.7.2
- Article 5.3
- Article 5.5
- Article 6.2.3
- Article 8.1.1
- Article 8.1.2
- Article 8.1.3
- Article 8.1.4
- Article 8.1.5
- Article 8.1.6
- Article 8.2.2 (c)
- Article 13.3.2
- Article 14.1 (ii)
- Article 14.1 (ix)
- Article 14.1 (x)
- Article 14.1 (xi)
- Article 14.3.1.

and any other Articles of this Agreement not specifically mentioned herein, which provide for a joint action by all the Procurers.

  
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Shakti Bhawan Bxtn  
Lucknow.



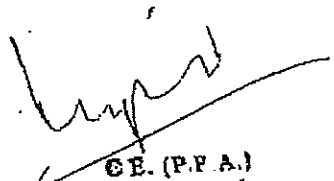


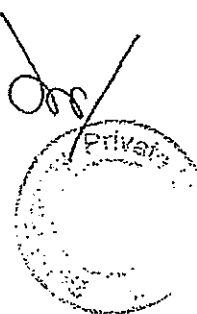
**SCHEDULE 13 : ALLOCATED CONTRACTED CAPACITY**

Shall be filled in by Procurers on or prior to the Effective Date.

Contracted Capacity allocated to each of the Procurers shall be as under

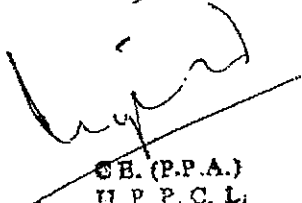
Name of the Procurer	Allocated Contracted Capacity (%)
Paschimanchal Vidyut Vitran Nigam Ltd (Procurer 1)	30%
Poorvanchal Vidyut Vitran Nigam Ltd. (Procurer 2)	30%
Madhyanchal Vidyut Vitran Nigam Ltd (Procurer 3)	20%
Dakshinanchal Vidyut Vitran Nigam Ltd (Procurer 4)	20%

  
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## SCHEDULE 14 : CAPITAL STRUCTURE SCHEDULE

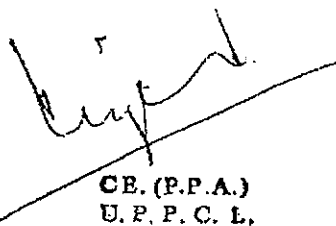
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**SCHEDULE 15 : FORMAT OF PERFORMANCE GUARANTEE**

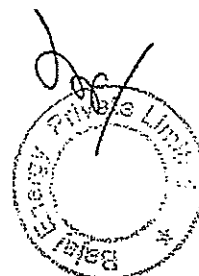
(Shall be provided by UPPCL at a later stage)

  
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Lucknow.



## SCHEDULE 16 : NOT USED

  
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U. P. P. C. L.  
Shakti Bhawan Bata  
Lucknow.



**SCHEDULE 17 : SUBSTITUTION RIGHTS OF THE LENDERS****1. Substitution of the Seller**

a) Subject to the terms of the PPA, upon occurrence of a Seller Event of Default under the PPA, the Lenders shall, have the right to seek substitution of the Seller by a Selectee for the residual period of the PPA, for the purposes of securing the payments of the Total Debt Amount from the Seller and performing the obligations of the Seller, in accordance with the provisions of this Schedule.

b) The Lenders may seek to exercise right of substitution by an amendment or novation of the PPA and other Project Documents executed between Procurers and the Seller in favour of the Selectee, the Procurers and the Seller shall cooperate with the Lenders to carry out such substitution.

**2. Procurers Notice of Default**

The relevant Procurer (i.e. the Procurer who serves the Preliminary Default Notice on the Seller as per this Agreement) shall, simultaneously also issue a copy of the same to the Lenders.

**3. Substitution Notice**

In the event of failure of the Seller to rectify the Event Of Default giving rise to Preliminary Default Notice, the lenders, upon receipt of a written advice from the procurers confirming such failure, , either on their own or through its representative ("the Lenders' Representative") shall be entitled to notify the Procurers and the Seller of the intention of the Lenders to substitute the Seller by the Selectee for the residual period of the PPA (the "Substitution Notice").

**4.- Omitted****5. Interim operation of Project**

a) On receipt of a Substitution Notice, no further action shall be taken by any Party to terminate the PPA, except under and in accordance with the terms of this Schedule 17 of this Agreement.

b) On issue of a Substitution Notice, the Lenders shall have the right to request the Procurers to enter upon and takeover the Project for the interim and till the substitution of the Selectee is complete and to otherwise take all such steps as are necessary for the continued operation and maintenance of the Project, including levy, collection and appropriation of payments thereunder, subject to, the servicing of monies owed in respect of the Total Debt Amount as per the Financing Agreements and the Seller shall completely cooperate in any such takeover of the Project by the Procurers. If the Procurers, at their sole and exclusive discretion agree to enter upon and takeover the Project, till substitution of the Selectee in accordance with this Agreement, such Procurers shall be compensated for rendering such services in accordance with clause 11.1.3 herein.

c) If the Procurers refuse to takeover the Project on request by the Lenders in accordance with clause 5(b) above, the Seller shall have the duty and obligation to

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Lucknow.



continue to operate the Project in accordance with the PPA till such time as the Selectee is finally substituted under clause 8.8 hereof.

d) The Lenders and the Procurers shall, simultaneously have the right to commence the process of substitution of the Seller by the Selectee in accordance with these terms and the Seller hereby irrevocably consents to the same.

6. Process of Substitution of Seller

The Lenders' Representative may, on delivery of a Substitution Notice notify the Procurers and the Seller on behalf of all the Lenders about the Lenders' decision to invite and negotiate, at the cost of the Lenders, offers from third parties to act as Selectee, either through private negotiations or public auction and / or a tender process, for the residual period of the PPA. Subject to and upon approval of the Lead Procurer referred to in clause 8.5, such Selectee shall be entitled to receive all the rights of the Seller and shall undertake all the obligations of the Seller under the PPA and other Project Documents executed between the Seller and the Procurers, in accordance with these terms of substitution.

The Lenders and the Seller shall ensure that, upon the Lead Procurer approving the Selectee, the Seller shall transfer absolutely and irrevocably, the ownership of the Project to such Selectee simultaneously with the amendment or novation of the PPA and other Project Documents executed between the Seller and the Procurers in favour of the Selectee as mentioned in clause 1 (b).

7. Modality for Substitution

7.1 Criteria for selection of the Selectee.

The Lenders and / or the Lenders' Representative shall in addition to any other criteria that they may deem fit and necessary, apply the following criteria in the selection of the Selectee:

- (a) If the Seller is proposed to be substituted during the Construction Period, the Selectee shall possess the technical and financial capability to perform and discharge all the residual duties, obligations and liabilities of the Seller under the PPA. If the Seller is proposed to be substituted during the Operation Period, this criteria shall not be applicable.
- (b) The Selectee shall have the capability and shall unconditionally consent to assume the liability for the payment and discharge of dues, if any, of the Seller to the Procurers under and in accordance with the PPA and also payment of the Total Debt Amount to the Lenders upon terms and conditions as agreed to between the Selectee and the Lenders;
- (c) The Selectee shall have not been in breach of any agreement between the Selectee and any Bank or any Lender or between the Selectee and any of the Procurers, involving sums greater than Rupees twenty (20) crores at any time in the last two (2) years as on the date of the substitution of the Seller.

- (d) Any other appropriate criteria, whereby continuity in the performance of the Selectee's obligations under the PPA is maintained and the security in favour of the Lenders under the Financing Agreements is preserved.

8. Modalities

The following modalities shall be applicable to any substitution of the Seller by the Selectee pursuant to this Agreement:

- 8.1 The Lenders' Representative shall on behalf of the Lenders propose to the Procurers (the "Proposal") pursuant to sub-clause 8.2 below, the name of the Selectee for acceptance, seeking:

- (a) Grant of all the rights and obligations under the PPA and the other Project Documents executed between the Procurers and the Seller, to the Selectee (as substitute for the Seller);
- (b) Amendment of the PPA and the other Project Documents executed between the Procurers and the Seller, to the effect that the aforementioned grant to the Selectee, shall be such that the rights and obligations assumed by the Selectee are on the same terms and conditions for the residual period of the PPA as existed in respect of the Seller under the original PPA and the other Project Documents executed between the Procurers and the Seller; and
- (c) The execution of new agreements as necessary, by the proposed Selectee for the residual period of the PPA on the same terms and conditions as are included in this Agreement.

- 8.2 The Proposal shall contain the particulars and information in respect of the Selectee the data and information as any of the Procurers may reasonably require. The Procurers may intimate any additional requirement within thirty (30) days of the date of receipt of the Proposal.

- 8.3 The Proposal shall be accompanied by an unconditional undertaking by the Selectee that it shall, upon approval by the Procurers of the Proposal:

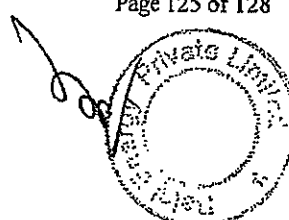
- (a) Observe, comply, perform and fulfil the terms, conditions and covenants of the PPA and all Project Documents executed between Seller and the Procurers or a new power purchase agreement or respective Project Document (in the case of the novation thereof), which according to the terms therein are required to be observed, complied with, performed and fulfilled by the Seller, as if such Selectee was the Seller originally named under the PPA; or the respective Project Document; and

- (b) Be liable for and shall assume, discharge and pay the Total Debt Amount or then outstanding dues to the Lenders under and in accordance with the Financing Agreements or in any other manner agreed to by the Lenders and the Procurers as if such Selectee was the Seller originally named under such Financing Agreements.
- 8.4 At any time prior to taking a decision in respect of the Proposal received under clause 8.1, the Procurers may require the Lender / Lenders' Representative to satisfy it as to the eligibility of the Selectee. The decision of the Procurers as to acceptance or rejection of the Selectee, shall be made reasonably and when made shall be final, conclusive and binding on the Parties.
- 8.5 All Procurers shall convey their approval or disapproval of such Proposal, through the Lead Procurer, to the Lender / Lender's Representative. Such decision shall be made by the Procurers at their reasonably exercised discretion within twenty one (21) days of:
- (a) The date of receipt of the Proposal by the Procurers; or
- (b) The date when the last of further and other information and clarifications in respect of any data, particulars or information included in the Proposal requested by any of the Procurers under clause 8.2 above is received; whichever is later.

Notwithstanding anything to the contrary mentioned in this Agreement, the approval of the Procurer(s) or Lead Procurer for the Selectee shall not be withheld in case the Selectee meets the criteria mentioned in Clause 7.1.

- 8.6 Upon approval of the Proposal and the Selectee by the Procurers, the Selectee mentioned in the Proposal shall become the Selectee hereunder.
- 8.7 Following the rejection of a Proposal, the Lenders and/or the Lenders' Representative shall have the right to submit a fresh Proposal, proposing another Selectee (if the rejection was on the grounds of an inappropriate third party proposed as Selectee) within sixty (60) days of receipt of communication regarding rejection of the Selectee previously proposed. The provisions of this clause shall apply mutatis mutandis to such fresh Proposal.
- 8.8 The substitution of the Seller by the Selectee shall be deemed to be complete upon the Selectee executing all necessary documents and writings with or in favour of the Seller, Procurers and the Lenders so as to give full effect to the terms and conditions of the substitution, subject to which the Selectee has been accepted by the Lenders and the Procurers and upon transfer of ownership and complete possession of the Project by the Procurers or the Seller, as the case may be, to the Selectee. The Procurers shall novate all the Project Documents, which they had

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entered in to with the Seller in order to make the substitution of the Seller by the Selectee effective. The quantum and manner of payment of the consideration payable by the Selectee to the Seller towards purchase of the Project and assumption of all the rights and obligations of the Seller under the PPA and the Project Documents as mentioned in this Agreement shall be entirely between the Seller, Selectee and the Lenders and the Procurers shall in no way be responsible to bear the same.

- 8.9 Upon the substitution becoming effective pursuant to sub-clause 8.8 above, all the rights of the Seller under the PPA shall cease to exist:  
Provided that, nothing contained in this sub-clause shall prejudice any pending / subsisting claims of the Seller against a Procurer or any claim of the Procurers against the erstwhile Seller or the Selectee.
- 8.10 The Selectee shall, subject to the terms and conditions of the substitution, have a period of ninety (90) days to rectify any breach and / or default of the Seller subsisting on the date of substitution and required to be rectified and shall incur the liability or consequence on account of any previous breach and / or default of the Seller.
- 8.11 The decision of the Lenders and the Procurers in the selection of the Selectee shall be final and binding on the Seller and shall be deemed to have been made with the concurrence of the Seller. The Seller expressly waives all rights to object or to challenge such selection and appointment of the Selectee on any ground whatsoever.
- 8.12 The Lenders shall be solely and exclusively responsible for obtaining any and all consents/approvals or cooperation, which may be required to be obtained from the Seller under this Agreement and the Procurers shall not be liable for the same.
- 8.13 All actions of the Lenders' Representative hereunder shall be deemed to be on behalf of the Lenders and shall be binding upon them. The Lenders' Representative shall be authorised to receive payment of compensation and any other payments, including the consideration for transfer, if any, in accordance with the Proposal and the Financing Agreements and shall be bound to give valid discharge on behalf of all the Lenders.

#### 9. Seller's Waiver

- 9.1 The Seller irrevocably agrees and consents (to the extent to which applicable law may require such consent) to any actions of the Lenders, the Lender's Representative and the Procurers or exercise of their rights under and in accordance with these terms.
- 9.2 The Seller irrevocably agrees and consents (to the extent to which applicable law may require such consents) that from the date specified in clause 8.9, it shall cease to have any rights under the PPA or the Financing Agreements other than those expressly stated therein.

9.3 The Seller warrants and covenants that any agreement entered into by the Seller, in relation to the Project, shall include a legally enforceable clause providing for automatic novation of such agreement in favour of the Selectee, at the option of the Lenders or the Procurers. The Seller further warrants and covenants that, in respect of any agreements which have already been executed in relation to the Project and which lack a legally enforceable clause providing for automatic novation of such agreement, the Seller shall procure an amendment in the concluded agreement to incorporate such clause.

10. Interim Protection Of Service And Preservation Of Security

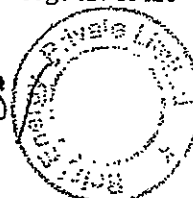
10.1 Appointment of a Receiver

10.1.1 In every case of the Lenders issuing a Substitution Notice and the Procurers refusing to takeover the Project and the Seller failing to operate the Project in accordance with Clause 5(c) above and the Procurers not electing to act as Receiver as per sub-clause 10.1.1A hereof, the Lenders may institute protective legal proceedings for appointment of a receiver (the "Receiver") to maintain, preserve and protect the assets held as security by the Lenders if such right is granted under the terms of the Financing Agreements.

10.1.1A Provided that in event of the Procurers refusing to take over the Project and the Seller failing to operate the Project in accordance with Clause 5 (c) above, and if the assets of the Project are, in the opinion of the Procurers, necessary and required for the operation and maintenance of the Project, the Procurers shall be entitled to elect to act as the Receiver for the purposes of this Clause and be entitled to maintain, preserve and protect the said assets by engaging an operator/service provider to act on their behalf and the Lenders and Seller hereby consent and agree to the same. Upon the Procurers so intimating the Seller and the Lender's representative their desire to act as Receiver, the Seller and the Lender's representative shall co-operate with the Procurers to facilitate the same.

10.1.2 Upon appointment of the Court appointed Receiver or the Procurers acting as Receiver, all the Receivables received by such Receiver shall be deposited by the Receiver in the bank account jointly designated by the Procurers and the Lenders. The Receiver shall be responsible for protecting the assets in receivership and shall render a true and proper account of the receivership to the lenders in accordance with the terms of its appointment.

10.1.3 When acting as a Receiver or operator in accordance with this clause 11 or clause 5(b), Procurers shall be entitled to be remunerated for such services as may be determined by Central Electricity Regulatory Commission. Furthermore, when acting as a Receiver, the Procurers shall not be liable to the Lenders, the Lenders' Representative, Seller or any third party for any default under the PPA, damage or



loss to the Power Station or for any other reason whatsoever, except for wilful default of the Procurers.

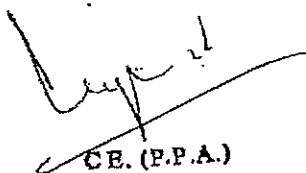
11. Substitution Consideration

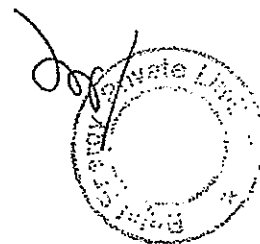
11.1 The Lenders and Procurers shall be entitled to appropriate any consideration received for the substitution of the Seller as hereinabove provided, from the Selectee towards the payment of Lenders' and the Procurer's respective dues, to the exclusion of the Seller.

11.2 The Seller shall be deemed to have nominated, constitutes and appoints the Lenders' Representative as its constituted attorney for doing all acts, deeds and things as may be required to be done for the substitution of the Seller by the Selectee pursuant to these terms.

12. Change in the Procurers or Lenders

The Parties hereto acknowledge that during the subsistence of the PPA, it is possible that any Procurer(s) may cease to be a party to this Agreement by reason of termination of PPA vis-à-vis such Procurer and any Lender may cease to remain as a Lender by reason of repayment of the debt or otherwise. Further it may possible that any Lender may be substituted or a new Lender may be added. In the event of any Procurer ceasing to be a party to the PPA or Financing Agreement respectively, the term and conditions as prescribed in this Schedule shall cease to automatically apply to such Procurer or Lender as the case may be. Further, upon any entity being added as a Lender and in the event such entity is given the right to substitute the Seller under the Financing Agreement and then the contents of this Schedule shall be applicable to the exercise of such right by the said new entity.

  
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Shakti Bhawan Bxin  
Lucknow.



**Before the Appellate Tribunal for Electricity  
(Appellate Jurisdiction)**

**Appeal No. 89 of 2006**

**Dated: 22nd January, 2007**

**Present: Hon'ble Mr. Justice Anil Dev Singh, Chairperson  
Hon'ble Mr. A.A. Khan, Technical Member**

**N.T.P.C. Limited**

**...Appellant**

**Versus**

- 1. Madhya Pradesh State Electricity Board,  
Shakti Bhavan, Vidyut Nagar,  
Jabalpur - 482 008**
- 2. Maharashtra State Electricity Distribution  
Company Limited,  
'Prakashgad', Bandra (East)  
Mumbai - 400 051**
- 3. Gujarat Urja Vikas Nigam Limited  
Vidyut Bhavan, Race Course,  
Vadodara - 390 007**
- 4. Chhattisgarh State Electricity Board,  
Dhagania, Raipur - 492 103**
- 5. Electricity Department,  
Govt. of Goa, Vidyut Bhavan,  
3<sup>rd</sup> Floor Panaji, GOA**
- 6. Electricity Department  
Administration of Daman & Diu (DD)  
Daman - 396 210**
- 7. Electricity Department  
Administration of Dadra and Nagar Haveli (DNH)  
Silvassa, Via VAPI**
- 8. Central Electricity Regulatory Commission  
Core 3, Sixth Floor Scope Complex,  
7, Institutional Area, Lodhi Road  
New Delhi - 110003**

**...Respondents**

**Counsel for the Appellant: Mr. M.G. Ramachandran, Ms.  
Taruna Singh Baghel & Ms.  
Saumya Sharma**

**Counsel for the Respondents: Mr. Pradeep Misra for MPSEB  
Ms. Yogmaya Agnihotri for CSEB  
Mr. Kamlesh P. Jangid, COA CON),  
GUVNL**

**JUDGMENT**

**Per Hon'ble Mr. Justice Anil Dev Singh, Chairperson**

1. This appeal is directed against the order of the Central Electricity Regulatory Commission (for short 'CERC') dated Feb. 16, 2006 in Petition No. 46/05, whereby the CERC has rejected the plea of the appellant for relaxation of the combined Target availability level fixed by the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2001, for recovery of fixed capacity charges for Kawas Gas Power Stations (for short 'Kawas GPS') and Gandhar Gas Power Stations (for short 'Gandhar GPS'). The facts leading to the appeal are as follows:-
2. In the year 1992-93, Kawas GPS was set up by the National Thermal Power Corporation Ltd. (for short 'NTPC') for generation of electricity with gas linkage of 2.25 MMSCM per day. During the year, 1994-95,

Gandhar GPS was also commissioned by the NTPC with gas linkage of 1.5 MMSCM per day to be increased to 2.25 MMSCM. On April 30, 1994, Notification was issued by the Govt. of India under Section 43A of the Electricity (Supply) Act, 1948, whereby tariff for Kawas GPS was determined for the period upto March 31, 1998. The Target Availability PLF was fixed at 62.78% for the full fixed cost recovery.

3. By a subsequent Notification dated April 28, 1997, the Govt. of India under Section 43A of the Electricity (Supply) Act, 1948 determined the tariff for Gandhar GPS for the period upto March 31, 2000. The target availability PLF for the full fixed cost recovery was also fixed at 62.78%.
4. It appears that due to non-availability of sufficient quantity of gas, the Gas Power Stations were not able to achieve the optimum level of generation. In the 95<sup>th</sup> Meeting of the Western Regional Electricity Board, held on March 18, 1994, the issue relating to shortage of

availability of gas for Kawas and Gandhar Gas Power Stations was discussed. It was suggested during the discussion that to overcome reduced availability of gas, half of the stations should be run on Naptha and the other half on gas and the incremental costs should be distributed on the total generation of the stations.

5. The Board agreed to examine the matter and requested the appellant to send a detailed proposal in this regard.
6. In the 96<sup>th</sup> meeting of the Western Regional Electricity Board, held on August 13, 1994, the matter again cropped up for discussion. It was decided to allow the use of Naptha for generation of power in the two gas stations. The respondent nos. 1 to 7, who were members of the Western Regional Electricity Board, agreed to bear the extra cost of installing alternative liquid fuel firing facility in Kawas GPS. It is not in dispute that in so far as the Gandhar GPS is concerned, it is not technically feasible to install liquid fuel firing facility.

7. In consonance with the aforesaid decision, during June-July, 1997 liquid fuel (Naptha) firing facility was installed in Kawas GPS. In view of the commissioning of the liquid fuel firing facility at Kawas, it was considered appropriate to divert gas from Kawas GPS to Gandhar GPS and to operate some or all the gas turbines at Kawas GPS using liquid fuel in order to maximize the generation of power from these two stations.
8. In the 107<sup>th</sup> Western Regional Electricity Board's meeting held on April 18, 1998, the beneficiaries consented to the proposal of the NTPC to link Kawas and Gandhar with HBJ pipeline.
9. After the Electricity Regulatory Commissions Act, 1998 came into force the Central Commission on March 26, 2001 notified the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2001. The target availability norms applicable for the tariff period from April 1, 2001 to



March 31, 2004 for the various NTPC generating stations was fixed at 80%.

10. On Feb. 7, 2002, the NTPC filed a petition, being petition no. 31/2001, before the CERC, for determination of tariff for Kawas GPS for the period April 1, 2001 to March 31, 2004. The NTPC in the petition prayed for relaxation of the target availability norms due to the reduced availability of gas and Naptha. Again on Feb.13, 2002, the NTPC filed a petition, being petition no. 33/2001 before CERC for seeking determination of tariff for Gandhar GPS for the period April 1, 2001 to March 31, 2004.
11. On July. 1, 2002, the NTPC filed yet another petition, being petition no. 86 of 2002, for relaxation of target availability norm for both the stations. In petition no. 86 of 2002, the CERC by its order dated November 1, 2002 directed that two generating stations, for the purpose of recovery of capacity charges and the fuel capacity charges shall be recovered at 65% PLF provided machine

availability is 80%. This view of the CERC was based on non-availability of adequate quantity of gas and the fact that it was not possible for both Kawas GPS and Gandhar GPS to achieve availability level of 80% simultaneously. The CERC observed that the position will be reviewed while considering the revision of the norms after March 31, 2004.

12. On April 1, 2005, the CERC determined the tariff for Gandhar GPS for the period April 1, 2001 to March 31, 2004. While determining the tariff, the Commission referred to its order dated November 1, 2002 in Petition No. 86 of 2002, for relaxing the target availability of the plant. It allowed machine availability of 80% coupled with PLF of 65% for recovery of full fixed charges and computation of fuel element in the working capital for the period from April 1, 2001 to March 31, 2004. Thereafter, on April 7, 2005, the CERC in Petition No. 31 of 2001 determined the tariff for Kawas GPS for the period April 1, 2001 to March 31, 2004. In view of the order dated

November 1, 2002 in Petition No. 86/2002 and on the parity of reasoning, CERC considered machine availability of 80% coupled with PLF of 65% for recovery of full fixed charges and computation of fuel element in the working capital for the same period. Thus, it is clear that Orders dated April 1, 2005 and April 7, 2005 in Petition Nos. 33 and 31 of 2001 respectively were passed in relaxation of the target availability PLF of 80%, which was fixed by Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2001 under Electricity Regulatory Commission Act, 1998.

13. On March 26, 2004, CERC framed and notified the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 under the Electricity Act, 2003. These norms were made applicable for tariff period April 1, 2004 to March 31, 2009. It needs to be noted that the Target availability norm laid down in these Regulations for NTPC's generating stations was kept at 80%.

14. On May 5, 2005, NTPC filed a Petition before the CERC being Petition NO. 46 of 2005 for relaxation of the Target availability norms for the Kawas and Gandhar GPS upto 65% PLF for recovery of full fixed cost and for treating both the Stations as one integrated unit.

15. While Petition No. 46 of 2005 filed by the NTPC was pending, Gujarat Urja Vikas Nigam Ltd. (hereinafter referred as 'GUVNL') on August 17, 2005 filed a petition, being Petition No. 95 of 2005 before the CERC seeking the following directions amongst others:-

"1.The Hon'ble Commission may direct to NTPC to immediately give consent for laying the gas pipeline of GSPL in to the power plant premises of Kawas and Gandhar power stations.

2. The Hon'ble Commission may direct NTPC to make sincere efforts for procurement of adequate gas at economical rates through firm and long term arrangements, for Kawas and Gandhar power stations, so that maximum generation can be achieved."

16. In the Petition no. 95 of 2005, it was pointed out that GUVNL had requested the NTPC to arrange gas supply

from various agencies at competitive prices, so as to achieve maximum utilization of Kawas and Gandhar power stations. It was also claimed in the Petition that the NTPC was informed that many of the gas based power stations of the **GVVNL**, **that were not** being fully utilized earlier due to non-availability of gas and high cost of liquid fuel, had entered into long term Power Purchase Agreements with the Independent Power Producers (IPPs), as a result whereof they have been able to achieve maximum generation. The Commission, however, in Petition No. 95 of 2005 took the view that NTPC had made efforts for procurement of the gas supply and it had been pursuing the matter diligently and sincerely. On the same day, the CERC also passed the impugned order in Petition No. 46 of 2005, filed by the appellant, NTPC. The plea of the appellant for relaxation of the Target Availability of 80%, fixed by the Regulations of 2004, on the ground of non-availability of adequate quantity of gas was rejected by the Commission. While

rejecting the contention of the appellant, the Commission observed as follows:-

*"4. The terms and conditions for determination of tariff for the period 1.4.2004 to 31.3.2009 have been specified by the Commission in terms of the Central Electricity Regulatory Commissions (Terms and Conditions of Tariff) Regulations, 2004 (the regulations). As specified in sub-clause (a) of clause (i) of regulation 16 of the regulations in respect of all thermal power generating stations, except those specifically mentioned, under sub-clauses (b) and (c) thereof, target availability for recovery of full capacity (fixed) charges is 80%. These, two generating stations are not exempted in terms of sub-clauses (b) and (c) and thus, the target availability for recovery of full capacity (fixed) charges of 80% applies to Kawas GPS and Gandhar GPS individually. The petitioner seeks relaxation under proviso to Clause (2) of Regulation 2 and also Regulation 13.*

5. ....

6. We have considered the rival submissions. Proviso to clause (2) of regulation 2 cannot be

*invoked in the present case as the said provision applies only where the tariff for the period ending 31.3.2004 was not determined under the terms and conditions for determination of tariff applicable for the period 1.4.2001 to 31.3.2004 in respect of Kawas GPS and Gandhar GPS tariff was determined based on the terms and conditions applicable for that period.*

*7. The relaxation, in the Normative Target Availability Level granted by order dated 1.11.2000 was "one time" act. This, inter alia, was for the reason that target availability level for recovery of capacity (fixed) charges was increased from 62.78% to 80% with effect from 1.4.2001. While granting relaxation, the Commission had noted that the special dispensation being allowed was to be reviewed while considering revision of norms for the period beyond 31.3.2004. The terms and conditions for determination of tariff for the period 1.4.2004 onwards have already been notified. The target availability of 80% has been retained in respect of the generating stations belonging to the petitioner except for Tanda TPS. When specifying the fresh norms for tariff determination applicable from*

1.4.2004, the Commission did not consider it appropriate to provide for relaxed target availability for any generating station in case of inability of the petitioner to obtain sufficient quantity of fuel. Sufficient time was available with the petitioner to make necessary arrangements for supply of gas from alternative sources after grant of relaxation by order dated 1.11.2002. The petitioner as a commercial entity has to bear the responsibility to ensure that its generating stations are available to the respondents, who do not have any role in arranging availability of fuel for the generating stations in question. Therefore, considering the totality of the circumstances we do not consider it to be a fit case for grant of relaxation in target availability, as prayed for, by invoking powers under regulation 13. The petitioner is, however, at liberty to divert gas supply from Kawas GPS to Gandhar GPS in terms of the consent already given by the beneficiaries in the Western Region. The petitioner is also at liberty to declare availability of Kawas GPS based on liquid fuel for which also the beneficiaries have given their consent".



17. Aggrieved by the order of the CERC dated Feb. 16, 2006 in Petition No. 46 of 2005, the NTPC has filed the instant appeal.
18. We have heard the learned counsel for the parties extensively.
19. The learned counsel for the appellant has submitted that Kawas GPS and Gandhar GPS should be considered as single integrated unit for the purpose of target availability as the gas facility for both the stations is being operated in an unified manner. It is also pointed out that CERC has allowed diversion of gas from Kawas GPS to Gandhar GPS in view of inadequate availability of gas. It was also contended that in the circumstances, the Target Availability norm of 80% ought to have been relaxed under clause (2) of Regulation 2 and Regulation 13 of the Regulations of 2004. On the other hand, the learned counsel for the respondents submitted that the Target Availability for recovery of full capacity charges has been fixed by the CERC at 80%, making no exception for

Kawas and Gandhar GPS. According to the learned counsel, the Target Availability for recovery of full capacity charges of 80% applies to both the GPS separately and individually. As per the learned counsel the appellant is not entitled to seek relaxation of Target Availability norms as the issue of non-allocation of gas falls within the realm of appellant's commercial risks and in order to cover that risk, the appellant ought to have made adequate arrangement for supply of gas as the same is freely available in the open market and for additional gas it could have tied up with GSPC-Niko, CAIRNS, GUVNL in addition to GAIL.

20. It was also canvassed on behalf of the respondents that sub-clause (2) of Regulation 2 is applicable to generating stations for which the tariff is not determined in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2001. It was further contended that since the tariff of Kawas and Gandhar Gas Power Stations of the Appellant for the period April 1, 2001 to March 31,

2004 was determined by the CERC in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2001 vide orders dated April 7, 2005 and April 1, 2005 respectively, sub clause (2) of Regulation 2 is not applicable.

21. We have considered the submissions of the learned counsel for the parties.
22. The first issue which requires determination is whether the Commission is empowered to relax the norms laid down in the Regulations of 2004. The relaxation of the Target availability has been claimed by the appellant under proviso to sub-clause (2) of Regulation 2 and Regulation 13 of the Regulations. At this stage, it would be convenient to set out these Regulations for facility of reference:

**"2. Scope and extent of application**

(2) *These regulations shall apply in all other cases where tariff is to be determined by the Commission based on capital cost.*

*Provided that the Commission may prescribe the relaxed norms of operation, including the norms*

*of Target Availability and Plant Load Factor contained in these regulations for a generating station the tariff of which is not determined in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2001, and the relaxed norms shall be applicable for determination of tariff for such a generating station”.*

*13. “Power to Relax: The Commission, for reasons to be recorded in writing, may vary any of the provisions of these regulations on its own motion or on an application made before it by an interested person”.*

23. It is clear from proviso to clause (2) of Regulation 2 that CERC can prescribe the relaxed norms of operation including the norms of target availability in respect of a generating station only in a case, where the tariff was not determined in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2001. It is, however, not necessary to examine the argument of the learned counsel for the appellant based on Regulation 2(2) of the Regulations of

2004 or to construe Regulation 2(2) and its implication as Regulation 13 of the Regulations of 2004 empowers the Commission to vary the provisions of the Regulations on its own motion or on an application made before it. This power has been conferred on the Commission to relax the rigor of the Regulations in appropriate cases.

24. In order to appreciate the import of Regulation 13, it is necessary to look at the heading pre-fixed to it. The title to the Regulation 13 reads as under:

"Power to relax"

In Bhinka vs. Charan Singh, AIR 1959 SC 960, it was held that headings or titles pre-fixed to a section can be referred to for construing the same. In Ralph Godrej Carriton, AIR 1955 559, it was held that a heading is to be regarded as key to the interpretation of the clause under examination. In Qualter Hall & Co. Ltd. vs. Board of Trade, 1961(3) AU E.R. 389, it was held that heading can be treated as preamble to the provision following it. These principles can also be utilized for construing the Regulations, which are quasi legislative in nature. Therefore, Regulation 13 can be construed in the light of its Heading. Reading the Regulation in the light of its

Heading, it must be held that the power comprised in Regulation 13 is essentially the 'power to relax'. In case any Regulation causes hardship to a party or works injustice to him or application thereof leads to unjust result, the Regulation can be relaxed. The exercise of power under Regulation 13 of the Regulations is minimized by the requirement to record the reasons in writing by the Commission before any provision of the Regulations is relaxed. Therefore, there is no doubt that the Commission has the power to relax any provision of the Regulations.

25. The power to relax any provision by the Commission can be invoked by the Commission itself or on an application made by an interested person. The appellant in consonance with the provisions of Regulation 13 had preferred a petition, being Petition No. 46 of 2005, for relaxation of Target availability norm of Kawas GPS and Gandhar GPS for the period April 1, 2001 to March 31, 2004. The Commission however, proceeded on the basis that earlier by an Order dated November 1, 2002, the Commission as 'one time' measure had relaxed the

Target availability level from 80% to 62.78% for recovery of fixed charges w.e.f. April 1, 2001 and it was recorded that the special dispensation was to be reviewed, while considering revision of norms for the period beyond March 31, 2004. The Commission was of the view that since the norms for determination of tariff for the period April 1, 2004 onwards have already been reviewed and the target availability of 80% has been retained in respect of the generating stations belonging to the appellant except for Tanda TPS, it was not appropriate to provide for relaxed target availability for any generating station in case of inability of the appellant to obtain sufficient quantity of fuel. The Commission also took the view that sufficient time was available with the appellant to make necessary arrangements for supply of gas from alternative sources after it was granted one time relaxation by the order dated November 1, 2002. The Commission also observed that the appellant being a commercial entity has to bear the responsibility to ensure that its generating stations are available to the

respondents, who do not have any role in arranging the fuel. In this view of the matter, the Commission did not consider it to be a fit case for grant of relaxation of norms for target availability.

26. It is significant to note that the Commission in its order dated February 16, 2005, in Petition No. 95 of 2005, had recognized the efforts of the appellant for procuring gas supply for Kawas GPS and Gandhar GPS. The Commission had also come to the conclusion that the appellant had been pursuing the matter diligently and sincerely. It also recorded that the efforts made by the appellant had been appreciated by the beneficiaries in the 127<sup>th</sup> meeting of the Western Region Electricity Board held on May 20, 2005. The Commission took note of the fact that Kawas GPS had acquired dual fuel firing facility since 1997, after the beneficiaries had given their consent to avail power generated by using liquid fuel. It rejected the contention of the GUVNL that the appellant cannot be allowed to recover capacity charges on the



basis of target availability of liquid fuel. In this regard, the observations of the Commission read as follows:-

*"On perusal of the reply of NTPC, we are satisfied that it has made efforts for procuring gas supply for Kawas GPS and Gandhar GPS. The evidence made available on record by NTPC leads us to believe that in the past NTPC has been pursuing the matter diligently and sincerely. At times its efforts met with partial success. It could procure 2.7 MMSCMD gas supplies from GAIL, 0.45 MMSCMD gas (RLNG) from GIPCL and 1.0 MMSCMD from GSPC. NTPC has also taken up the matter with GSPC for supply of additional 2 MMSCMD of gas. In fact, the efforts made by NTPC have been appreciated by the beneficiaries in the region at 127<sup>th</sup> WREB meeting held on 20.5.2005. We hope and trust NTPC will continue its efforts with equal, if not more, vigour and force so that the two generating stations are able to utilize the full available capacity.*

*As we have noted above, Kawas GPS has dual fuel firing facility. Liquid fuel firing facility at this generating station was commissioned in 1997 after the beneficiaries had given their consent to avail power generated by using liquid fuel. Therefore, the petitioner, and for that matter the other beneficiaries*

*in the region, cannot escape their liability to pay the capacity charge for the station, in case availability of the generating station is so declared by NTPC. We do not find any force in the petitioner's contention that NTPC should not be allowed to recover capacity charges on the basis of target availability of liquid fuel".*

27. Thus, the Commission found the appellant to be diligent in making efforts for procuring the gas for Kawas GPS and Gandhar GPS. The Commission was also of the view that the appellant was entitled to recover capacity charges for the stations.
28. It may be recalled, even at the risk of repetition, that after the Regulations of 2001 were notified by the Commission on March 26, 2001 for the period April 1, 2001 to March 31, 2004, the appellant filed a petition, being Petition No. 86 of 2002, for relaxation of target availability norms for both the stations. The Commission by its order dated November 1, 2002 expressed its satisfaction that on account of non-availability of adequate quantity of gas, it was not possible for both

Kawas GPS and Gandhar GPS to achieve availability level of 80% simultaneously. The Commission recognized that for the circumstances and reasons beyond control of the appellant, it would not be possible to achieve the target availability of 80% for the purpose of recovery of capacity charges. Both the stations were considered as a single integrated unit. The observations of the Commission are significant in nature and need to be extracted:

*"We have considered the submissions made on behalf of the petitioner as also respondent No. 2, Madhya Pradesh Electricity Board both orally as well as in writing. We are satisfied that on account of non-availability of adequate quantity of gas, it is not possible for both Kawas GPS and Gandhar GPS to achieve availability level of 80% simultaneously at present. We are satisfied that "impossibility" is not on account of conduct of the petitioner and is for the circumstances and reasons beyond its control. Law does not force a person to do an impossible act. Therefore, we consider it necessary to allow one-time relaxation in the normative target availability level for recovery of capacity charges in respect of Kawas GPS and Gandhar GPS.*

16. In order to do even handed justice to both the parties, we direct as under:-

(a) For the purpose of recovery of capacity charges Kawas GPS and Gandhar GPS shall be considered as single integrated unit. This is basically for the reason that the gas supply to these two stations has

*been operated in an integrated manner by transferring it from Kawas GPS to Gandhar GPS.*

*(b) Recovery of full capacity charges in respect of Kawas GPS and Gandhar GPS shall be allowed on the "unit" achieving 80% machine availability and 65% PLF, subject to dispatch instructions by WRLDC. The petitioner shall be liable to demonstrate the machine availability when asked to do so by WRLDC/WREB.*

*(c) In case the "unit" is unable to achieve 65% PLF coupled with 80% machine availability, the petitioner shall be liable to pay disincentive on pre-rata basis to the beneficiaries.*

*(d) The petitioner shall not be entitled to incentive even in case the "unit" achieves PLF of more than 77%.*

*(e) Special dispensation being made shall be applicable from 1.7.2000, the date of introduction of ABT in the Western Region and up to 31.3.2004, that is, during the current tariff period.*

*(f) Special dispensation shall be reviewed while considering revision of norms for the period beyond 31.3.2004.*

*(g) The parties shall be at liberty to seek review of these directions in the event of improvement of supply of gas for the "unit".*

29. Therefore, it is clear from the aforesaid observations that the norms were relaxed for non-availability of adequate quantity of gas and no fault was found with the appellant

for not being able to procure sufficient volume of gas. Both the stations were considered as one unit by the Commission for the basic reason that the gas supplied to these stations was being provided in an integrated manner by transferring it from Kawas GPS to Gandhar GPS. The recovery of full capacity charges in respect of both the stations were allowed for achieving 80% machine availability and 65% PLF. The appellant was not held entitled to incentive for achieving PLF beyond 77% and at the same time in case the unit was not able to achieve 65% PLF and 80% machine availability, the appellant was liable to pay the beneficiaries on account of disincentive on pro-rata basis.

30. The scarcity of gas for which the appellant was not able to reach the target availability was taken note of in the orders of the CERC dated April 1, 2005 and April 7, 2005 in Petition Nos. 33 of 2001 and 31 of 2001 respectively. Petition No. 31 of 2001 was filed by the appellant for approval of tariff in respect of Kawas GPS and Petition

No. 33 of 2001 was in respect of determination of tariff for Gandhar GPS. The Commission dealing with the target availability did not find any justification to take a view different from the view taken in the Order dated November 1, 2002 in Petition No. 86 of 2002. Since the observations in regard to target availability in both the orders are almost identically worded, we consider it appropriate only to set out the observations of the Commission in the order passed in Petition NO. 31 of 2001:

*" The Commission in its order dated 1.11.2002 in Petition No. 86/2002, relaxed the target availability for Kawas GPS and Gandhar GPS from 1.7.2002 to 31.3.2004 after deliberating the issue at great length. It was held that recovery of full capacity charges in respect of Kawas GPS and Gandhar GPS should be allowed on their together achieving 80% machine availability and 65% PLF, subject to dispatch instructions by WRLDC. The petitioner is liable to demonstrate the machine availability when asked to do so by WRLDC/WREB."*

31. In four orders viz. order dated Nov., 1, 2002 in Petition No. 86 of 2002, Order dated April 1, 2005 in Petition No. 33 of 2001, Order dated April 7, 2005 in Petition NO. 31

of 2001 and order dated February 16, 2006 in Petition No. 95 of 2005, the Commission has recognized the fact that due to non-availability of gas and not for the reason of failure of the appellant, target availability of 80% could not be achieved by the Kawas GPS and Gandhar GPS. The Commission in one of the order dated November 1, 2002 in Petition No. 86 of 2002, observed that it cannot ask the appellant to perform an impossible task of achieving Target Availability level of 80%. After having said that, the Commission in the impugned order has taken a different view of the matter by holding that the appellant was a commercial entity and had to bear the responsibility to ensure that the generating stations are available to the respondents. This order of the Commission, which is impugned in the appeal, and the order passed by it in Petition No. 95 of 2005 are of the same date. In the order passed in Petition No. 95 of 2005 the appellant has not been held responsible for not reaching the target availability, while in the impugned order, without any change in the fact situation, the

appellant has been faulted for falling short of the target availability. Thus, the commission has passed contradictory orders in the two matters, without there being any distinction on facts.

32. The learned counsel for the respondents, however, contended that the appellant could have arranged gas from the open market, especially from GSPC. They also referred to certain correspondence exchanged between the appellant and Gujarat State Petronet Ltd. and GSPC and submitted that the appellant could have negotiated with them for supply of adequate quantity of gas for running the stations. The correspondence forms part of the affidavits filed in Petition No. 95/2005 before the CERC. Copies of the affidavits alongwith Annexures have been presented before us. We have gone through the affidavits and the correspondence. We, however, do not find that it was because of the appellant that the negotiations could not fructify. As already pointed out, in the order dated February 16, 2006, passed by the CERC



in Petition No. 95/ 2005, the appellant has not been faulted for not being able to secure adequate quantity of gas for the two stations in question.

33. It needs to be noted that the appellant in petition No. 95/2005 in its reply affidavit stated that it had been making consistent efforts with Ministry of Petroleum and Natural Gas and Gas Authority of India Ltd. directly and through Ministry of Power, Govt. of India for securing additional supply of gas for its gas based stations at Kawas and Gandhar. It is further averred that it was only because of the efforts of the appellant through Ministry of Power that two MSCMD gas withdrawn by GAIL was restored to the appellant.
34. According to the affidavit, GAIL had offered to the appellant RLNG at a price of around US \$ 4.5, but this was not acceptable to the beneficiaries and therefore, clearance could not be given to GAIL for supply of additional gas. It is also asserted that both GAIL and Gujarat State Petronet Ltd. (GSPCL), and Gujarat

Petroleum Corporation Ltd (GSPC) did not submit any firm offer for supply of gas to NTPC power stations.

35. In a letter dated December 3, 2004 of the appellant to the GSPC, the latter was asked to submit a detailed proposal. The respondents have not brought on record any document to show that in response to the letter of the appellant dated December 3, 2004, any proposal was submitted. From the affidavit, it appears that the appellant had made efforts for securing adequate quantity of gas for its Kawas and Gandhar stations and that is also the finding of the CERC in the other application.
36. It cannot be disputed that the appellant cannot buy gas from the open market at any price, as otherwise the beneficiaries would suffer and will not agree for an imprudent price. The scarcity of gas for which the appellant was not able to reach the target availability ought to have been taken note of by the CERC in the impugned order. In the circumstances, it is fit case in which the commission ought to have exercised its powers

under Regulation 13 of the Regulations for relaxing the target availability for Kawas and Gandhar GPS, especially when in the order passed in Petition No. 95/2005, the commission has held to the effect that the evidence on record leads it to believe that the NTPC has been pursuing the matter diligently and sincerely for securing the supply of gas.

37. It is not disputed that the gas is supplied to the Kawas Station through HBJ pipeline and thereafter the balance gas is diverted to Gandhar power station. Both the stations are linked together and are being operated in a unified manner, in so far as the supply of gas is concerned. Therefore, both the stations are to be considered as one integrated unit for the purpose of fixing target availability till such time adequate quantity of gas is available to operate both plants independently.

38. It appears from the rejoinder affidavit of the appellant filed before the CERC that the combined availability of

power from Kawas and Gandhar stations has increased as per the following Table:-

Year	Availability/ deemed generation \$ Kawas	PLF including Gandhar	Combined Availability/ PLF including deemed generation
2000-2001	87.05	48.46	67.74
2001-2002	72.54	62.85	67.69
2002-2003	81.96	59.21	70.57
2003-2004	86.72	57.16	71.93
2004-2005	91.19	71.19	81.18
Average	83.89	59.77	71.82

39. Thus, over the last five years i.e. 2000-01; 2001-02; 2002-03; 2003-04; and 2004-05, the combined availability has increased steadily. The average combined availability for the aforesaid period is 71.82%. It is also clear from the Table that for the year 2004-05, the combined availability was 81.18%, while for the year 2003-04, it was 71.93. The significant gain is indicative of better availability of power from the stations.

40. In the circumstances, therefore, the appellant is not justified in asking for permitting recovery of full capacity charges for Kawas and Gandhar GPS together at 65% PLF. It also needs to be recognized that the beneficiaries

have been paying full capacity charges to the appellant, even though they are not receiving full benefit of the stations. We, therefore, can allow the relaxation of norms up to a reasonable limit & length of time.

41. In the circumstances, we are of the view that the norms ought to be relaxed suitably for the years 2004-2005; 2005-2006; 2006-2007 and 2007-2008. But beyond this period, the appellant must arrange for adequate supply of gas for running the two stations independently to their full capacity. For securing gas beyond the aforesaid period, the appellant has enough time.

42. Looking to the average combined PLF for the two stations together for the years 2000-2001; 2001-2002; 2002-2003; 2003-04 and 2004-2005, we are of the view that the recovery of full capacity charges in respect of Kawas and Gandhar GPS should be permitted on their together achieving 80% machine availability and 72% PLF.

43. Having regard to the aforesaid discussion, the appeal is allowed and the impugned order passed by the CERC is set aside. In relaxation of the norms, the combined target availability for the years April 1, 2004 to March 31, 2008, for recovery of full capacity charges for Kawas and Gandhar GPS together, is fixed at 72% PLF. Thereafter, no relaxation will be available to the appellant.

**(Justice Anil Dev Singh)**  
**Chairperson**

**(A.A. Khan)**  
**Technical Member**

Dated the January 22, 2007

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or persons authorised to sell by private negotiations, can, in a given case, enter into a secret or invisible underhand deal or understanding with the purchasers at the cost of the concerned institution. Those who are willing to purchase by private negotiations can also bid at a public auction. Why would they feel shy or be deterred from bidding at a public auction? Why then permit sale by private negotiations which will not be visible to the public eye and may even give rise to public suspicion unless there are special reasons to justify doing so? And care must be taken to fix a reserve price after ascertaining the market value for the sake of safeguarding the interest of the endowment. With these words of caution we close the matter.

11. Appeal is allowed, order of the High Court is set aside, order in the aforementioned terms be and is passed.

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(BEFORE E.S. VENKATARAMIAH AND M.P. THAKKAR, JJ.)

HINDUSTAN PAPER CORPN. LTD. ... Appellant;

*Versus*

GOVERNMENT OF KERALA AND OTHERS ... Respondents.

Civil Appeals Nos. 1871-76 of 1981†,  
 decided on April 16, 1986

**Forests — Kerala Forest Produce (Fixation of Selling Price) Act, 1978 (29 of 1978) — Section 6 — Exemption to Government companies and co-operative societies for selling forest produce at less than selling price under — Held, Section 6 constitutional not being violative of Articles 14 and 19(1)(g)**

**Constitution of India — Article 14 — Government or public sector undertakings form a distinct class**

**Constitution of India — Article 19(1)(g) — Burden lies on person alleging violation of Article 19(1)(g) to give valid reasons to establish his claim**

**Statute Law — Exemption provision — Purpose and validity**

**Held —**

Section 5 of the Act provides that the forest produce covered by the Act shall not be sold at a price less than the price fixed under Section 3. The notified price has to be fixed on the basis of the recommendation to be made by the Expert Committee constituted under Section 4 of the Act and the Expert Committee is required to take into consideration the market price of the forest produce, the cost of regenerating and maintaining the forest produce in cases where regeneration is necessary after selling the forest produce and such other matters as may be prescribed. Therefore, the consumers of forest

†From the Judgment and Order dated April 15, 1981 of the Kerala High Court in O.P. Nos. 6, 7, 1005, 1153, 1154 and 1345 of 1981

produce who are not granted any exemption under Section 6 cannot claim that they must be shown any concession and that the forest produce should be made available to them at a price which would be lower than the market price. (Para 9)

The power under Section 6 to grant exemption from Section 5 by notification is not unfettered. The State Government can grant the exemption only in public interest and only to a company owned by Central Government or Government of Kerala bearing in mind the entire policy and object of the Act. While issuing the notification granting exemption it is open to the State Government to impose appropriate conditions and restrictions. It is also reasonable to expect that the price payable for the forest produce in question by the government companies or co-operative societies would be determined after negotiations having regard to the public interest and would not be made available to them at throw-away prices. Any profits that the Government undertakings and companies make enriches the public coffer and not the private coffer. An exemption or a concession might provide to such companies some breathing time or settling down time. It may be treated as a subsidy at the worst. This appears to be the policy behind Article 19(6)(ii). In appropriate cases in order to place an industry owned by the government on an enduring basis in the national interest, some concession may have to be shown to it. The action of the State Government in exempting the government companies from the operation of Section 5 does not in the instant case amount to the exclusion of the industries in the private sector from their business nor does it deny the usual supplies of forest produce used as a raw material by these industries. The government is not shown to be taking any undue advantage of the monopoly it enjoys as the owner of the forests and the position it holds as the sole supplier of forest produce in fixing the minimum prices in order to preserve the national wealth from being wasted away. In the circumstances of this case it cannot be said that the provision is either arbitrary or unreasonable even though the government industries may be rivals in trade to the industries in the private sector. (Paras 7 and 9)

Sher Singh v. Union of India, (1984) 1 SCC 107 : (1984) 1 SCR 464 : AIR 1984 SC 200; Viklad Coal Merchant v. Union of India, (1984) 1 SCC 619 : (1984) 1 SCR 657 : AIR 1984 SC 95 and Fatehchand Himmattal v. State of Maharashtra, (1977) 2 SCC 670 : (1977) 2 SCR 828 : AIR 1977 SC 1825, relied on

State of Rajasthan v. Mukandchand, (1964) 6 SCR 903 : AIR 1964 SC 1633, limited

Preference shown to government companies under Section 6 of the Act cannot be considered to be discriminatory as they stand in a different class altogether and the classification made between government companies and others for the purposes of the Act is valid one. Same is the case with the clause which gives power under Section 6 to the government to exempt sales of forest produce in favour of co-operative societies up to the limit mentioned therein. Therefore Section 6 cannot be said to be violative of Article 14. (Para 10)

P.V. Sivarajan v. Union of India, 1959 Supp 1 SCR 779 : AIR 1959 SC 556 and Orient Weaving Mills (P) Ltd. v. Union of India, 1962 Supp 3 SCR 481 : AIR 1963 SC 98, relied on

In almost all the statutes by which the fiscal or economic interests of the State are regulated, provision for granting exemption in appropriate cases would have necessarily to be there and the power to grant exemption is invariably



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conferred on the government concerned. The legislature which is burdened with heavy legislative and other types of work is not able to find time to consider in detail the hardships and difficulties that are likely to result by the enforcement of the statute concerned. It has, therefore, now become a well-recognised and constitutionally accepted legislative practice to incorporate provisions conferring the powers of exemption on the government in such statutes. Such exemptions cannot ordinarily be granted secretly. A notification would have to be issued and published in the Gazette and in the ordinary course it would be subject to the scrutiny by the legislature. The power can be exercised only in the public interest as provided by the section itself. The validity of provisions conferring the power of exemption has been consistently upheld by the Supreme Court.

(Para 9)

State of Bombay v. F.N. Balsara, 1951 SCR 682 : AIR 1951 SC 318, relied on

The notification issued under Section 6 cannot also be said to be invalid. The burden lay on the petitioner-companies before the High Court (present respondents) to give valid reasons to show why the court should hold that the notification was not in public interest. In absence of any material it is not possible to hold that the notification was not in public interest.

(Para 11)

Appeals allowed

R-M/7320/C

Advocates who appeared in this case:

Dr Y.S. Chitale, Senior Advocate (M. Ramchandran, Mrs Shanta Vasudevan, P. Parameswaran and A.S. Nambiar, Advocates, with him), for the Appellant;

T.S. Krishnamurthy Iyer, Senior Advocate (P.K. Pillai, Advocate, with him), for the Respondents.

The Judgment of the Court was delivered by

VENKATARAMIAH, J.—In these appeals by special leave we are concerned with the question of constitutional validity of Section 6 of the Kerala Forest Produce (Fixation of Selling Price) Act, 1978 (Act 29 of 1978) (hereinafter referred to as 'the Act').

2. The appellant Hindustan Paper Corporation Ltd. is a company owned by the Central Government carrying on the business of manufacturing newsprint at its factory in the State of Kerala. Before its factory was established an agreement was entered into between the appellant Hindustan Paper Corporation Ltd. and the Government of Kerala on October 7, 1974 under which the Government of Kerala agreed to grant to the appellant the right of free use of water from the Muvattupuzha river for the purpose of manufacturing newsprint and also to make available annually to the appellant 1,50,000 tonnes of eucalyptus wood. The Government of Kerala further agreed to keep reserved from the date of agreement the State plantations of eucalyptus grandis in Pamba, Kottayam, Punalur, Thenmalai and Trivandrum Forest Divisions as constituted then for the appellant and not to permit harvesting of eucalyptus wood and reeds by other parties and for the regeneration of the forest in the areas, the Chief Conservator of Forests, Kerala State was required in consultation with the appellant

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to prepare and implement a scientific management plan which would include fire protection and epidemic control programmes. The appellant agreed to pay to the Government of Kerala royalty for the raw materials supplied to the appellant at the rate of Rs 11 per tonne of green wood of eucalyptus grandis and eucalyptus tereticornis (both with 50 per cent moisture) and at the rate of Rs 12 per tonne of green reeds with 50 per cent moisture. There were several other conditions in the agreement with which we are not concerned in these cases. After the above agreement was entered into the appellant established its factory. The Punalur Paper Mills Ltd. and the Gwalior Rayon Silk Manufacturing (Wvg.) Co. Ltd. which were companies in the private sector had also established their factories in the State of Kerala which consumed forest produce as raw material. The Kerala State Bamboo Corporation Limited and the Travancore Plywood Industries Ltd. which were owned by the Government of Kerala were also carrying on business in the State of Kerala.

3. In the year 1978 the Act was passed by the Kerala legislature with the object of providing for the procedure to be followed in fixing the selling prices of certain important forest produce, for the prohibition of the sale of such forest produce at less than the prices so fixed and for matters incidental or ancillary thereto. The Act was also intended to provide for the proper regeneration and maintenance of the forests in the State. The Act governs only those forests which are considered as reserved forests within the meaning of Kerala Forest Act, 1961 and forests vested in the government under Section 3 of the Kerala Private Forests (Vesting and Assignment) Act, 1971. It provides for the determination of the selling price of certain forest produce specified in clause (c) of Section 2 of the Act. Section 3 of the Act requires the government to notify in the Gazette before the end of each financial year the selling price of every forest produce for the following financial year. The notified price has to be fixed by the government after taking into consideration the recommendations of the Expert Committee consisting of the officers mentioned in Section 4(2) of the Act. Sub-section (3) of Section 4 of the Act requires the Expert Committee to make its recommendation having regard inter alia to the market price of the forest produce, the cost of regenerating and maintaining the forest produce in cases where regeneration is necessary after selling the forest produce; and such other matters as may be prescribed. Section 5 is the crucial section in the Act. It reads as follows:

5. *Forest produce to be sold at price not less than the selling price.*—(1) After the date of the publication of the notification under sub-section (2) of Section 3, no forest produce shall be

sold by the government or any forest officer at a price which is less than the selling price of that forest produce.

(2) The sale of any forest produce in contravention of sub-section (1) shall be null and void and shall not be enforceable in a court of law.

4. There is no prohibition of sale of forest produce at prices higher than the prices mentioned in the notification. Section 7 of the Act provides that 10 per cent of the amount obtained by the sale of forest produce after the commencement of the Act, subject to such rules as may be made under the Act, should be set apart for being utilised for the development of forests. Section 8 enables the government to make rules for the purpose of carrying into effect the provisions of the Act. We are concerned in these cases with the validity of Section 6 of the Act which reads thus :

6. *Exemption.*—The government may, in the public interest, by notification in the Gazette, exempt the sale of any forest produce—

- (a) to any company owned by the Central Government or the Government of Kerala ;
- (b) not exceeding ten cubic metres, to any co-operative society registered or deemed to be registered under the Kerala Co-operative Societies Act, 1969 (21 of 1969),

from the provisions of Section 5, subject to such conditions and restrictions as may be specified in the notification.

5. The Act came into force on its publication, i.e., on September 26, 1978. On March 9, 1979 the Government of Kerala published a notification exempting the appellant, i.e., Hindustan Paper Corporation Ltd., the Kerala State Bamboo Corporation Limited and the Travancore Plywood Industries Limited from the provisions of Section 5 of the Act. The relevant part of the notification and the Explanatory Note attached to it are given below :

No. G.O.(MS) 100/79/AD

Date 1, Trivandrum

March 9, 1979

S.R.O. No. 313/79 :—In exercise of the powers conferred by Section 6 of the Kerala Forest Produce (Fixation of Selling Price) Act, 1978 (29 of 1978), the Government of Kerala, being satisfied that it is necessary so to do in the public interest, hereby exempt the sale of any forest produce to the Kerala Newsprint Project under the Hindustan Paper Corporation, the Kerala State Bamboo Cor-

HINDUSTAN PAPER CORPN. LTD. V. GOVT. OF KERALA (*Venkataramiah, J.*) 403

poration and the Travancore Plywood Industries, Punalur from the provisions of Section 5 of the said Act.

By order of the Governor

K.V. Vidhyadharan

Additional Secretary to Govt.

*Explanatory Note*

After government have notified selling price of forest produce under Section 3 of Act 29 of 1978, forest produce cannot be sold at prices less than the selling price. Under Section 6 of the Act, government can exempt in public interest, by notification, the sale of any Forest Produce to companies owned by the Central Government, by Government of Kerala. As Kerala Newsprint Project, Bamboo Corporation and the Travancore Plywood Industries, Punalur are undertakings of the Central Government and the Government of Kerala respectively, it is considered expedient to exempt these from the provisions of Section 5 of the Act. The notification is intended to achieve the above purpose.

6. The State Government issued the notification under Section 3 of the Act fixing the price below which forest produce covered by the Act could not be sold. Aggrieved by the notification granting exemption to the government companies, the two companies in the private sector, namely, Punalur Paper Mills Limited and the Gwalior Rayon Silk Manufacturing (Wvg.) Co. Ltd. filed writ petitions in the High Court questioning the constitutional validity of Section 6 and the notification granting exemption thereunder in favour of the appellant Hindustan Paper Corporation Ltd. and two other companies owned by the Government of Kerala. The writ petitions were opposed by the Government of Kerala, the appellant Hindustan Paper Corporation Ltd., the Kerala State Bamboo Corporation Ltd. and the Travancore Plywood Industries Ltd. In the counter-affidavit filed on behalf of the Government of Kerala the contention urged by the petitioners in the writ petitions were refuted and the State Government took the stand that Section 6 of the Act was constitutionally valid. At the hearing of the writ petitions before the High Court, the Additional Advocate-General who appeared for the State Government conceded that in his opinion Section 6 of the Act was unconstitutional. Perhaps what he meant was that he was not able to offer any good answer to the contentions urged by the other side in support of the challenge to the constitutionality of the concerned provision. A reference to this concession which was neither here nor there is found at the end of paragraph 22 of the judgment of the High Court. The High Court held that Section 6 of the Act was violative of Article 14 of the Constitution and struck it down along with the notification. No appeal was

filed by the State Government. The above appeals are filed by the Hindustan Paper Corporation Ltd. the appellant herein which is one of the beneficiaries of the notification granting exemption. But, at the hearing of these appeals in this Court the learned counsel for the Government of Kerala stated that the concession made by the learned counsel for the State before the High Court was incorrect, and supported the validity of Section 6 of the Act and the notification granting exemption issued thereunder.

7. These appeals are filed against the judgment of the High Court after obtaining the leave of this Court under Article 136 of the Constitution. Section 6 of the Act has already been set out above. It confers the power on the State Government to grant exemption from the provisions of Section 5 of the Act. The power conferred under Section 6 of the Act is not unfettered. The government can grant the exemption only in the public interest. Such exemption can be granted only to a company owned by the Central Government or the Government of Kerala. There is also, however, a provision in clause (b) of Section 6 of the Act, which ununderstandably has also been struck down by the High Court, even though its validity had not been expressly challenged. Under this provision any sale of forest produce not exceeding ten cubic metres effected in favour of any co-operative society registered or deemed to be registered under the Kerala Co-operative Societies Act, 1969 may be exempted from Section 5 of the Act by the State Government. While issuing the notification granting exemption it is open to the State Government to impose appropriate conditions and restrictions. The State Government, of course, has to bear in mind the entire policy and object of the Act before exercising its power under Section 6 of the Act. At the outset it should be observed that the decision of the High Court to the extent it has quashed clause (b) of Section 6 of the Act which gave power to the State Government to exempt the sale of any forest produce in small quantities not exceeding 10 cubic metres to any co-operative society is liable to be set aside straightway without anything more as there was no challenge to that part of the section at all and the High Court has not at all scrutinized the constitutional validity of this provision.

8. The reasons given by the High Court for quashing Section 6 of the Act are these :

- (1) if the government is given a power to sell the produce at a lower price than the notified rate to the government companies it will enable the government to cripple or in slow degrees to eliminate the other consumers in the field. This conferment of power on the State Government is discriminatory and unreasonable.

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- (2) a government company is as such a legal entity as any other entity. It is a commercial corporation acting on its own behalf and all consumers of the forest produce should have an equal opportunity to get the goods. The government company could not, therefore, be given any favour,
- (3) there is no nexus between the object to be achieved by the Act and the exemption to be granted in favour of the government companies, and
- (4) the submission made by the Additional Advocate General to the effect that he could not support the validity of Section 6 of the Act.

9. We find it difficult to accept the grounds on which the High Court has held Section 6 of the Act to be unconstitutional. So far as consumers of forest produce who are not granted any exemption under Section 6 of the Act are concerned, any sale of forest produce in their favour cannot be affected at a price less than the price notified under Section 3 of the Act. The notified price has to be fixed on the basis of the recommendation to be made by the Expert Committee constituted under Section 4 of the Act and the Expert Committee is required to take into consideration the market price of the forest produce, the cost of regenerating and maintaining the forest produce in cases where regeneration is necessary after selling the forest produce and such other matters as may be prescribed. If Section 5 of the Act provides that the forest produce covered by the Act shall not be sold at a price less than the price which is determined on the basis of the factors referred to above which appear to be quite relevant they cannot have any grievance. They cannot claim that they must be shown any concession and that the forest produce should be made available to them at a price which would be lower than the market price. Even when it is stated that any company owned by the Central Government or the Government of Kerala or a co-operative society (subject to the limit as regards the quantity of forest produce to be supplied) may be supplied forest produce without the constraint contained in Section 5 of the Act, it does not mean that the forest produce would be made available to them at throw-away prices. It is reasonable to expect that the price payable for the forest produce in question by the government companies or co-operative societies would be determined after negotiations having regard to the public interest. In almost all the statutes by which the fiscal or economic interests of the State are regulated, provision for granting exemption in appropriate cases would have necessarily to be there and the power to grant exemption is invariably conferred on the government concerned. The legislature which is burdened with heavy legislative and other types of work is not able to find time to consider in detail the

hardships and difficulties that are likely to result by the enforcement of the statute concerned. It has, therefore, now become a well-recognised and constitutionally accepted legislative practice to incorporate provisions conferring the powers of exemption on the government in such statutes. Such exemptions cannot ordinarily be granted secretly. A notification would have to be issued and published in the Gazette and in the ordinary course it would be subject to the scrutiny by the legislature. The power can be exercised only in the public interest as provided by the section itself. The validity of provisions conferring the power of exemption has been consistently upheld by this Court in a number of decisions commencing with the *State of Bombay v. F.N. Balsara*<sup>1</sup>. The next question is whether Section 6 of the Act which restricts the power of the government to grant exemption to companies owned by the Central Government or the Government of Kerala and to co-operative societies only is valid. As far as government undertakings and companies are concerned, it has to be held that they form a class by themselves since any profit that they may make would in the end result in the benefit to the members of the general public. The profit, if any, enriches the public coffer and not the private coffer. The role of industries in the public sector is very sensitive and critical from the point of view of national economy. Their survival very often depends upon the budgetary provision and not upon private resources which are available to the industries in the private sector. They are often established to break the power of strangulation on economy which the industries in private sector may have developed and may be using to choke the industrial growth of the country. An exemption or a concession might provide them some breathing time or settling down time. It may be treated as a subsidy at the worst. This appears to be the policy behind Article 19(6)(ii) of the Constitution. In appropriate cases in order to place an industry owned by the government on an enduring basis in the national interest, some concession may have to be shown to it. It is neither alleged nor established that if the exemption is annulled the petitioners will be richer by a single paise or if it is retained they will be poorer by a single paise. The only purpose hinted at is that if the public sector is made to pay more, it may use less raw material which in turn might be available to the private sector. Not a very laudable purpose to say the least of it. The action of the State Government in exempting the government companies from the operation of Section 5 of the Act does not in the instant case amount to the exclusion of the industries in the private sector from their business nor does it deny the usual supplies of forest produce used as raw material by

1. 1951 SCR 682 : AIR 1951 SC 318

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these industries as alleged by them. The government is not shown to be taking any undue advantage of the monopoly it enjoys as the owner of the forests and the position it holds as the sole supplier of forest produce in fixing the minimum prices in order to preserve the national wealth from being wasted away. In the circumstances of this case it cannot be said that the provision is either arbitrary or unreasonable even though the government industries may be rivals in trade to the industries in the private sector. In *Sher Singh v. Union of India*<sup>2</sup> this Court has upheld Section 47(1-H) of the Motor Vehicles Act, 1939 under which a statutory preference is shown to a State Transport Undertaking. In *Viklad Coal Merchant v. Union of India*<sup>3</sup> the preference shown to the government in allotment of railway wagons for transporting coal has been upheld. Learned counsel for the respondents however depended upon the decision of this Court in *State of Rajasthan v. Mukandchand*<sup>4</sup> by which an exemption granted in respect of debts due to the State or a scheduled bank from the operation of Section 2(e) of the Jagirdar's Debt Reduction Act, 1937 was held to be not in conformity with the object of the Act and so violative of Article 14 of the Constitution. That case depended on the facts and circumstances surrounding the statute in question. We may refer here to the decision of this Court in *Fatehchand Himmatlal v. State of Maharashtra*<sup>5</sup> where it is observed at page 849 of the Reports thus : (SCC p. 688, para 41)

There is no merit in the plea. Liabilities due to government or local authorities are not tainted with exploitation of the debtor. Likewise, debts due to banking companies do not ordinarily suffer from overreaching, unscrupulousness or harsh treatment. Moreover, financial institutions have, until recently, treated the village and urban worker and petty farmer as untouchables and so do not figure in the picture. To exempt the categories above referred to is reasonable.

10. Hence preference shown to government companies under Section 6 of the Act cannot be considered to be discriminatory as they stand in a different class altogether and the classification made between government companies and others for the purposes of the Act is a valid one. Same is the case with the clause which gives power under Section 6 of the Act to the government to exempt sales of forest produce in favour of co-operative societies up to the limit mentioned therein. In *P.V. Sivarajan v. Union of India*<sup>6</sup> the exemption granted

2. (1984) 1 SCR 464 : (1984) 1 SCC 107 : AIR 1984 SC 200
3. (1984) 1 SCR 657 : (1984) 1 SCC 619 : AIR 1984 SC 95
4. (1964) 6 SCR 903 : AIR 1964 SC 1633
5. (1977) 2 SCR 828 : (1977) 2 SCC 670 : AIR 1977 SC 1825
6. 1959 Supp 1 SCR 779 : AIR 1959 SC 556



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(1986) 3 SCC

in favour of traders carrying on export business in a small scale who formed co-operative societies was upheld. In *Orient Weaving Mills (P) Ltd. v. Union of India*<sup>7</sup> this Court upheld the exemption granted in favour of power-loom weavers in a co-operative society from the levy of central excise duties. We do not find any substance in the contention that the provision granting exemption in favour of government companies and the co-operative societies as stated above is unconstitutional. We must, however, express our disapproval of one of the reasons given by the High Court for striking down Section 6 of the Act, namely, "private sector consumers generally show more concern in the speedy production of goods, in the finished products and in the sale of them which is in public interest as well". The above observation is not warranted and is presumably based on the personal opinion of the learned judges. It is misleading and cannot in the circumstances of the case serve as a prop to support the contention of the respondents.

11. Therefore, the decision of the High Court that Section 6 of the Act was violative of Article 14 of the Constitution is liable to be set aside. We do not also approve of the finding of the High Court that even assuming that the section was valid, the notification issued thereunder was invalid. It may be stated here that the writ petitioners on whom the burden lay have not given any valid reason as to why we should hold that the impugned notification was not in the public interest. As mentioned earlier the appellant, Hindustan Paper Corporation Ltd. established its factory after entering into an agreement with the State Government as regards the regular supply of raw material from the forests in the State of Kerala for production of newsprint and that the said factory was employing a large labour force. The other two concerns in whose favour the exemption is granted by the impugned notification are the concerns of Kerala Government itself. We have no material in this case to hold that the impugned notification was not in the public interest. We accordingly set aside the finding recorded by the High Court on the validity of the notification also.

12. In the result, we allow the appeals, set aside the judgment of the High Court and dismiss the writ petitions filed in the High Court. There shall, however, be no order as to costs.

7. 1962 Supp 3 SCR 481 : AIR 1963 SC 98



U.P. Pollution Control Board

**CONSENT ORDER**

Ref No. -  
5207/UPPCB/Basti(UPPCBRO)/CTO/air/BALRAMPUR/2017

Dated : 08/02/2018

To ,

M/S DR AJAY VIKRAM SINGH  
BAJAJ ENERGY LTD UTRAULA BALRAMPUR  
VILL ITAI MAIDA POST MAHUWA IBRAHIM DISTT BAL RAMPUR (UP  
BALRAMPUR

Sub : Consent under section 21/22 of the Air (Prevention and control of Pollution) Act, 1981 (as amended)  
to M/s. BAJAJ ENERGY LTD UTRAULA BALRAMPUR

Reference Application No. 234270

Dated : 08/02/2018

1. With reference to the application for consent for emission of air pollutants from the plant of M/s BAJAJ ENERGY LTD UTRAULA BALRAMPUR. under Air Act 1981. It is being authorised for said emissions, as per the standards, in environment, by the Board as per enclosed conditions .
  2. This consent is valid for the period from 01/01/2018 to 31/12/2019 .
  3. In spite of the conditions and provisions mentioned in this consent order UP Pollution Control Board reserves its right and powers to reconsider/amend any or all conditions under section 21 (6) of the Air (Prevention and Control of Pollution) Act, 1981 as amended.
- This consent is being issued with the permission of competent authority .

Digitally signed by  
PRAMOD MISHRA  
Date: 2018.02.20  
13:11:49 +05'30'

For and on behalf of U.P. Pollution Control Board

Enclosed : As above  
(condition of consent):

Copy to: Regional Officer, U.P. Pollution Control Board, Basti for information and necessary action.

Digitally signed by  
PRAMOD MISHRA  
Date: 2018.02.20  
13:12:03 +05'30'

## U.P. Pollution Control Board

Dated : 08/02/2018

## CONDITIONS OF CONSENT

1. This consent is valid only for the approved production capacity of 90 Megawatt/hr Electricity.
- 2(a). The maximum rate of emission of flue gas should not be more than the emission norms for the stacks.

Air Pollution Source Details					
S.No	Air Pollution Source	Type of Fuel	Stack No.	Parameters	Height
1	180 TPHx2 Boiler	Coal 1600 ton/day	1	Particulate Matter	110 mtr

- 2(b). The emissions by various stacks into the environment should be as per the norms of the Board.

Emission Quality Details Detail			
S.No	Stack No	Parameter	Standard
1	1	Particulate Matter	150 mg/Nm3
2	1	Sulphur Dioxide	80 mg/Nm3
3	1	Oxides of Nitrogen	80 mg/Nm3

3. Quantity of other pollutants should also be as per the norms prescribed by the Board/MOEF & CC/or otherwise mandatory.
4. The equipment for air pollution control system and monitoring, as proposed by the industry and approved by the Board should be installed in their premises itself.
5. The modification or installation in the existing pollution control equipments should be done only by prior approval of Board.
6. The operation of air pollution control system and maintenance be done in such a way that the quantity of pollutants should be in accordance with the standards prescribed by the Board/MoEF & CC/or otherwise mandatory.
7. Unit should do provisions for fugitive emissions chimney/stack as per the norms of the Board/MOEF & CC/or otherwise mandatory.
8. The unit should submit the stack emissions monitoring report within one month from issuance of consent order along with the point wise compliance report of the consent order. Further quarterly monitoring report should be submitted.

## Specific Conditions:

1. This consent is being issued only for production of 90 Megawatt/hr Electricity/power generation.
2. Industry shall submit Environment Statement to this Board as per provision of Environment (Protection) amendment Rule, 1993 for the previous year ending 31st March on or before 30th September every year.
3. Wide and dense green belt of broad leaf local species shall be developed all along the plant premises. As far as possible maximum area of open spaces shall be utilized for plantation purposes. Industry shall develop green belt within and around the plant premises in at-least 33% area of the total project area. Extensive tree plantation shall be carried out in this year.
4. Implementation report of Consent Compliance must be submitted.
5. The consent will be self-suspended in case of Closure issued by CPCB and incase of revoke closure order consent shall be effective for operation.
6. The industry have been maintain boundary-wall around the ash pond and insure for not leaching of effluent.
7. The industry shall be maintain the records of electricity consumption for the operation of APCs. and submit the mentioned details to UPPCB.
8. Stack and Ambient Air Monitoring report must be submitted every Three Months.
9. Industry shall make proper arrangement for safe and scientific handling, storage, transportation and disposal of coal Ash.
10. Industry have been comply to continues water sprinkling for control of fugitive dust emission.
11. All D.G. sets must have equipped with acoustic enclosure to control Noise Pollution.
12. Industry must be comply the order of CPCB as per charter.
13. Industry have been insure good house keeping in own campus and near by area.
14. Audited Balance Sheet/ C.A. Certificate should be submitted within one month from the date of issue of this Certificate for verification of Consent fee payable.

Issued with the permission of competent authority .

Digitally signed by  
PRAMOD MISHRA  
Date: 2018.02.20  
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For and on behalf of U.P. Pollution Control Board .



फोन Phone -26511211  
फैक्स Fax : 26865206  
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वेबसाइट Website : www.nrpc.gov.in

भारत सरकार  
विद्युत मंत्रालय  
उत्तर क्षेत्रीय विद्युत समिति  
18-ए, श.जीत सिंह मार्ग, कटवारिया सराय,  
नई दिल्ली 110016  
Government of India  
Ministry of Power  
Northern Regional Power Committee  
18-A, S. Jai Singh Marg, Katwaria Sarai,  
New Delhi-110016

सं. उल्लेखित/ वाणिज्यिक/ 209/ टी सी सी (39 वीं)/2017/10899-10945  
No. NRPC/ Comm/ 209/ TCC (36<sup>th</sup>)/2017

दिनांक : 04 अक्टूबर, 2017  
Dated: 04<sup>th</sup> October, 2017

सेवा में / To,

उ.क्षे.वि.स. के सभी सदस्य  
Members of NRPC/TCC

विषय: तकनीकी समन्वय उप-समिति की 36 वीं बैठक का कार्यवृत्त।

Subject: Minutes of 36<sup>th</sup> (special) TCC meeting of NR

महोदय / Sir,

तकनीकी समन्वय उप-समिति की 36 वीं बैठक दिनांक 14 सितम्बर 2017 को उत्तर क्षेत्रीय विद्युत समिति, नई दिल्ली में आयोजित की गयी थी। इन बैठकों के कार्यवृत्त की एक प्रति आपकी सूचना व आवश्यक कार्यवाही हेतु इस पत्र के साथ संलग्न है।

The 36<sup>th</sup> meeting of TCC was held on 14<sup>th</sup> September, 2017 at NRPC, New Delhi. A copy of the minutes of the meetings is enclosed herewith for favour of information and necessary action.

भवदीय/Yours faithfully,

(एम.ए.के.पी. सिंह)  
(M.A.K.P. Singh)  
सदस्य सचिव  
Member Secretary

**Minutes of Special TCC meeting held on 14.09.2017 on Preparation of Phasing Plan for implementation of new Environmental Norms for Thermal Plants in Northern Region**

A special TCC meeting of NRPC was held on 14.09.2017 at NRPC, New Delhi to prepare phasing Plan for implementation of new Environmental Norms for Thermal Plants in Northern Region. The list of participants in the meeting is enclosed at Annexure-1.

1. Chairman TCC welcomed the delegates of the Special TCC meeting. He expressed his satisfaction that peak load period in Northern Region has almost passed without any significant event affecting grid security. In Northern Region, the installed capacity is about 91 GW against demand of about 59 GW with the Coal based capacity being more than 52 GW. With current developments in power sector owing to thrust on renewable and compliance of environmental norms, the coal based generation is likely to be affected.

He briefed that the objective of the Special TCC meeting convened was related to compliance of environmental norms by Coal based generating stations. The new norms would require installation of specific pollution control equipment for SO<sub>x</sub> and NO<sub>x</sub> control as well as augmentation of ESPs for complying with more stringent SPM norms in Coal based generating plants. He expressed hope that with constructive deliberations in the meeting this forum would be able to finalize FGD installation and ESP up-gradation plan for Northern Region.

2. Member Secretary, NRPC welcomed the delegates and informed that NRPC had been assigned the responsibility of preparing the phasing plan for the identified units in the Northern Region for FGD installation and ESP up gradation in consultation with all the entities for compliance of new Environmental norms for Thermal Plants. He asserted that an action plan has already been chalked out after consultation with stakeholders which extended till the year 2024. However, in a meeting held between Secretary (Power) and Secretary (MoEF&CC) on 01.09.2017, it was decided that the implementation plan for FGD installation and ESP up gradation must be within 31.12.2022. The existing phasing plan for some units exceeds the new timeline, thus need to be reviewed
3. NRPC Secretariat made a presentation on the implementation of new environmental norms for Thermal Power Stations. Delegates were informed that the revised norms notified by MoEF&CC in December 2015 for SPM, SO<sub>x</sub>, NO<sub>x</sub>, and Mercury and water consumption are more stringent ones.
4. In the Northern Region there are total 154 coal and lignite based units with total capacity of 42963 MW. Out of these 154 units, 24 units (2 already have FGD system and 22 are CFBC) are likely to limit SO<sub>x</sub> level within the levels as per the new environment norms.
5. Further, 17 units have already been identified for retirement by the year 2022, and 19 units have no space for FGD installation. So, phasing out plan for these 36 units would need to be prepared. [Annexure 2(A) and 2(B)]

6. The phasing plan of the remaining units thus needs to be discussed. The criteria for the plan has been worked out taking into account the following:
  - a. The estimated shutdown requirement for FGD installation taken as 2 months
  - b. Units in NCR and polluted areas to taken up for FGD installation first (preferably by 2020)
  - c. Newer units to be taken up first for FGD installation
  - d. Phasing of all units of a particular plant to take place in successive months
  - e. Minimum outage in peak months of May-Aug
  - f. Power supply position in the Northern Region to ensure that every state has availability to meet their peak demand.
7. Representatives from MGTPP Jhajjar informed that the existing FGDs were designed for imported coal envisaged earlier for operation of MGTPP. The new SOx emission limit of 200 mg/Nm<sup>3</sup> cannot be achieved by these FGDs and augmentation and auxiliary systems would be needed. He requested extension upto January 2019 for carrying out the above works. Accordingly, MGTPP was shifted from the list of power plants already having FGD to the list of plants covered under "Phasing Plan for units identified for FGD installation" and it was given a timeline of January 2019 to comply with the new SOx emission limits with continuous operation of FGDs.
8. The phasing plan for FGD installation of the 96 units which do not meet SOx emission norms as decided in the meeting is given in Annexure 2(C).
9. Regarding ESP up gradation, it was stated that all those units where SPM level is below 100 mg/Nm<sup>3</sup> may be able to meet the new norms with FGD installation itself [Annexure-2(D)]. However, Owner of these units must ensure that the new norms are complied and if any action is required, shall be taken by them. The units having CFBC boiler, which do not require FGD installation for compliance of SOx norms would take up ESP up-gradation to comply the SPM norms as per time line given at Annexure 2 (D). The phasing plan for ESP up-gradation of units where SPM level is above 100 mg/Nm<sup>3</sup> is given in Annexure 2(E).
10. Representatives from some entities stated that they have filed petitions with their respective Regulatory Commissions for tariff revision on account of cost incurred for FGD installation, incremental O&M charges and Auxiliary Power Consumption. They requested that a letter for expediting this process may be issued to all Regulatory Commissions as funds for procurement of FGDs would only be mobilized after concurrence of CERC/SERC for tariff revision. Member Secretary, NRPC assured that a letter in this regard would be written to all SERCs and CERC for their consideration. It was also stated by the entities that a minimum period of 36-40 months would be required for FGD installation.
11. The specific issues raised by representatives of utilities whose units were identified for installation of FGD or up-gradation of ESP are listed in Annexure 3.

Participants list Special TCC meeting held on 14.09.2017 at NRPC Sectt New Delhi

S.No.	Name of Officer	Designation	Organization	Mobile Number	Email Address
1	M.R.Parhan	Dir./Gen	PSPCL	9646200031	director-generation@pspcl.in
2	Balbir Singh	Advisor (Power)	LPGL & BEL	7838211194	balbirsingh@lpgl.com
3	Vikas Saxena	President (PS)	LPGL	9971200857	vsaxena@lpgl.com
4	A.K.Singh	CE(SLDC)	UPSLDC	9415006223	cecs@upslc.org
5	Om Prakash	AGM	APCPL/Jharkhand	0416312479	omprakash01@ntpc.co.in
6	P. Mediratta	AGM	APCPL/Jharkhand	9416212411	pmediratta@ntpc.co.in
7	T.Nrusimha	AGM	TSPL	8146628462	
8	M.Durairaj	Head-Projects	TSPL	9501110721	m.durairaj@vodanto.co.in
9	Sanjay Uppal	CGM	SJVNL	9871772582	uppalsanjay@sjvn.nic.in
10	G.S.Mander	Dy.Mgr	SJVNL	8800664182	goreshankar@gail.com
11	O.M.Reddy	JGM	Nabha Power Ltd.	9833069893	o.madhusudan.reddy@larsentubro.com
12	Bhramar Majhi	Sr.DGM	Nabha Power Ltd.	8283803708	bhramar.charanmajhi@larsentubro.com
13	S.K.Sinha	DGM	SLDC, Delhi	9999533673	sinha.surendra@yahoo.com
14	Mangal Singh	CE(civil)	RVUN, Jaipur	9413385670	ce.civil.jaipur@rvun.com
15	N.N.M.Rao	CGM(Barsingsar)	NLC India Ltd.	9602038118	nnmrao@nlcindia.com
16	Himanshu Gupta	EE	HPGL	9354782005	himanshugupta@hpgcl.org.in
17	S.K.Khungar	CE	HPGL	9540940022	skkhungar@hpgcl.org.in
18	Samir Ganju	Head NR	Adani	8860550077	samirganju@adani.com
19	Jagdish Kumar	Dir.tech.	IPGL	9958701234	jkumar190@yahoo.co.in
20	Dashani Bhojraj	GM	Rajwest Power	9783800377	bhojraidashani@jsw.in
21	S.K.Bagai	President	Prayagraj Power	9971119820	skbagai@jalindia.co.in
22	M.K.V.Rao	Director	Prayagraj Power	9650994345	mkvrrao@jalindia.co.in
23	M.P.Singh	Sr.Vice president	JPVL	9910900380	mp1singh@jalindia.co.in
24	Awadesh kumar	GM(OS)	NTPC	9650992634	Awadeshkumar@ntpc.co.in
25	P.K. Gupta	AGM	NTPC	9650991868	pkgupta@ntpc.co.in
26	Sanjay Shrivastav	AVP	BRPL	9312147045	sanjayshrivastav@rellanceoda.com
27	Sandeep Sarwate	ACE	NPCIL HQ	9869441211	ssarwate@npcil.co.in
28	Raminder Singh	Sr. XLN	PSTCL	9646118731	raminder1983@gmail.com
29	Sunil Singh	AVP	SCL	9214200184	shreebwr@shreecementltd.com
30	S Dhawan	UP	GVK	9717120415	sdhawan@gvk.com
31	Hemant Sharma	Manager	GVK	9312949040	hemantkumar@gvk.com
32	Haridas Maity	General Manager	BYPL	9350110156	haridas.maity@rellanceoda.com
33	Rajneesh Setia	Se. Manager	CLP India	70879775769	rajneeshsetia@clpindia.in
34	Arun Tholia	General Manager	Lanco Anpara	9560464455	aruntholia@lancogroup.com
35	Sidharth Jalali	Dy.Mgr	Lanco Anpara	9717657711	sidharthjalali@lancogroup.com
36	Ranjeet Joshi	General Manager	Lanco Anpara	8800392221	ranjeetjoshi@lancogroup.com
37	N. Nallarasani	Dy Gen Manager	NLDC, POSOCO	8527077022	nallarasani@posoco.in
38	Rajeev Porwal	DGM	NRLDC, POSOCO	9871581133	rkporwal@posoco.in
39	D.K. Jain	General Manager	NRLDC, POSOCO	9910344127	dkjain@posoco.in
40	B.K. Sharma	PCE	CEA		bks59@nic.in
41	Rajesh Kumar	DD	CEA		rk62@nic.in
42	MAKP Singh	MS	NRPC	9968667741	ms-nrpc@nic.in
43	Upendra Kumar	SE	NRPC	9910180485	seo-nrpc@nic.in
44	Hemant Pandey	SE	NRPC	9868966170	hemantcea1@gmail.com
45	Sonia Chauhan	ASE	NRPC	9814804274	soniaq.vij456@gmail.com
46	Anil Kawrani	EE	NRPC	9811396969	anilkawrani@nic.in
47	BS Meena	EE	NRPC	8750251805	seo-nrpc@nic.in
48	Vikrant Dhillon	AEE	NRPC	8800121247	vikrantdhillon@gov.in



# ANNEXURE - C

# UTR

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List of Units identified for retirement

ANNEXURE 2 (A)

Sr. No.	Developer	Name of Project	Sector	State	Unit No	Total Capacity	DT-of COMMISSIONING	Phase out plan
1	IPGCL	RAJGHAT TPS	State Sector	Delhi	1	68	10-03-89	RETIRED
2	IPGCL	RAJGHAT TPS	State Sector	Delhi	2	68	20-02-90	RETIRED
3	NTPC	BADARPUR TPS	Central Sector	Delhi	1	95	20-07-73	July'18
4	NTPC	BADARPUR TPS	Central Sector	Delhi	2	95	05-08-74	July'18
5	NTPC	BADARPUR TPS	Central Sector	Delhi	3	95	29-03-75	July'18
6	PSEB	GND TPS(BHATINDA)	State Sector	Punjab	1	110	22-09-74	Dec'17
7	PSEB	GND TPS(BHATINDA)	State Sector	Punjab	2	110	15-09-75	Dec'17
8	PSEB	ROPAR TPS	State Sector	Punjab	1	210	26-09-84	Dec'17
9	PSEB	ROPAR TPS	State Sector	Punjab	2	210	30-03-85	Dec'17
10	PSEB	ROPAR TPS	State Sector	Punjab	3	210	31-03-88	Dec'22
11	PSEB	ROPAR TPS	State Sector	Punjab	4	210	29-01-09	Dec'22
12	UPRVUNL	HARDUAGANJ TPS	State Sector	Uttar Pradesh	5	60	21-03-77	RETIRED
13	UPRVUNL	OBRA TPS	State Sector	Uttar Pradesh	1	40	15-08-67	RETIRED
14	UPRVUNL	OBRA TPS	State Sector	Uttar Pradesh	2	50	12-02-68	RETIRED
15	UPRVUNL	OBRA TPS	State Sector	Uttar Pradesh	8	94	15-09-75	Dec'18
16	UPRVUNL	PANKI TPS	State Sector	Uttar Pradesh	3	105	10-11-76	Dec'18
17	UPRVUNL	PANKI TPS	State Sector	Uttar Pradesh	4	105	24-03-77	Dec'18

1934 MW

(17 Units)

# ANNEXURE - C

# UTR

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List of Units where FGD is not possible

ANNEXURE -2 (B)

Sr. No.	Developer	Name of Project	Sector	State	Unit No	Total Capacity	DT-of COMMISSIONING	Phase out plan
1	NTPC	BADARPUR TPS	Central Sector	Delhi	4	210	02-12-78	31/07/2018
2	NTPC	BADARPUR TPS	Central Sector	Delhi	5	210	25-12-81	31/07/2018
3	HGPCorpn	PANIPAT TPS	State Sector	Haryana	5	210	28-03-89	31/12/2018
4	PSEB	GND TPS(BHATINDA)	State Sector	Punjab	3	110	29-03-78	31/12/2017
5	PSEB	GND TPS(BHATINDA)	State Sector	Punjab	4	110	31-01-79	31/12/2017
6	PSEB	ROPAR TPS	State Sector	Punjab	5	210	29-03-92	31/12/2022
7	PSEB	ROPAR TPS	State Sector	Punjab	6	210	30-03-93	31/12/2022
8	RRVUNL	KOTA TPS	State Sector	Rajasthan	1	110	17-01-83	31/12/2022
9	RRVUNL	KOTA TPS	State Sector	Rajasthan	2	110	18-01-83	31/12/2022
10	RRVUNL	KOTA TPS	State Sector	Rajasthan	3	210	25-09-88	31/12/2022
11	RRVUNL	KOTA TPS	State Sector	Rajasthan	4	210	01-05-89	31/12/2022
12	NTPC	TANDA TPS	Central Sector	Uttar Pradesh	1	110	21-03-88	31/12/2021
13	NTPC	TANDA TPS	Central Sector	Uttar Pradesh	2	110	11-03-89	31/12/2021
14	NTPC	TANDA TPS	Central Sector	Uttar Pradesh	3	110	28-03-90	31/12/2021
15	NTPC	TANDA TPS	Central Sector	Uttar Pradesh	4	110	20-02-98	31/12/2021
16	UPRVUNL	HARDUAGANJ TPS	State Sector	Uttar Pradesh	7	105	31-03-78	31/12/2022
17	UPRVUNL	OBRA TPS	State Sector	Uttar Pradesh	7	94	14-12-74	31/12/2020
18	UPRVUNL	PARICHHA TPS	State Sector	Uttar Pradesh	1	110	31-03-84	31/12/2022
19	UPRVUNL	PARICHHA TPS	State Sector	Uttar Pradesh	2	110	25-02-85	31/12/2022

2769 MW

(19 Units)

## Phasing plan for FGD installation

## ANNEXURE -2 (C)

Sr. No.	Developer	Name of Project	Sector	State	Region	Unit No	Total Capacity	DT-of COMMISSIONING	Phasing Plan for FGD Installation
1	HGPCorpn	PANIPAT TPS	State Sector	Haryana	NR	6	210	31-03-01	March-April 2021
2	HGPCorpn	PANIPAT TPS	State Sector	Haryana	NR	7	250	28-09-04	Jan-Feb 2021
3	HGPCorpn	PANIPAT TPS	State Sector	Haryana	NR	8	250	28-01-05	Nov-Dec 2020
4	HGPCorpn	RAJIV GANDHI TPS	State Sector	Haryana	NR	1	800	31-03-10	March-April 2022
5	HGPCorpn	RAJIV GANDHI TPS	State Sector	Haryana	NR	2	600	01-10-10	Jan-Feb 2022
6	HGPCorpn	YAMUNA NAGAR TPS	State Sector	Haryana	NR	1	300	01-11-07	Nov-Dec 2021
7	HGPCorpn	YAMUNA NAGAR TPS	State Sector	Haryana	NR	2	300	29-02-08	Sept-Oct 2021
8	NTPC	INDIRA GANDHI STPP	Central Sector	Haryana	NR	1	600	31-10-10	Sept-Oct 2020
9	NTPC	INDIRA GANDHI STPP	Central Sector	Haryana	NR	2	500	04-11-11	March-April 2020
10	NTPC	INDIRA GANDHI STPP	Central Sector	Haryana	NR	3	500	07-11-12	Jan-Feb 2020
11	GVK Power Ltd.	GOINDWAL SAHIB	Private Sector	Punjab	NR	1	270	14-02-16	March-April 2020
12	GVK Power Ltd.	GOINDWAL SAHIB	Private Sector	Punjab	NR	2	270	15-03-16	Jan-Feb 2020
13	L&T PDL (Nabha)	Nabha TPP (Rajpura TPP)	Private Sector	Punjab	NR	1	700	24-01-14	March-April 2021
14	L&T PDL (Nabha)	Nabha TPP (Rajpura TPP)	Private Sector	Punjab	NR	2	700	06-01-14	Jan-Feb 2021
15	PSEB	GH TPS (LEH.MOH.)	State Sector	Punjab	NR	1	210	29-12-97	March-April 2022
16	PSEB	GH TPS (LEH.MOH.)	State Sector	Punjab	NR	2	210	16-10-98	March-April 2022
17	PSEB	GH TPS (LEH.MOH.)	State Sector	Punjab	NR	3	250	03-01-08	Jan-Feb 2022
18	PSEB	GH TPS (LEH.MOH.)	State Sector	Punjab	NR	4	250	31-07-08	Jan-Feb 2022
19	TSPL	TALWANDI SABO TPP	Private Sector	Punjab	NR	1	660	17-06-14	Jan-Feb 2021
20	TSPL	TALWANDI SABO TPP	Private Sector	Punjab	NR	2	660	25-10-15	Nov-Dec 2020
21	TSPL	TALWANDI SABO TPP	Private Sector	Punjab	NR	3	660	29-03-16	Sept-Oct 2020
22	Adani Power Ltd.	KAWAI TPS	Private Sector	Rajasthan	NR	1	660	28-05-13	July-Aug 2020
23	Adani Power Ltd.	KAWAI TPS	Private Sector	Rajasthan	NR	2	660	24-12-13	May-June 2020
24	RRVUNL	CHHABRA TPP	State Sector	Rajasthan	NR	1	250	30-10-09	Nov-Dec 2021
25	RRVUNL	CHHABRA TPP	State Sector	Rajasthan	NR	2	250	04-05-10	Sept-Oct 2021
26	RRVUNL	CHHABRA TPP	State Sector	Rajasthan	NR	3	250	14-09-13	July-Aug 2021
27	RRVUNL	CHHABRA TPP	State Sector	Rajasthan	NR	4	250	30-06-14	July-Aug 2021
28	RRVUNL	CHHABRA TPP	State Sector	Rajasthan	NR	5	660	04-04-17	March-April 2020
29	RRVUNL	KALISINDH TPS	State Sector	Rajasthan	NR	1	600	02-05-14	May-June 2021
30	RRVUNL	KALISINDH TPS	State Sector	Rajasthan	NR	2	600	06-06-15	March-April 2021
31	RRVUNL	KOTA TPS	State Sector	Rajasthan	NR	5	210	26-03-94	Nov-Dec 2022
32	RRVUNL	KOTA TPS	State Sector	Rajasthan	NR	6	195	30-01-03	Nov-Dec 2022
33	RRVUNL	KOTA TPS	State Sector	Rajasthan	NR	7	195	30-08-08	Sept-Oct 2022
34	RRVUNL	SURATGARH TPS	State Sector	Rajasthan	NR	1	250	10-05-98	Nov-Dec 2022
35	RRVUNL	SURATGARH TPS	State Sector	Rajasthan	NR	2	250	28-03-00	Sept-Oct 2022
36	RRVUNL	SURATGARH TPS	State Sector	Rajasthan	NR	3	250	29-10-01	July-Aug 2022
37	RRVUNL	SURATGARH TPS	State Sector	Rajasthan	NR	4	250	25-03-02	May-June 2022
38	RRVUNL	SURATGARH TPS	State Sector	Rajasthan	NR	5	250	30-06-03	March-April 2022
39	RRVUNL	SURATGARH TPS	State Sector	Rajasthan	NR	6	250	29-08-09	Jan-Feb 2022
40	Lalitpur Power Gen. Co	LALITPUR TPS	Private Sector	Uttar Pradesh	NR	2	660	08-01-16	Jan-Feb 2021
41	Lalitpur Power Gen. Co	LALITPUR TPS	Private Sector	Uttar Pradesh	NR	3	660	01-04-16	Sept-Oct 2020
42	Lalitpur Power Gen. Co.	LALITPUR TPS	Private Sector	Uttar Pradesh	NR	1	660	26-03-16	Nov-Dec 2020
43	Lanko Anpara Pow Ltd	ANPARA C TPS	Private Sector	Uttar Pradesh	NR	1	600	12-10-11	July-Aug 2022
44	Lanko Anpara Pow Ltd	ANPARA C TPS	Private Sector	Uttar Pradesh	NR	2	600	18-01-12	May-June 2022
45	NTPC	DADRI (NCTPP)	Central Sector	Uttar Pradesh	NR	1	210	21-12-91	Nov-Dec 2020
46	NTPC	DADRI (NCTPP)	Central Sector	Uttar Pradesh	NR	2	210	18-12-92	Sept-Oct 2020
47	NTPC	DADRI (NCTPP)	Central Sector	Uttar Pradesh	NR	3	210	23-03-93	July-Aug 2020
48	NTPC	DADRI (NCTPP)	Central Sector	Uttar Pradesh	NR	4	210	24-03-94	May-June 2020
49	NTPC	DADRI (NCTPP)	Central Sector	Uttar Pradesh	NR	5	490	25-01-10	March-April 2020

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50	NTPC	DADRI (NCTPP)	Central Sector	Uttar Pradesh	NR	6	490	16-07-10	Jan-Feb 2020
51	NTPC	RIHAND STPS	Central Sector	Uttar Pradesh	NR	1	500	31-03-88	Jan-Feb 2022
52	NTPC	RIHAND STPS	Central Sector	Uttar Pradesh	NR	2	500	05-07-89	Nov-Dec 2021
53	NTPC	RIHAND STPS	Central Sector	Uttar Pradesh	NR	3	500	31-01-86	Sept-Oct 2021
54	NTPC	RIHAND STPS	Central Sector	Uttar Pradesh	NR	4	500	24-09-05	March-April 2021
55	NTPC	RIHAND STPS	Central Sector	Uttar Pradesh	NR	5	500	25-05-12	Jan-Feb 2021
56	NTPC	RIHAND STPS	Central Sector	Uttar Pradesh	NR	6	500	17-10-13	Nov-Dec 2020
57	NTPC	SINGRAULI STPS	Central Sector	Uttar Pradesh	NR	1	200	14-02-82	Nov-Dec 2021
58	NTPC	SINGRAULI STPS	Central Sector	Uttar Pradesh	NR	2	200	25-11-82	Nov-Dec 2021
59	NTPC	SINGRAULI STPS	Central Sector	Uttar Pradesh	NR	3	200	28-03-83	July-Aug 2021
60	NTPC	SINGRAULI STPS	Central Sector	Uttar Pradesh	NR	4	200	02-11-83	July-Aug 2021
61	NTPC	SINGRAULI STPS	Central Sector	Uttar Pradesh	NR	5	200	26-02-84	March-April 2021
62	NTPC	SINGRAULI STPS	Central Sector	Uttar Pradesh	NR	6	500	24-12-86	Jan-Feb 2021
63	NTPC	SINGRAULI STPS	Central Sector	Uttar Pradesh	NR	7	500	24-11-87	Nov-Dec 2020
64	NTPC	UNCHAHAR TPS	Central Sector	Uttar Pradesh	NR	1	210	21-11-88	Nov-Dec 2022
65	NTPC	UNCHAHAR TPS	Central Sector	Uttar Pradesh	NR	2	210	22-03-89	Nov-Dec 2022
66	NTPC	UNCHAHAR TPS	Central Sector	Uttar Pradesh	NR	3	210	27-01-89	Sept-Oct 2022
67	NTPC	UNCHAHAR TPS	Central Sector	Uttar Pradesh	NR	4	210	22-10-99	Sept-Oct 2022
68	NTPC	UNCHAHAR TPS	Central Sector	Uttar Pradesh	NR	5	210	28-09-06	March-April 2022
69	NTPC	UNCHAHAR TPS	Central Sector	Uttar Pradesh	NR	6	500	31-03-17	July-Aug 2020
70	Prayagraj PGCL	PRAYAGRAJ TPP	Private Sector	Uttar Pradesh	NR	1	660	25-12-16	March-April 2020
71	Prayagraj PGCL	PRAYAGRAJ TPP	Private Sector	Uttar Pradesh	NR	2	660	06-09-15	May-June 2020
72	Prayagraj PGCL	PRAYAGRAJ TPP	Private Sector	Uttar Pradesh	NR	3	660	22-05-17	Jan-Feb 2020
73	Rosa Power Supply Co	ROSA TPP Ph-I	Private Sector	Uttar Pradesh	NR	1	300	10-02-10	Nov-Dec 2021
74	Rosa Power Supply Co	ROSA TPP Ph-I	Private Sector	Uttar Pradesh	NR	2	300	26-06-10	Nov-Dec 2021
75	Rosa Power Supply Co	ROSA TPP Ph-I	Private Sector	Uttar Pradesh	NR	3	300	28-12-11	Sept-Oct 2021
76	Rosa Power Supply Co	ROSA TPP Ph-I	Private Sector	Uttar Pradesh	NR	4	300	28-03-12	Sept-Oct 2021
77	UPRVUNL	ANPARA TPS	State Sector	Uttar Pradesh	NR	1	210	24-03-86	Sept-Oct 2022
78	UPRVUNL	ANPARA TPS	State Sector	Uttar Pradesh	NR	2	210	28-02-87	July-Aug 2022
79	UPRVUNL	ANPARA TPS	State Sector	Uttar Pradesh	NR	3	210	12-03-88	May-June 2022
80	UPRVUNL	ANPARA TPS	State Sector	Uttar Pradesh	NR	4	500	19-07-93	March-April 2022
81	UPRVUNL	ANPARA TPS	State Sector	Uttar Pradesh	NR	5	500	04-07-94	Jan-Feb 2022
82	UPRVUNL	ANPARA TPS	State Sector	Uttar Pradesh	NR	6	500	08-06-15	May-June 2021
83	UPRVUNL	ANPARA TPS	State Sector	Uttar Pradesh	NR	7	500	06-03-16	March-April 2021
84	UPRVUNL	HARDUAGANJ TPS	State Sector	Uttar Pradesh	NR	8	250	27-09-11	Nov-Dec 2021
85	UPRVUNL	HARDUAGANJ TPS	State Sector	Uttar Pradesh	NR	9	250	25-05-12	Sept-Oct 2021
86	UPRVUNL	OBRA TPS	State Sector	Uttar Pradesh	NR	9	200	26-10-80	July-Aug 2022
87	UPRVUNL	OBRA TPS	State Sector	Uttar Pradesh	NR	10	200	14-01-79	Sept-Oct 2022
88	UPRVUNL	OBRA TPS	State Sector	Uttar Pradesh	NR	11	200	31-12-77	Nov-Dec 2022
89	UPRVUNL	OBRA TPS	State Sector	Uttar Pradesh	NR	12	200	28-03-81	May-June 2022
90	UPRVUNL	OBRA TPS	State Sector	Uttar Pradesh	NR	13	200	21-07-82	March-April 2022
91	UPRVUNL	PARICHHA TPS	State Sector	Uttar Pradesh	NR	3	210	29-03-06	March-April 2022
92	UPRVUNL	PARICHHA TPS	State Sector	Uttar Pradesh	NR	4	210	28-12-06	March-April 2022
93	UPRVUNL	PARICHHA TPS	State Sector	Uttar Pradesh	NR	5	250	24-05-12	Jan-Feb 2022
94	UPRVUNL	PARICHHA TPS	State Sector	Uttar Pradesh	NR	6	250	11-03-13	Nov-Dec 2021
95	CLP	MAHATMA GANDHI TPS	Private Sector	Haryana	NR	1	660	12-01-12	Dec-18-Jan-19
96	CLP	MAHATMA GANDHI TPS	Private Sector	Haryana	NR	2	660	11-04-12	Dec-18-Jan-19

TOTAL CAPACITY 36230 MW

(96 Units)

Units having SPM level less than 100 mg/Nm<sup>3</sup>

ANNEXURE 2 (D)

Sr. No.	Developer	Name of Project	Sector	State	Unit No	Total Capacity	OT of COMMISSIONING	Present SPM Level	Phasing Plan for Implementation
361	HGPC Corpn	RAJIV GANDHI TPS	State Sector	Haryana	1	600	31-03-10	90	*
362	HGPC Corpn	RAJIV GANDHI TPS	State Sector	Haryana	2	600	01-10-10	98	*
363	HGPC Corpn	YAMUNA NAGAR TPS	State Sector	Haryana	1	300	01-11-07	99	*
364	HGPC Corpn	YAMUNA NAGAR TPS	State Sector	Haryana	2	300	29-03-08	89	*
365	NTPC	INDIRA GANDHI STPP	Central Sector	Haryana	1	500	31-10-10	65	*
366	NTPC	INDIRA GANDHI STPP	Central Sector	Haryana	2	500	06-11-11	61	*
367	NTPC	INDIRA GANDHI STPP	Central Sector	Haryana	3	600	07-11-12	50	*
388	PSEB	GH TPS (LEIMCHL)	State Sector	Punjab	3	250	01-01-09	71	*
389	PSEB	GH TPS (LEIMCHL)	State Sector	Punjab	4	250	11-07-08	83	*
411	JSW Rajwest Power Ltd	JALIPA KAPURDI TPP	Private Sector	Rajasthan	1	135	16-10-09	61	31-12-22
412	JSW Rajwest Power Ltd	JALIPA KAPURDI TPP	Private Sector	Rajasthan	2	135	08-01-10	62	31-12-22
413	JSW Rajwest Power Ltd	JALIPA KAPURDI TPP	Private Sector	Rajasthan	3	135	02-11-11	54	31-08-22
423	JSW Rajwest Power Ltd	JALIPA KAPURDI TPP	Private Sector	Rajasthan	4	135	23-11-11	57	31-08-22
424	JSW Rajwest Power Ltd	JALIPA KAPURDI TPP	Private Sector	Rajasthan	5	135	05-02-13	63	30-04-22
427	JSW Rajwest Power Ltd	JALIPA KAPURDI TPP	Private Sector	Rajasthan	6	135	03-03-13	65	30-04-22
428	JSW Rajwest Power Ltd	JALIPA KAPURDI TPP	Private Sector	Rajasthan	7	135	16-03-13	66	31-12-21
429	JSW Rajwest Power Ltd	JALIPA KAPURDI TPP	Private Sector	Rajasthan	8	135	26-02-13	56	31-12-21
430	NEVELI LIGNITE	BARSINGSAR LIGNITE	Central Sector	Rajasthan	1	125	28-06-10	74	31-08-20
431	NEVELI LIGNITE	BARSINGSAR LIGNITE	Central Sector	Rajasthan	2	125	25-01-11	76	30-04-20
432	RRVUNL	CHHABRA TPP	State Sector	Rajasthan	1	250	30-10-09	85	*
433	RRVUNL	CHHABRA TPP	State Sector	Rajasthan	2	250	04-05-10	98	*
434	RRVUNL	CHHABRA TPP	State Sector	Rajasthan	3	250	14-09-13	93	*
487	RRVUNL	SURATGARH TPS	State Sector	Rajasthan	6	250	29-08-09	81	*
488	Bajaj Power Co	BARKHERA TPS	Private Sector	Uttar Pradesh	1	45	06-11-11	60	30-09-21
489	Bajaj Power Co	BARKHERA TPS	Private Sector	Uttar Pradesh	2	45	28-01-12	60	31-03-21
490	Bajaj Power Co	KHAMBARKHERA TPS	Private Sector	Uttar Pradesh	1	45	17-10-11	60	30-09-21
493	Bajaj Power Co	KHAMBARKHERA TPS	Private Sector	Uttar Pradesh	2	45	28-11-11	60	30-09-21
494	Bajaj Power Co	KUNDARKI TPS	Private Sector	Uttar Pradesh	1	45	10-01-12	60	30-09-21
495	Bajaj Power Co	KUNDARKI TPS	Private Sector	Uttar Pradesh	2	45	29-02-12	60	31-03-21
496	Bajaj Power Co	MAQSODPUR TPS	Private Sector	Uttar Pradesh	1	45	03-11-11	60	30-09-21
497	Bajaj Power Co	MAQSODPUR TPS	Private Sector	Uttar Pradesh	2	45	21-01-12	60	31-03-21
498	Bajaj Power Co	UTRAULA TPS	Private Sector	Uttar Pradesh	1	45	21-02-12	60	30-09-21
499	Bajaj Power Co	UTRAULA TPS	Private Sector	Uttar Pradesh	2	45	19-03-12	60	31-03-21
520	NTPC	RIHAND STPS	Central Sector	Uttar Pradesh	3	500	31-01-05	86	*
527	NTPC	RIHAND STPS	Central Sector	Uttar Pradesh	4	500	24-09-05	88	*
687	NTPC	UNCHAHAR TPS	Central Sector	Uttar Pradesh	5	210	28-09-06	61	*
691	Rosa Power Supply Co	ROSA TPP Ph-I	Private Sector	Uttar Pradesh	1	300	10-02-10	50	*
692	Rosa Power Supply Co	ROSA TPP Ph-I	Private Sector	Uttar Pradesh	2	300	26-06-10	50	*
1603	UPRVUNL	ANPARA TPS	State Sector	Uttar Pradesh	7	500	06-03-16	65	*

8890 MW  
39 Units

\* Units may be able to meet SPM norms by FGD Installation itself

Phasing plan for ESP up gradation where SPM level is greater than 100 mg/Nm<sup>3</sup>

ANNEXURE 2 (5)

Sr. No.	Developer	Name of Project	Sector	State	Unit No	Total Capacity	DT-of COMMISSIONING	Phasing Plan for Implementation
357	HGPCorpn	PANIPAT TPS	State Sector	Haryana	7	250	28-00-04	28-02-21
358	HGPCorpn	PANIPAT TPS	State Sector	Haryana	8	250	28-01-05	31-12-20
386	PSEB	GH TPS (LEH.MOH.)	State Sector	Punjab	1	210	29-12-97	30-04-22
387	PSEB	GH TPS (LEH.MOH.)	State Sector	Punjab	2	210	18-10-98	30-04-22
400	PSEB	ROPAR TPS	State Sector	Punjab	6	210	30-03-93	31-12-22
435	RRVUNL	CHHABRA TPP	State Sector	Rajasthan	4	250	30-06-14	31-08-21
	RRVUNL	CHHABRA TPP	State Sector	Rajasthan	5	660	04-04-17	30-04-20
449	RRVUNL	GIRAL TPS	State Sector	Rajasthan	1	125	28-02-07	under closure
450	RRVUNL	GIRAL TPS	State Sector	Rajasthan	2	125	31-03-10	under closure
453	RRVUNL	KOTA TPS	State Sector	Rajasthan	1	110	17-01-83	to be retired
454	RRVUNL	KOTA TPS	State Sector	Rajasthan	2	110	13-07-93	to be retired
455	RRVUNL	KOTA TPS	State Sector	Rajasthan	3	210	25-09-88	to be retired
475	RRVUNL	KOTA TPS	State Sector	Rajasthan	4	210	01-06-80	to be retired
476	RRVUNL	KOTA TPS	State Sector	Rajasthan	5	210	26-03-94	31-12-22
518	NTPC	RIHAND STPS	Central Sector	Uttar Pradesh	1	500	31-03-88	28-02-22
519	NTPC	RIHAND STPS	Central Sector	Uttar Pradesh	2	500	05-07-89	31-12-21
531	NTPC	SINGRAULI STPS	Central Sector	Uttar Pradesh	1	200	14-02-82	31-12-21
565	NTPC	SINGRAULI STPS	Central Sector	Uttar Pradesh	2	200	25-11-82	31-12-21
566	NTPC	SINGRAULI STPS	Central Sector	Uttar Pradesh	3	200	28-03-83	31-08-21
567	NTPC	SINGRAULI STPS	Central Sector	Uttar Pradesh	4	200	02-11-83	31-08-21
568	NTPC	SINGRAULI STPS	Central Sector	Uttar Pradesh	5	200	26-02-84	30-04-21
569	NTPC	SINGRAULI STPS	Central Sector	Uttar Pradesh	6	500	23-12-86	28-02-21
570	NTPC	SINGRAULI STPS	Central Sector	Uttar Pradesh	7	500	24-11-87	31-12-20
571	NTPC	TANDA TPS	Central Sector	Uttar Pradesh	1	110	21-03-88	to be retired
600	NTPC	TANDA TPS	Central Sector	Uttar Pradesh	2	110	11-03-89	to be retired
668	NTPC	TANDA TPS	Central Sector	Uttar Pradesh	3	110	28-03-90	to be retired
669	NTPC	TANDA TPS	Central Sector	Uttar Pradesh	4	110	20-02-98	to be retired
672	NTPC	UNCHAHAR TPS	Central Sector	Uttar Pradesh	1	210	21-11-88	31-12-22
675	NTPC	UNCHAHAR TPS	Central Sector	Uttar Pradesh	2	210	22-03-89	31-12-22
676	NTPC	UNCHAHAR TPS	Central Sector	Uttar Pradesh	3	210	27-01-99	31-10-22
677	NTPC	UNCHAHAR TPS	Central Sector	Uttar Pradesh	4	210	22-10-99	31-10-22
	NTPC	UNCHAHAR TPS	Central Sector	Uttar Pradesh	6	500	31-03-17	31-08-20
	PPGCL	PRAYAGRAJ TPP	Private Sector	Uttar Pradesh	3	660	22-05-17	29-02-20
695	UPRVUNL	ANPARA TPS	State Sector	Uttar Pradesh	1	210	24-03-86	31-10-22
696	UPRVUNL	ANPARA TPS	State Sector	Uttar Pradesh	2	210	28-02-87	31-08-22
697	UPRVUNL	ANPARA TPS	State Sector	Uttar Pradesh	3	210	12-03-88	30-06-22
698	UPRVUNL	ANPARA TPS	State Sector	Uttar Pradesh	4	500	19-07-93	30-04-22
699	UPRVUNL	ANPARA TPS	State Sector	Uttar Pradesh	5	500	04-07-94	28-02-22
1610	UPRVUNL	OBRA TPS	State Sector	Uttar Pradesh	7	94	14-12-74	to be retired
1613	UPRVUNL	OBRA TPS	State Sector	Uttar Pradesh	10	200	14-01-79	31-10-22
1614	UPRVUNL	OBRA TPS	State Sector	Uttar Pradesh	11	200	31-12-77	31-12-22
1615	UPRVUNL	OBRA TPS	State Sector	Uttar Pradesh	12	200	28-03-81	30-06-22
1616	UPRVUNL	OBRA TPS	State Sector	Uttar Pradesh	13	200	21-07-82	30-04-22
1619	UPRVUNL	PARICHHA TPS	State Sector	Uttar Pradesh	1	110	31-03-84	to be retired
1620	UPRVUNL	PARICHHA TPS	State Sector	Uttar Pradesh	2	110	25-02-85	to be retired
1621	UPRVUNL	PARICHHA TPS	State Sector	Uttar Pradesh	3	210	29-03-05	30-04-22
1622	UPRVUNL	PARICHHA TPS	State Sector	Uttar Pradesh	4	210	28-12-06	30-04-22
1623	UPRVUNL	PARICHHA TPS	State Sector	Uttar Pradesh	5	250	24-05-12	28-02-22
1624	UPRVUNL	PARICHHA TPS	State Sector	Uttar Pradesh	6	250	11-03-13	31-12-21

12244 MW

49 Units

TSPL/NRPC/AM/SEP-17/168

Dated: 16 September 2017

To,  
Member Secretary- NRPC,  
18-A, Qutab Institutional Area,  
Shaheed Jeet Singh Marg,  
Katwaria Sarai,  
New Delhi-110016.

Dear Sir,

This is in reference to the Special Technical Coordination Committee (TCC) meeting held on 14.09.2017 at Northern Regional Power Committee Secretariat, New Delhi to finalize the phasing plan for FGD installation and ESP upgradation.

In this regard, we would like to submit the following:

1. Shut down period as suggested - During the meeting it was discussed that Talwandi Sabo Power Limited (TSPL) would be given a shutdown period of 2 Months for each Unit.

The shutdown periods as proposed by NRPC is as follows:

- Unit-1: Jan-Feb 2021
- Unit-2: Nov-Dec 2020
- Unit-3: Sep-Oct 2020

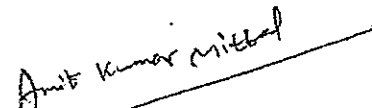
Please note, the above shutdown periods, as proposed by NRPC is not technically achievable for TSPL's plant as per our present proposal, and would require to be changed keeping in view the time required by Punjab State Electricity Regulatory Commission (PSERC) in deciding the petition filed by TSPL (Petition No. 44 of 2017) and time required for implementation of the FGD and other systems post the issuance of an order by the PSERC. As per the Feasibility Study conducted by the Tata Consulting Engineers (TCE) for TSPL, the required time of shutdown for each Unit is approximately 4 Months.

2. Timeline for FGD Implementation- Please note FGD implementation time should be 32+12 Months from the Order of the PSERC, allowing the Environment (Protection) Amendment Rules, 2015 as an event of Change in Law under Article 13.3 of the PPA between TSPL and PSPCL. 32 months are required for FGD installation etc. to meet the Environment (Protection) Amendment Rules, 2015 as per the Feasibility Report given by our consultant TCE and 12 Months are required for achieving Financial Closure as per the letter TSPL/CEA/AM/JUN-17/116 dated 22.06. 2017 as given to CEA & NRPC.



3. Deadline for FGD implementation for TSPL project - Since, for TSPL, which is a case-2 project, all approvals would be required from PSPCL/P SERC before implementation of FGD etc., this would take a significant period of time. Therefore, TSPL may be given deadline to meet the norms in the later stage of the timelines of December, 2022 (as mentioned in NRPC in letter no. NRPC/OPR/117/011/2017/9/91 9856 dated 05.09.2017) keeping in mind the fact that the petition filed by TSPL is pending at PSERC for approval and a considerable time is being taken by PSPCL.
4. In the interest of FGD etc. system implementation at TSPL - It is requested that the NRPC/ Central Electricity Authority (CEA) may highlight the importance of electricity regulatory commissions expeditiously disposing of the change in law claims related to implementation of the FGD and other systems, so compliance may be achieved at the earliest. In this regard, it is requested that the NRPC/CEA take the necessary steps to request the PSERC to expeditiously dispose of Petition No. 44 of 2017 by passing an order, so that implementation of the FGD systems can commence at the earliest. It is submitted that without approval / clarity from PSERC/PSPCL, the plan for implementation of FGD and other systems cannot be finalized/ achieved. It is requested that a special meeting may be called where PSPCL etc. may be invited along with other stake holders to request for their support for early disposal of Petition No. 44 of 2017.

Thanking you in anticipation,  
Thanking You,  
For Talwandi Sabo Power Ltd.

  
Amit Mittal  
(AGM-Power Sales & Strategy)

Copy to: 1. Chief Engineer (Thermal Designs), PSPCL, Patiala.  
2. Chief Engineer (PPR), PSPCL, Patiala.



**ANNEXURE - C**NTPC **UTR****282**

Subject: RE: Special TCC meeting to discuss the phasing plan for environmentally non-compliant thermal power plants in the Northern region

To: seo-nrpc@nlc.in

Cc: 'Gopalakrishnan Venu' <gvenu@ntpc.co.in>, awadheshkumar@ntpc.co.in, ukumar@ntpc.co.in

Date: 09/14/17 06:21 PM

From: P K Gupta <pkgupta02@ntpc.co.in>

Dear sir,

This has reference to Special TCC meeting held today. You requested to kindly include the following in the MOM wrt installation of FGD

CERC may be requested to allow capitalization of initial expenditure and allowance for additional reagent cost, O&M expenditure, aux. power consumption under Change in Law for all units, including units operational for more than 25 years. It will provide great help in making decision fast for installation of FGD in older units.

Shut sown indicated in the list are tentative.

Kindly provide adequate time i.e. up to Dec 2022 for installation of FGD in units commissioned after Jan 2017.

**सादर/ Regards**

**Pankaj Kumar Gupta**

*Add General Manager*

पी इ मैकेनिकल (बायलर एंड ऑक्सीलिरर) / PE-Mechanical (Boiler & Auxiliary)

प्लॉट-ए-एरे ईओसी एन.टी.पी.सी. लिमिटेड / Plot A-8A, EOC, NTPC Limited

सेक्टर २४ नॉएडा उत्तर प्रदेश २०१३०१ भारत / Sector-24, Noida (U.P)-201301 India

मो / Mo: +91- 9650991868

# ANNEXURE - C

ADANI POWER

UTR

283

Subject: FW: Reference : Special TCC Meeting on 14th Sept 2017 for environment phasing plan  
To: "sec-nrpc@nic.in" <sec-nrpc@nic.in>

Date: 14 09 17 06:47 PM  
From: Sameer Ganju <Sameer.Ganju@adani.com>

From: Sameer Ganju  
Sent: 14 September 2017 17:43  
To: ms-nrpc@nic.in; msnrpc1@yahoo.com  
Cc: se-nrpc@nic.in  
Subject: Reference : Special TCC Meeting on 14th Sept 2017 for environment phasing plan

Dear Sir,

Pursuant to the new environment norms issued on 07.12.2015 by MoEFCC for Thermal Power Plants, NRPC had circulated the phasing plan for units identified for FGD installation and ESP up gradation vide letter no. NRPC/OPR1111/101/2017/6506 6510 dated 16 05 2017. Consequently, the scheduled date for implementation of FGD for the two units of Adani Power Rajasthan Ltd's Thermal Power Station in Kawai, Rajasthan were March 2022 (U 1) and June 2022 (U2) respectively. The same was also uploaded in the CEA website

NRPC has intimated that in a meeting held between Secretary (Power) and Secretary (MoEF&CC) on 01.09.2017, it was decided that the implementation plan for FGD installation and ESP upgradation must be restricted to 31.12.2022. In this regard, TCC meeting on 14.09.2017 to review the existing phasing plan as the schedule for implementation for some units exceeded the new timeline. During the meeting, the scheduled dates for implementation of FGD given to the two units of Kawai Thermal Power Stations are as follows

Unit 1: July –Aug 2020

Unit 2: May – June 2020

That amounts to preponing the implementation by two years which is practically not possible

You would appreciate that the Kawai Thermal Power Station has a PPA of 1200 MW through competitive bidding route with Rajasthan. The cost towards implementation of environment norms is required to be approved by RERC under the Change in law provision of the PPA. We need to adopt ICB route for placement of order to ensure lowest cost for implementation of FGD. Further, the perceived timelines for implementation of FGD are as under considering approval of the State Commission as zero date

Tendering and Placement of order- 8 months

Supply and Installation of FGD- 40 months

Commissioning of FGD- 3 months

This is compounded with the uncertainty about the issue of financing, clarity on change in law and availability of vendors to meet the huge requirement of retrofit in approx. 1,16,000 MW capacity

The timeline would also depend on timely availability of equipment from the vendors who would be catering to a huge demand from IPPs/Central and State PSUs/CPPs of approximately 1,16,000 MW capacity, compounded with the non-clarity on change in law leading to the uncertainty about the issue of financing to arrive at zero date.. The phasing plan was developed considering all these above concerns.

The Ministry of Power and MoEFCC may be advised to consider the plan already developed after due consideration of above and was discussed in details with the proponents.

However, in context of today's meeting it will not be possible to advance the implementation for FGD in Kawai before the dates mentioned below.

Unit 1: November 2021

Unit 2: January 2022

As mentioned above installation of FGD would require large investment and generators are seeking comfort from respective Regulatory Commissions for in-principle approval of this notification as change in law before going ahead with the implementation. These petitions are pending with various CERC and State regulators. It is also pertinent to mention that regulators do not take cognizance of an event under change in law till the cost is incurred by the power plant. Therefore, to expedite the implementation of FGD, you are kindly requested to recommend Ministry of Power to issue direction under section 107 of the Electricity Act, 2003 to CERC for grant of relief to the generators under change in law for implementation of new environment norms. The Ministry of Power may also advise State Governments to issue similar directions under Section 108 of the Act to SERCs.

Kind regards  
Sameer Ganju  
8860550077



## NABHA POWER LIMITED

Mailing Address: Aspire Tower, 4<sup>th</sup> floor, Plot No.55, Industrial and Business Park,  
Phase-I, Chandigarh-160 002

Phone: 0172 4646846 • Fax: 0172 4646802

E-Mail: Pramod.Bhateley@larsentoubro.com

Ref: NPL/PB/FGD/5680

Date: 19.09.2017

To,  
The Member Secretary,  
Northern Region Power Committee,  
18-A, Qutab Institutional Area,  
Katwaria Sarai,  
New Delhi-110 016 New Delhi

**Sub: Special TCC meeting on 14.09.2017 to discuss phasing plan for environmentally non-compliant Thermal Power Plants in Northern Region - Nabha Power Ltd.(NPL)**

Dear Sir,

This has reference to the Special TCC meeting held on 14.09.2017 regarding the subject matter, wherein it was informed that in view of Ministry of Power (MoP), GOI, and Ministry of Environment, Forest and Climate Change's (MOEFCC) directions to restrict implementation plan for FGD installation to 31.12.2022, the existing implementation plan prepared and finalized by CEA for installation of FGD needs to be reviewed.

Please note that as per existing implementation plan of CEA, the implementation schedule for NPL, a Case 2 tariff based competitively bid project in Punjab, envisages Unit # 2: December 2021 and Unit #1- March 2023, whereas as per the revised implementation schedule now intimated to NPL the schedule is advanced as Unit#1: Sep-Oct 2020 and Unit#2: Nov-Dec 2020.

We would like to inform that since publication of the MOEFCC Notification dated 17.12.2015, we have already taken several proactive measures including intense interaction with MOEFCC, Ministry of Power, GOI, Punjab State Electricity Regulatory Commission (PSERC) and Punjab State Pollution Control Board (PSPCB) to expedite the implementation of FGD. In this regard, the Punjab State Electricity Regulatory Commission (PSERC) has also issued a notification dated 14.09.2017 regarding the implementation of FGD. The Punjab State Pollution Control Board (PSPCB) has also issued a notification dated 14.09.2017 regarding the implementation of FGD. The Punjab State Electricity Regulatory Commission (PSERC) has also issued a notification dated 14.09.2017 regarding the implementation of FGD. The Punjab State Pollution Control Board (PSPCB) has also issued a notification dated 14.09.2017 regarding the implementation of FGD.

Further, we would like to inform that the Punjab State Electricity Regulatory Commission (PSERC) has also issued a notification dated 14.09.2017 regarding the implementation of FGD. The Punjab State Pollution Control Board (PSPCB) has also issued a notification dated 14.09.2017 regarding the implementation of FGD. The Punjab State Electricity Regulatory Commission (PSERC) has also issued a notification dated 14.09.2017 regarding the implementation of FGD. The Punjab State Pollution Control Board (PSPCB) has also issued a notification dated 14.09.2017 regarding the implementation of FGD.

In view of the above, retrofitting of FGD and other environmental measures in one Unit to meet revised environmental norms, can only be completed by June 2022 and for the other Unit six months thereafter i.e. December 2022, subject to timely regulatory approval.

Under the circumstances, the revised implementation plan for FGD Unit#1: Sep-Oct 2020 and Unit#2: Nov-Dec 2020 intimated to us in the subject meeting is not achievable.

Therefore, we request you to intervene in the matter and Ministry of Power, Govt be approached and requested to take a pragmatic approach for finalizing the implementation schedule towards implementation of new environmental norms keeping in view holistic view and all relevant factors.

Thanking you.

Yours faithfully,  
For Nabha Power Limited



(Authorized Signatory)

Copy to:

1. The Secretary  
Ministry of Power  
Shram Shakti Bhavan,  
New Delhi-110003
2. The Secretary  
Ministry of Environment, Forest & Climate Change  
Paryavaran Bhavan, CGO Complex, Lodi Road,  
New Delhi - 110003
3. The Chairman  
Central Electricity Authority,  
Sewa Bhavan, R K Puram,  
New Delhi

Wholly Owned Subsidiary of L&T Power Development Limited

Corporate Office: L&T House, N.M Marg, Ballard Estate, Mumbai 400 001

Regd. Office: P.O.Box no 28, Near Village Helind, Rajpura - 140101, Punjab

CIN No. L1401AN20000701 0001030

**ANNEXURE - C**

GVK (GO) GOINDWAL SAHIB

**UTR****286**

Subject: RE: Special TCC meeting to discuss the phasing plan for environmentally non-compliant thermal power plants in the Northern region

To: "seo-nrpc@nic.in" <seo-nrpc@nic.in>

Date: 09/14/17 07:37 PM

From: M RamaMurty <M.RamaMurty@gvk.com>

image001.png (754bytes)

Sir,

In continuation to the today's meeting, we will submit the following for your kind consideration:

1. We need time to install as the expected expenditure is about Rs. 800 Crores (as per our initial discussions with prospective suppliers)
2. But it is very difficult at this stage as our plant had restarted the operations only in June 2017 due to non-availability of coal.
3. Therefore, our plant timelines can be extended to June 2023.
4. As requested earlier also, the following need to be addressed by CEA:
  - a) Will this expenditure be part of tariff? If so lenders need a consent letter from PSPCL along with regulatory approval.
  - b) Will the idle period be treated as eligibility for deemed generation?
  - c) CEA can guide us on cost and technology to be adopted. Our capacity is 2x270 MW BHEL units.
4. Due to lack of clarity on the said policy it will be very difficult to initiate action as lenders are not coming forward to support.

Kindly consider our request for more time favourably, and guide us to find way forward.

Thanking you,  
Yours sincerely,  
for GVK Power Goindwal Sahib Limited,  
**M.Rama Murty**  
Director

GVK Power (Goindwal Sahib) Limited  
156-159 Paigah House,  
Sardar Patel Road,  
Secunderabad 500 003, India.  
T +91 40 27902663 F +91 40 27902665  
www.gvk.com

**GVK**



HARYANA POWER GENERATION CORPORATION LIMITED  
Read. Office - C-7, Uja Bhawan, Sector-6, Panchkula  
Corporate Identity Number: U45207HR1997SGC033517  
Website: www.hpgcl.org.in E-mail - cepg@hpgcl.org.in  
Telefax No. 0172-5022439



From

Director/Generation,  
HPGCL, Panchkula.

To

Member Secretary,  
Northern Regional Power Committee,  
18-A, Qutab Institutional Area,  
Shaheed Jeet Singh Marg, Katwaria Sarai,  
New Delhi - 1100016

Kind Attn: Sh. M.A.K.P Singh

Memo No. 1086/Ch-182/KC/HPGCL-144/Vol-II  
Dated: 18.09.2017

**Subject:-** HPGCL concerns regarding revised scheduling of HPGCL units for FGD installation as discussed during meeting held at NRPC, New Delhi on 14.09.2017.

1. As per the phasing plan issued by NRPC vide letters dated 23.02.2017 and 27.06.2017 for installation of FGD, HPGCL units were given schedule for installation of FGD in 2023. HPGCL planned their activities accordingly keeping in view the timeline of 2023 and started action for new units of HPGCL i.e. 2x600 MW RGTPP, Hissar and 2x300 MW DCRTTP, Yamuna Nagar which gets maximum scheduling.

Now, as informed during the meeting held on 14.09.2017 at NRPC, New Delhi, HPGCL units of PTPS are given schedule for installation of FGD in Nov-Dec, 2020, Jan-Feb, 2021 and Mar-Apr, 2021 whereas other units of HPGCL are scheduled in 2021 and 2022.

In this regard, it is pertinent to mention here that installation of FGD including tendering process & other associated activities will take at least 40 months. Since HPGCL has not started the tendering process and activities for PTPS, Panipat units till date, so it will not be possible to adhere the new timeline/schedule. Moreover, these units for PTPS are older units of HPGCL and get minimum scheduling, HPGCL need to take approval from Government to make such huge investment in these units. So, keeping in view of above facts, these units may be re-scheduled for installation of FGD as per original schedule in 2023.

2. It is further requested that since the DCRTTP units of HPGCL gets maximum scheduling, as such these units may be scheduled for FGD installation prior to units of RGTPP.

Director/Generation,  
HPGCL, Panchkula.

Copy to:

SPS to MD, HPGCL, Panchkula - for kind information of worthy MD/HPGCL, Panchkula

**PSPCL, Lehra Mohabbat (Bathinda)**

**Subject:- Preparation of Phasing Plan for implementation of new Environmental Norms for Thermal Plants, issued by MOEF & CC- Meeting held on 18-01-2017.**

Unit No.1 to 4 of GHTP Lehra Mohabbat and Unit No.6 of GGSSTP Ropar have been considered in phasing plan for implementation of new environmental norms for PSPCL vide CLA Letter ref. CEATh.TPE&CC/FNV/55/2015 dated 22-12-2016.

PSPCL thermal units at GHTP, Lehra Mohabbat and GGSSTP Ropar Unit No.6 do not have adequate space for installation of FGD for SOX control as already incorporated in Annexure-3 and 4 of the above mentioned letter of CEA, however SPM and NOX control is required.

To control SPM, ESP upgradation is required for all the four units of GHTP and Unit No.6 of GGSSTP.

GHTP Stage-I (2x210 MW) Units meets up with the required norms of NOX, whereas NOX of Stage-II (2x250 MW) Units is within 450 mg/Nm<sup>3</sup> and to reduce it further SCR/SNCR technology is required to be installed. As discussed in the meeting NTPC is going first to install SCR/SNCR technology as a pilot projects for about 6-7 of their units and the performance of SCR/SNCR technology shall be checked and recommend for the other utilities by NTPC.

In view of the above, it is requested that MOEF&C may kindly be requested to exempt PSPCL Units for installation of FGD due to space constraints.

Phasing plan for ESP upgradation for PSPCL Units may also be carried out after approval of exemption by MOEF&C for SOX.

It is further submitted that:-

- PLF of PSPCL units is too low (i.e about 35%) and the units are running only for about 5 months in a year.
- When the units are started after long period (i.e cold start) and during stabilization period some times SPM value goes above the norms and comes down on stabilizing the unit on full load. It is requested to monitor the value of SPM after stabilization period only.
- Due to above stated reasons, average value of SPM/NOX should be considered for the period for which units have been in operation for meeting the environmental norms.

**ANNEXURE - C**UPRVUNL  
**UTR****289**

**Subject: Special TCC meeting to discuss the phasing  
plan for environmentally non-compliant thermal  
power plants in the Northern region.**

**To: seo-nrpc@nic.in**

**Cc: director.technical@uprvunl.org**

**Date: 09/16/17 03:49 PM**

**From: GM ES <gm.es@uprvunl.org>**

**Reply-To: GM ES <gm.es@uprvunl.org>**

Dear Sir,

In reference of meeting Dated 14.09.2017 held on NRPC Secretariat, New Delhi I have to intimate as under:-

UPRVUNL agree to the plan approved/proposed by NRPC for Anpara 'B' and 'D' Projects. As regards Anpara A (Unit no 1 to 3) and Obra 'B' (5x200 MW), we would like to inform that these units are 30 to 40 years old, and for installation of FGD and retrofitting of ESP of these units, we have to take financial approval from U.P.Govt. and approval for tariff from UPERC. Detailed programme regarding this shall be intimated shortly.

Regards,  
CE(E&S)  
UPRVUNL





The power of new standards

Our Ref : JPL/CEA/ENV/08008  
Date : September 19, 2017

The Chief Engineer  
C&E Division,  
Central Electricity Authority  
3rd Floor, Sewa Bhawan, R.K. Puram  
New Delhi- 110066  
Fax: 011-26105462  
E-mail ID: [cdmcea@yahoo.co.in](mailto:cdmcea@yahoo.co.in)

Kind Attn: Sh. Narendra Singh

Subject: Phasing Plan for FGD Operation at Jhajjar Power Limited (JPL)

Ref: NRPC/OPR/117/01/2017/9791-9856 dated 05-09-2017 (Annexure I)

Dear Sir,

This is in reference to discussion held during the Special TCC meeting called for framing "Revised Phasing Plan for units identified for FGD" at NRPC Secretariat, New Delhi on 14.09.2017. JPL requested it's inclusion in the list of power plants covered under the Phasing Plan. JPL was advised to submit a formal request for inclusion of - Mahatma Gandhi Thermal Power Plant (MGTPP) in the list of power plants covered under "Phasing Plan for units identified for FGD installation". JPL had installed Flue Gas Desulphurization (FGD) plant at the time of project construction (between 2008-2012) on our own with intent to operate the same whenever JPL receives coal excessive of sulphur content in the coal/ flue gas.

As you are aware, there were no norms prescribed by MoEF&CC by then. Current notification by MoEF & CC besides setting a specific level of emission performance, also require continuous full load operation on long term sustained basis.

We are in the process of evaluating our FGD's ability to operate at full load on sustainable long term basis for its rest of life. We are also expecting the technical guideline from CEA in this regard to take next steps. Our preliminary estimate suggest that JPL's FGD would require augmentation and building redundancies in the critical components/equipment and auxiliaries to ensure continuous operation. This will also involve time, capital investment & shutdowns.

Jhajjar Power Limited (JPL) is a Company  
Registered Office: JPL, Jhajjar, District Jhajjar, Haryana  
Corporate Office: 10, Tandon Road, JPL, Jhajjar, District Jhajjar, Haryana  
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Phone: 0182-2511111, 0182-2511112, 0182-2511113, 0182-2511114, 0182-2511115, 0182-2511116, 0182-2511117, 0182-2511118, 0182-2511119, 0182-2511120, 0182-2511121, 0182-2511122, 0182-2511123, 0182-2511124, 0182-2511125, 0182-2511126, 0182-2511127, 0182-2511128, 0182-2511129, 0182-2511130, 0182-2511131, 0182-2511132, 0182-2511133, 0182-2511134, 0182-2511135, 0182-2511136, 0182-2511137, 0182-2511138, 0182-2511139, 0182-2511140, 0182-2511141, 0182-2511142, 0182-2511143, 0182-2511144, 0182-2511145, 0182-2511146, 0182-2511147, 0182-2511148, 0182-2511149, 0182-2511150, 0182-2511151, 0182-2511152, 0182-2511153, 0182-2511154, 0182-2511155, 0182-2511156, 0182-2511157, 0182-2511158, 0182-2511159, 0182-2511160, 0182-2511161, 0182-2511162, 0182-2511163, 0182-2511164, 0182-2511165, 0182-2511166, 0182-2511167, 0182-2511168, 0182-2511169, 0182-2511170, 0182-2511171, 0182-2511172, 0182-2511173, 0182-2511174, 0182-2511175, 0182-2511176, 0182-2511177, 0182-2511178, 0182-2511179, 0182-2511180, 0182-2511181, 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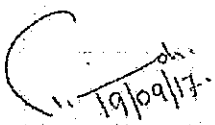
While JPL would like to continue to operate this FGD as per its existing capability and commitment to control SOx emission, it may be given time till January 2019 to strictly comply with new standard proposed by MoEF & CG which require continuous operation of FGD.

We request your kind office to include our name Mahatma Gandhi Thermal Power Plant (MGTPP) in the list of power plants covered under "Phasing Plan for units identified for FGD installation".

We also request your kind offices to consider setting up norms to deal with emergency situation such as - what power plants will do in the event of any critical equipment governing FGD goes on forced outage resulting exceeding emission norms till it is restored? Setting an annual limit concept to deal with such cases may be a useful for all plant in totality.

Thanking You,

Yours faithfully  
For Jhajjar Power Limited

  
Atanu Ghosh Chowdhury  
Sr. Vice President-Operations

Copy to:

1. Mr. B. K. SHARMA- PCE-II CEA
2. Mr. M.A.K.P. Singh - Member Secretary - NRPC
3. Mr. Hemant Kr. Pandey - SE - NRPC
4. Mr. Rajesh Kumar - Deputy Director CEA



# भारत का राजपत्र The Gazette of India

सी.जी.-डी.एल.-अ.-24092020-221952  
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असाधारण  
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)  
PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित  
PUBLISHED BY AUTHORITY

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No. 2941]	NEW DELHI, THURSDAY, SEPTEMBER 24, 2020/ASVINA 2, 1942

जल संसाधन, नदी विकास और गंगा संरक्षण विभाग

(केंद्रीय भूमि जल प्राधिकरण)

अधिसूचना

नई दिल्ली, 24 सितम्बर, 2020

का.आ. 3289(अ).—जबकि, 1985 की सिविल रिट याचिका 4677, एमसी. मे हुता बनाम भारत संघ में पारित दिनांक 10 दिसंबर, 1996 के माननीय उच्चतम न्यायालय के आदेशमूलक से इसके दिशनिर्देशों पर केंद्र सरकार ने भूमि जल प्रबंधन और विकास के विनियमन और नियंत्रण के उद्देश्यों और कतिपय शक्तियों का प्रयोग करने और उससे संबंधित कतिपय कार्यों को करने के लिए पर्यावरण (संरक्षण) अधिनियम 1986 (1986 का 29) की धारा 5 के तहत शक्तियों का प्रयोग करने के लिए दिनांक 14 जनवरी, 1997 की अधिसूचना सं. का.आ. 38(अ) के माध्यम से केंद्रीय भूमि जल प्राधिकरण (इसके बाद इसे "प्राधिकरण" के रूप में कहा गया है) गठित किया है।

और जबकि प्राधिकरण उद्योगों, अथवा आधारभूत परियोजनाओं अथवा खनन परियोजनाओं इत्यादि के लिए भू जल निष्कर्षण के लिए अनुमति प्रमाणपत्र जारी करके भू जल विकास और प्रबंधन को विनियमित करता रहा और वाइस राज्यों और दो संबंधित संघ शासित क्षेत्रों में, जहां पर भूकिसल संबंधित राज्य सरकारों तथा संघ शासित प्रशासनों द्वारा विनियमित नहीं किया जा रहा है, समयसमय पर इस संबंध में इसने दिशनिर्देश तैयार किये थे।

और जबकि, कुछ राज्य सरकारों अथवा संघ शासित क्षेत्रों ने विधान अधिनियमित किए हैं और भू जल विकास और प्रबंधन को विनियमित करने के लिए विनियामक दिशनिर्देश अथवा आदेश जारी किए हैं।

और जबकि, माननीय राष्ट्रीय हरित अधिकरण, नई दिल्ली ने 2014 की ओ.ए. सं. 204/205/206 में दिनांक 15 अप्रैल 2015 के आदेश के माध्यम से प्राधिकरण को निर्देश किया है कि वह सुनिश्चित करें कि ऐसे किसी भी व्यक्ति जो भू जल निष्कर्षण के लिए ट्यूबवेल, अथवा कोई अन्य साधन संश्लिष्ट है, को प्राधिकरण से अनुमति प्राप्त करनी

होगी और वह इसे लागू लागू की शर्त पर संवाचित करेगा। ध्वष्टि यूनिट मौजूद यूनिट हो अथवा यूनिट को अभी स्थापित करना हो;

और जबकि, उक्त माननीय अधिकरण ने 2014 की ओ.ए. सं. 34 और 3 में दिनांक 09 जुलाई 2015 को अपने आदेश के माध्यम से सभी औद्योगिक इकाइयों को, जो सामान्य अक्षिप्त परिशोधन संयंत्र (सीईटीपीएस) की सदस्य हैं, लागू न के अनुसंधानापत्ति प्रमाणपत्र प्राप्त करने के लिए राज्य प्रदूषण नियंत्रण बोर्ड के माध्यम से वध्नापत्ति संर्ण करने के निर्देश दिए हैं।

और जबकि, माननीय अधिकरण ने 2014 के ओ.ए. सं. 200 में दिनांक 13 जुलाई, 2017 के आदेश के माध्यम से निर्देश दिए कि प्रत्येक उद्योग को ऐसे जल की निकासी के लिए धुनत्तरने के निर्देश दिये जाने चाहियें और वह किसी यह ऐसी जल निकासी की अनुमति देने के आदेश में चलाई गई सतर्क रूप हो।

और जबकि, उक्त माननीय अधिकरण ने क्रमशः 2016 की ओ.ए. सं. 18 और 2012 की 59 में दिनांक 28 अगस्त 2018 के अपने आदेश में जल संसाधन, नदी विकास औसत संरक्षण में नाल को भूजल संसाधनों के संरक्षण के लिए प्रभावी कदम सुनिश्चित करने के लिए मौजूदा तंत्र की समीक्षा करने के निर्देश दिए।

और जबकि, माननीय राष्ट्रीय हरित अधिकरण के निर्देशों और पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 3 और धारा 5 की उप धारा (3) के तहत प्रदत्त शक्तियों के अनुसरण प्राधिकरण ने भूजल संसाधनों के बचाव की दृष्टि से 11 अक्टूबर, 2017 को "अनापत्ति प्रमाणपत्र" प्रदान करने के लिए प्राकृतिक विनिर्देश परीक्षा जिसे जिसमें सभी स्ट्रेटोल्डों से टिप्पणियां और सुझावों ने गए।

और जबकि, उक्त प्राकृतिक विनिर्देश के प्रत्युत्तर में प्राप्त सभी आपत्तियों और सुझावों पर केन्द्र सरकार विधिवत रूप से विचार किया गया है, प्राधिकरण दिनांक 12 दिसंबर 2018 की अधिसूचना सं. का.आ. 6140 (अ) के माध्यम से देश में भूजल के अक्षिप्त को विनियमित करने और भूजल संसाधनों के संरक्षण के निर्देश अधिसूचित किए;

और जबकि, उक्त माननीय अधिकरण ने 2015 की ओ.ए. सं. 176 में दिनांक 03 जनवरी, 2019 के आदेश के माध्यम से निर्देश दिए थे कि दिनांक 12 दिसंबर, 2018 की उपर्युक्त सूचना को लागू नहीं किया जा सकता क्योंकि यह स्थाई नहीं है यदि इसकी "पूर्वोपाय सिद्धांत सतत विकास और अन्तःस्थादन इच्छिती सिद्धांतों पर जांच की जाती है तो यह स्थाई नहीं है और यदि यह कार्यान्वित की जाती है, तो भूजल बहुत तेजी से निरावट आएगी और जल निकास क्षतिग्रस्त हो जाएंगे और भारत के संविधान के अनुच्छेद 24 के जीवन के मौलिक अधिकार का हनन होगा।

और जबकि, माननीय अधिकरण ने दिनांक 11 सितंबर, 2019 के देश के माध्यम से भूजल की निरावट को रोकने के लिए और अधिकृत जल निष्कासन के विरुद्ध सख्त मॉनीटरिंग तंत्र औसत प्रमाणपत्र शर्तों को पूरा करने, पर्यावरण क्षतिपूर्ति इत्यादि पर चर्चा करने के लिए एक समिति तैयार है और इस पर रिपोर्ट प्रस्तुत करने को कहा गया है;

और जबकि, उक्त समिति ने भूजल निष्कर्षण को विनियमित करने और भूजल संरक्षण के प्राकृतिक विनिर्देशों सहित रिपोर्ट दिनांक 16 मार्च, 2020 को माननीय अधिकरण में प्रस्तुत की है।

और जबकि, उक्त माननीय अधिकरण ने दिनांक 20 जुलाई, 2020 के अपने आदेश के माध्यम से प्राधिकरण द्वारा वाणिज्यिक स्थापनाओं को "अनापत्ति प्रमाणपत्र" जारी करते समय सतत भूजल प्रबंधन के लिए कतिपय बिन्दुओं के अनुकरण करने का निर्देश दिया है।

अब इसलिए माननीय राष्ट्रीय हरित अधिकरण के निर्देशों और पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 की 29) की धारा 5 के साथ पठित धारा 3 की उपधारा (3) द्वारा प्रदत्त शक्तियों के अनुकरण में जल संसाधन विकास और रक्षण विभाग एतद द्वारा नीचे दी गई अधिसूचना अनुसार इस मंत्रालय की अधिसूचना का.आ. 6140 (अ), दिनांक 12 दिसंबर, 2018 का अधिकरण करदेश में भूजल निकासी को विनियमित और नियंत्रित करने के निर्देश अधिसूचित करता है।

## अनुसूची

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(तत्काल प्रभाव से)

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[फा. सं. सीजीडब्ल्यू 1/4/2020- सीजीडब्ल्यू ए]

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- अनु लग्नकIII: प्रदूषित करने वाले उद्योगों/परियोजनाओं के संयंत्र क्षेत्रों में प्रदूषण को सुनिश्चित करने के लिए अपनाए जाने वाले उपाय।
- अनु लग्नकIV: उद्योगों के लिए अनापत्ति प्रमाण पत्र प्राप्त करने हेतु जमाबंदी ज्ञानिक रिपोर्ट की रूपरेखा।
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- अनु लग्नकVIII: उन राज्यों/संघ राज्य क्षेत्रों की सूची जहां भू जल की निकासी सीजीडब्ल्यू ए द्वारा विनियमित की जा रही है।
- अनु लग्नकIX: प्रयुक्त तकनीकी शर्तों की शब्दावली।
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भारत में भूजल निकासी को विनियमित और नियंत्रित करने के दिशानिर्देशप्रस्तावना और पृष्ठभूमि सूचना:

एमसी में हुता वनाम भारत संघ की 1985 की सिविल रिट याचिका सं. 4677 में जारी दिनांक 10 दिसंबर, 1986 के माननीय उच्चतम न्यायालय के आदेश के माध्यम से इस्तिफा-निर्देशों पर केन्द्र सरकार ने भू जल प्रबंधन और विकास के विनियमन और नियंत्रण के उद्देश्यों और उक्त अधिनियम कानून सार कतिपय शक्तियों का प्रयोग करने और कतिपय कार्य करने के लिए पूर्वावरण (संरक्षण) अधिनियम, 1986 का 29 की धारा 5 के तहत शक्तियों का प्रयोग करने के लिए 14 जनवरी, 1997 की अधिसूचना सं. का.आ. 38 के माध्यम से केन्द्रीय भूमि जल बोर्ड को प्राधिकरण के रूप में गठित किया है।

प्राधिकरण उद्योगों अथवा अवसरचतनात्मक परियोजनाओं अथवा खनन परियोजनाओं इत्यादि के लिए भू जल निकासी के लिए 'अनापत्ति प्रमाणपत्र' जारी करके भू जल विकास और प्रबंधन को विनियमित कर रहा है और 22 राज्यों और 2 यू.टी. में जहां राज्य सरकारों संघीय टी. प्रशासनों द्वारा भू जल विकास विनियमित नहीं किया गया है, लागू इस संबंध में समय समय पर दिशानिर्देश तैयार किए हैं।

देश में जल के संसाधन के सतत विकास के लिए देश में भूकृषीको विनियमित करने और कम भू जल संसाधनों को संरक्षित करने के लिए भू जल निकासी विनियमन तैयार किए गए हैं।

ये दिशानिर्देश राजपत्र अधिसूचना की तारीख से तत्काल प्रभावी होंगे और क्रीय भूमि जल प्राधिकरण (सीजीडब्ल्यू ए) द्वारा जारी पहले के सभी दिशानिर्देश के स्थान पर होंगे।

ये दिशानिर्देश पैम्डिआ में लागू होंगे। राज्य/संघ राज्य क्षेत्र (जो भू जल विकास विनियमित नहीं कर रहे हैं) में भू जल निकासी केन्द्रीय भूमि जल प्राधिकरण द्वारा विनियमित की जावरी रखी जाएगी।

इसके अलावा, जिन राज्यों/संघ राज्य क्षेत्रों के अपने भू जल निरीक्षण-निर्देश हैं, जो सीजीडब्ल्यू ए के अनुरूप नहीं हैं, वहां सीजीडब्ल्यू ए के निर्देशों के प्रावधान लागू होंगे। तथापि यदि ऐसे राज्यों/क्षेत्रों द्वारा अनुसरण किए जाने वाले दिशानिर्देशों में सीजीडब्ल्यू ए के निर्देशों से अधिक कठोर प्रावधान हैं, तो वहां सीजीडब्ल्यू ए के दिशानिर्देशों में निहित प्रावधानों के अलावा राज्य/संघ राज्य क्षेत्र अधिकरणों द्वारा उन प्रावधानों को भी लागू किया जाएगा। राज्य स्थानीय जल-भू वैज्ञानिक स्थितियों के आधार पर अतिरिक्त शर्तों/मानदंडों का सुझाव देने के लिए स्वतंत्र हो सकते हैं जिसकी स्वीकार करने से पहले सीजीडब्ल्यू ए/जल शक्ति मंत्रालय सरकार द्वारा समीक्षा की जाएगी।

सभी नए/मौजूद तथा विस्तार में गने वाले उद्योगों, अवसंरचनात्मकियोजनाओं और खनन परियोजनाओं को, जब तक कि पैरा 1.0 के अंतर्गत इसे विशिष्ट रूप से छूट प्राप्त है, नवे आधारित एप्लीकेशन प्रणाली के माध्यम से अनापत्ति प्रमाण पत्र (एनओसी) प्राप्त करना अपेक्षित होगा।

जल प्रबंधन योजनाएं अतिदोहित यूनिटों के साथ शुरू करके सस्तिदोहित, गंभीर और अर्धगंभीर मूल्यांकन यूनिटों के लिए सभी राज्य भूजल प्राधिकरणों/संघठनों द्वारा तैयार किए जाएंगी। जल प्रबंधन योजनाओं की समीक्षा की जाएगी और यह आवधिक रूप से अद्यतन की जाएगी। इस संबंध में तैयार प्रबंधन योजनाएं जल उपलब्धता और कमी के आंकड़े तथा नीति के बीच भूमि जल प्राधिकरण/राज्य भूमि जल अधि की वेबसाइटों पर दर्शाई जाएगी।

#### 1.0 एनओसी प्राप्त करने से छूट:

उपभोक्ताओं की निम्नलिखित श्रेणियों को भूजल निकासी के लिए एनओसी प्राप्त करने से छूट दी जाएगी

- (i) पेयजल और घरेलू उपयोग के लिए ग्रामीण और शहरी लोगों को मौसमिक घरेलू उपभोक्ता।
- (ii) ग्रामीण पेयजल आपूर्ति स्कीमों में।
- (iii) ग्रामीण और शहरी दोनों क्षेत्रों में सशस्त्र बलों के प्रतिष्ठान और नवीय सशस्त्र पुलिस बल।
- (iv) कृषि कार्य कलाप।
- (v) 10 लीटर यूएम/दिन से कम भूजल का आहरण करने वाले मोटर वाहन उद्योग।

#### 1.1 ड्रिलिंग रिगों का पंजीकरण

राज्य/संघ राज्य सरकारें अपने क्षेत्राधिकार में संचालित ड्रिलिंगों के पंजीकरण और उनके द्वारा ड्रिल किए गए कुओं के डेटाबेस के रखरखाव के लिए जिम्मेदार होंगी। सीजीडब्ल्यू ए को आंकड़े उपलब्ध करने के लिए सीजीडब्ल्यू ए पोर्टल में उपयुक्त लिंक दिए जाएंगे।

#### 2.0 शहरी क्षेत्रों में रेजीडेंसियल अपार्टमेंट/ग्रुप हाउसिंग सोसाइटी/सरकारी जलापूर्ति एजेंसियों के लिए पेय और घरेलू प्रयोग के लिए जल

भूजल निकासी के लिए अनापत्ति प्रमाण पत्र (एनओसी) देने के सिद्धियोजना प्रस्तावक को सीजीडब्ल्यू ए वेबसाइट में उपलब्ध उपयुक्त फॉर्मों में सीजीडब्ल्यू ए द्वारा जारी दिशानिर्देशों के अनुसार ब्यौरा भेजना होता है। नए/मौजूदा कुओं के लिए एनओसी केवल ऐसे मामलों में ही दिया जाता है, जहां निम्न सरकारी जलापूर्ति एजेंसी उस क्षेत्र में अपेक्षित मात्रा में जल की आपूर्ति करने में सक्षम नहीं है।

एनओसी तभी दिया जाएगा बशर्ते कि निम्नलिखित विशिष्ट शर्तें पूरी हों

- i) सीवेज परিশोधन संयंत्रों का संस्थापन सभी रेजीडेंसियल अपार्टमेंट/ग्रुप हाउसिंग सोसाइटी के लिए अनिवार्य होगा जहां भूजल की आवश्यकता 20 घनमीटर/दिन से अधिक है। एसटीपी का जल शैक्वालय प्लाशिंग, कार धोने, वागवानी इत्यादि के लिए उपयोग किया जाएगा।
- ii) यह एनओसी जारी होने की तारीख से 5 वर्षों की अवधि अथवा पंजीकृत क्षेत्र के लिए स्थानीय सरकार द्वारा जलापूर्ति करने के समय तक, जो भी पहले हो, वैध होगा। परियोजना प्रस्तावक एनओसी की वैधता के दौरान संबंधित स्थानीय सरकार से जलापूर्ति प्राप्त करता है, परियोजना प्रस्तावक को सीजीडब्ल्यू ए को जलापूर्ति की उपलब्धता के संबंध में सूचित करना होगा और प्राधिकरण द्वारा एनओसी रद्द कर दिया जाएगा। अन्य मामलों में परियोजना प्रस्तावक एनओसी की समाप्ति के 90 दिनों से पहले एनओसी के नवीकरण के लिए आवेदन करेगा।
- iii) प्रस्तावक को तालिका 6.1 में उल्लिखित दरों के अनुसार जल निष्का की प्रस्तावित भूजल के लिए भूजल निकासी प्रभार का भुगतान करना होगा।

आवेदन के साथ प्रस्तुत किए जाने वाले दस्तावेज

- क) प्लाशिंग इत्यादि के लिए पुनः चक्रित/परिशोधित जल के पुनर्वाह को ध्यान में रखते हुए राष्ट्रीय भवन कोड, 2016 (अनुलग्नक) के अनुसार अपेक्षित जल के ब्यौरे।

- घ) आगे दफ्त द्वारा 10/ रु. के गै रथायिग स्टैं प पर हलफनामा जिसमें पे च/घरे लू उपयोग के लिए 10 घनमीटर/दिन तक उपभोक्ता की भू जल की आवश्यकता होने की स्थिति में जोक जसूति की गै र/अपर्या स उपलब्धता की पु ष्टि की जाये ।
- ग) पे च/घरे लू उपयोग के लिए 10 घनमीटर/दिन से अधिक भू जल आभक्षके मामलों में स्थानीय सरकारी जलापूर् ति एजें सियां को एमओसी के लिए आने दन करते समय नगर्या िक्री जाने वाली स्कीम/प्रस्तावित परियोजना के लिए सरकारी अनु गोंदन की प्रति प्रस्तु त करनी होगी
- घ) किसी भी ने शनल अक्रे िशन बोर्ड फौर रे स्लिंग एं ड के लिते शनै जैरेंको(एनएसीएल) से प्रत्यागित प्रयोगशाला अथवा सरकार से अनु मोदित प्रयोगशाला से (एनओसी के लिए आवे द्य रही मौजू दा परियोजनाओं के मामले में ) मौजदा दोरवे ल/ट्यू बवे ल के भू जल गु णवत्ता आं कड़े ।
- ड) आवास और शहरी कार्य में चालय द्वारा जारी गॉडल भवन उपनिषागिक अनु सार क्षेत्र के भीतर वर्ष णन सं चयन/गु नर्भ रण के लिए प्रस्ताव।

### 3.0 कृषि क्षेत्र

कृ षि क्षेत्र भारतीय अर्थ व्यवस्था की रीढ़ की हड्डी है। वर्ष 2014 की लघु सिंचाई गणना के अनु सार 87.86 प्रतिशत कु एं 4 हे क्टे यर तक की भू मि वाले सीमान्त, लघु औसत किसानों के हैं। लगभग 9.18 प्रतिशत कु एं-140 हे क्टे यर की भू मि वाले मध्यम किसानों के हैं और 2.96 प्रतिशत कु एं-140 हे क्टे यर से अधिक भू मि वाले किसानों के हैं।

भू जल निकासी सं रचनाओं की सं ख्या पर विचार करते हुंसां ड एं ड के ट्रोलीति के माध्यम से कृ षि क्षेत्र में भू जल का विनियमन करना कठिन कार्य होगा। इसलिए सतत भू जल प्रबंधन के एमिगीदारी दृ ष्टिकोण अधिक सार्थ क होगा।

राज्यों/सं घ राज्य क्षेत्रों को किसानों के लिए मु फ्त/रियायती विद्यु त की समीक्षा करने , उपयु क्त विद्यु त मूल्य नीति तै यार करने और भू जल पर अत्यधिक निर्भ रता को कम करने के लिए कें द्रमदला-वदली/विविधीकरण/अन्य पहलों के प्रति कार्य करने की सलाह दी जाती है।

कृ षि क्षेत्र को भू जल निकासी के लिए एनओसी प्राप्त करने से छू ज्जदीती।

### 4.0 वाणिज्यिक प्रयोग

नीति दिशा-निर्देशों के अनु रूप के अतिरिक्त अतिदोहित मू ल्यां कन क्षेत्रों में िक्रीये वृ हद उद्योग को एनओसी नहीं दिया जाएगा।

वाणिज्यिक प्रयोग के लिए एनओसी दे ने हे तु आवे दन पर विचार करते समय भू जल सं साधनों की उपलब्धता पर पर्या स ध्यान दिया जाएगा।

भू जल निकालने वाले वाणिज्यिक उद्यमों को सं रक्षित धाराओं में उखिलजिल प्रयोग के ले खा सहित वार्षिक जल ले खा परीक्षा रिपोर्ट ऑनलाइन प्रस्तु त करनी होगी। सीजीडब्ल्यू ए/राज्य भू जल प्राधिकरण (एसजीडब्ल्यू ए) सभी ऐसी ले खा परीक्षा रिपोर्ट ऑनलाइन प्रकाशित करे गा।

सीजीडब्ल्यू ए/एसजीडब्ल्यू ए आवधिक रूप से एनओसी के अनु पालन की जाकरने के लिए स्वायत्त एजें सियों को कार्य पर लगाएगा।

### 4.1 औद्योगिक प्रयोग

अतिदोहित मू ल्यां कन इकाइयों में सू क्ष्म, लघु और मध्यम उद्यमों (एमएसई) की श्रे णी में आने वालों के अलावा किसी भी नए उद्योग को भू जल निकासी के लिए एनओसी नहीं दिया जाएगा। ापि कार्य बल के लिए पे यजल/घरे लू प्रयोग, इन नए उद्योगों द्वारा ग्रीनवे ल्ट उपयोग के लिए एनओसी की अनु मति होगी। अतिदोहित क्षेत्रों में नए सीलवें द जल उद्योगों को, चाहे वे एमएसएमई श्रे णी में आते हों, एनओसी नहीं दिया जाएगा।

उद्योगों द्वारा भू जल निकासी के लिए एनओसी दिया जाएगा बशर्ते िलिखित शर्तें पू री हों:

- I. ऐसे मामलों में ही एनओसी प्रदान किया जाएगा जहां स्थानीय सरकारी जलापूर् ति एजें सियां जल की अपे क्षित मात्रा की आपूर् ति करने में सक्षम नहीं है।



- II. सभी उद्योगों को अद्यतन जल दक्ष प्रौद्योगिकी को अपनाना अपेक्षित होगा, ताकि भूजल से साधन पर निर्भरता कम की जा सके।
- III. 100 घनमीटर/दिन से अधिक भूजल की निकासी वाले सभी उद्योगों/वर्गों के ड्रेनेज ऑफ इंडियन इंडस्ट्रीज (सीआईआई)/के ड्रेनेज ऑफ इंडियन चैम्बर ऑफ कॉमर्स एंड इंडस्ट्रीज (ईसीसीआई)/नेशनल प्रोडक्टिविटी ग्राउंड सिन (एगपीसी) कोषमाणित से खापरीक्षाओं के माध्यम से ध्वनिज लेखापरीक्षा करवाना और इसके पूरे होने के तीन माह के भीतर लेखापरीक्षा रिपोर्ट सीजीडब्ल्यू प्रस्तुत करना अपेक्षित होगा। ऐसे सभी उद्योगों को उपर्युक्त साधनों के माध्यम से अगले तीन वर्षों तक अप्रयोज्य जल प्रयोग को कम से कम 20 प्रतिशत कम करना अपेक्षित होगा।
- IV. अपने क्षेत्र के भीतर पर्यवेक्षण कुएं, पीजोमीटर का निर्माण और/या उल्लिखित उपर्युक्त जल स्तर मॉनिटरिंग तंत्र की संस्थापना करना 10 घनमीटर/दिन से अधिक भूजल निकासी करने का प्रस्ताव करने वाले उद्योगों के लिए अनिवार्य होगा। जल स्तर की मॉनिटरिंग यंत्रोपकरण प्रस्तावक द्वारा की जाएगी। बोरवे ल/प्रोडक्शन वे ल से कम से कम 15 मीटर की दूरी पर पीछे (अपेक्षित कुएं) का निर्माण किया जाएगा। पीजोमीटर में गहराई और चिह्नित जलभृत क्षेत्र परमिंग/कुओं के समान ही होंगे। पीजोमीटर के डिजाइन और निर्माण के विस्तृत दिशानिर्देश अनुलग्नक में दिए गए हैं। मासिक जल स्तर आंकड़े वेब पोर्टल के माध्यम से सीजीडब्ल्यू ए को प्रस्तुत किए जाएंगे।
- V. प्रस्तावक को परियोजना क्षेत्र में छतका वर्षा जल संचयन/पुनर्भरण कबोचित है। भूजल को प्रदूषित करने की संभावना वाले उद्योगों/रसायन, फार्मास्यूटिकल, डाई, पिगमेंट्स, ब्रिक्केटिंग/स्टिप्साइड/कीटनाशक, उर्वरक, स्लॉटर हाउस, विस्फोटक इत्यादि को उद्योग में प्रयोग करने के लिए सतह से ग्रहण करने में वर्षा जल संचयन करना होगा।
- VI. जलभृत सिस्टम में शोधित/गैर शोधित अपशिष्ट जल डालने की सख्त रूढ़ि है।
- VII. भूजल प्रदूषण के सम्भावित कारक उद्योगों जैसे डेस्लिंटर हाउस, डाई, रसायन/पेट्रोल/मिकल, कोयला वांशरीज, अन्य खतरनाक इकाइयों आदि को (सी पी सी डी लिस्ट के अनुसार) भूजल प्रदूषण के निवारण को सुनिश्चित करने के लिये आवश्यक वे ल हे ड संरक्षण उपायों को निरन्तर आवश्यकता है (अनुलग्नक)।
- VIII. सुरक्षित, अर्ध गंभीर और गंभीर आकलन यूनिटों में भूजल की निकासी वाले सभी उद्योगों को तालिका 5.2 क और 5.3 क के अनुसार लागू भूजल निकासी प्रभार का भुगतान करना अपेक्षित होगा।
- IX. अतिदोषित आकलन यूनिटों में भूजल निकासी करने वाले सभी मौजूदा उद्योगों को तालिका 5.2 ख और 5.3 ख के अनुसार लागू भूजल निकासी प्रभारों का भुगतान करने हेतु
- आवेदन के साथ प्रस्तुत किए जाने वाले दस्तावेज
- (क) ऐसे मामलों में, जहां भूजल 10 घनमीटर/दिन तक अपेक्षित है, स्थावरकारी एजेंसियों से जलापूर्ति उपलब्ध न होने के संबंध में -18/के गैर न्यायिक स्टैंप पेपर पर एक हलफनामा।
- (ख) ऐसे मामलों में, जहां भूजल 10 घनमीटर/दिन से अधिक अपेक्षित है/स्थानीय सरकारी जलापूर्ति एजेंसियों से ताजे जल/शोधित अपशिष्ट जल की आपूर्ति की उपलब्धता न होने/आंशिक रूप से होने का प्रमाणपत्र।
- (ग) किसी भी एनएबीएल प्रत्यायित प्रयोगशाला अथवा सरकार से अनुमोदित प्रयोगशाला (एनआरसी के लिए आवेदन कर रही मौजूदा परियोजनाओं के मामले में) से मौजूदा बोरेल/डगवे ल के भूजल गुणवत्ता आंकड़े।
- (घ) एनएबीएल प्रत्यायित प्रयोगशाला/सरकार से अनुमोदित प्रयोगशालाओं से मौजूदा उद्योगों के संबंध में बोरेल/डगवे ल/डगवे ल के जल गुणवत्ता आंकड़े।
- (ङ) आवासन और शहरी कार्य मंत्रालय द्वारा जारी मॉडल भवन उमविधियों के अनुसार क्षेत्र के भीतर वर्षा जल संचयन/पुनर्भरण के लिए प्रस्ताव।



सीजीडब्ल्यू ए से एनओसी प्राप्त करेगा। तथापि अतिदोहित आकलन नुतिटों में निर्माण कार्य कलापों के लिए भूजल का प्रयोग तभी अनुमत्य होगा। यदि उस स्थान के 10 किलोमीटर की परिधि भीतर कोई भी शोधित सीवेज जल उपलब्ध न हो। नई और मौजूदा आधारभूत परियोजनाओं को भूजल निकासी के लिए एनओसी प्राप्त करना भी अपेक्षित होगा।

अतिदोहित आकलन नुतिटों में जाटर पार्क, धीम पार्क, और मन्नेस्स पार्कों के लिए भूजल की निकासी हेतु एनओसी नहीं दिया जाएगा।

आधारभूत परियोजनाओं की सांकेतिक सूची अनुलग्नक में दी गई है।

भूजल की निकासी के लिए एनओसी दिया जाएगा बशर्ते कि निम्नलिखित शर्तें पूरी हों:

- आधारभूत परियोजनाएं, जिनके लिए डिवाटरिंग अपेक्षित हैं, केलासे गें प्रस्तावक को डिवाटरिंग जर्नल पर (डिजिटल वाटर फ्लो मीटर का प्रयोग करके) की नियमित मॉनीटरिंग करनी और सीजीडब्ल्यू ए/एसजीडब्ल्यू ए जो भी लागू हो के नेच पोर्टल के माध्यम से आंके प्रस्तुत करणा आवश्यक हॉलीडिंग रिपोर्टों और परिणामों को सीजीडब्ल्यू ए/एसजीडब्ल्यू ए की अपेक्षासुसार निरीक्षण अथवा रिपोर्टों के लिए प्रस्तावक द्वारा दो वर्ष तक रखना अपेक्षित होगा।
- ऐसी नई परियोजनाओं के लिए, जहां 20 घनमीटर/दिन से अधिक भूजल की आवश्यकता है, सीवेज परिशोधन संयंत्रों (एसटीपी) की संस्थापना अनिवार्य होगी। एसटीपी का जलवालय फलशिंग, कार धोने, बागवानी करने इत्यादि के लिए प्रयोग किया जाएगा।
- आधारभूत डिवाटरिंग/निर्माण कार्य कलापों के लिए परियोजना प्रकृत द्वारा प्रस्तुत विस्तृत प्रस्ताव के अनुसार विशिष्ट अवधि के लिए एनओसी वैध होगा।
- सुरक्षित, अर्ध गंधीर और गंधीर आकलन नुतिटों में भूजल निकासी आधारभूत परियोजनाओं को तालिका 5.3 के अनुसार लागू भूजल निकासी प्रभार देना अपेक्षित होगा।
- अति-दोहित आकलन नुतिटों में भूजल निकालने वाली सभी आधारभूत परियोजनाओं (नई/मौजूदा) को तालिका 5.3 ख के अनुसार भूजल संग्रहण प्रभार का अनुगठन करना होगा।

आवेदन के साथ प्रस्तुत किए जाने वाले दस्तावेज

- ऐसे मामले, जहां डिवाटरिंग होती है, में पम्पिंग की विस्तृत योजना बताते हुए क्षेत्र में भूजल की स्थिति, पंप किए गए जल का प्रस्तावित प्रयोग और उसका भूजल रिजिम पर व्यापक प्रभाव आकलन के सम्बंध में प्रत्यायित सलाहकार द्वारा तैयार की गई प्रभाव आकलन रिपोर्ट प्रस्तुत करके अनिवार्य होगा। रिपोर्ट में भूजल स्तर की गिरावट, भूमि धंसान इत्यादि जैसे किन्हीं विशिष्ट पर्यावरणीय मुद्दों को ध्यान में रखते हुए पर्यावरणीय जोखिम और प्रस्तावित प्रबंधन नीतियों को दर्शाया जाना चाहिए।
- सुरक्षित और अर्ध गंधीर क्षेत्रों में निर्माण के लिए जल की अपेक्षास्थिति में किसी अन्य स्रोत से जल उपलब्ध न होने के संबंध में -10 के गैर-स्वायिक स्टैंडपे पर एक हलफनामा।
- गंधीर और अतिदोहित क्षेत्रों में स्थल की 10 कि.मी. की परिधि भीतर निर्माण के लिए परिशोधित सीवेज जल के उपलब्ध न होने के संबंध में सरकारी एजेंसी से प्रमाणपत्र।
- वाणिज्यिक प्रयोग के लिए आकलन नुतिटों की सभी श्रेणियों के संबंध में स्थानीय सरकारी जलापूर्ति एजेंसी से जल के उपलब्ध न होने के संबंध में प्रमाणपत्र।
- आवासन और शहरी कार्य मंत्रालय द्वारा जारी मॉडल भवन उम्रनियमों के अनुसार क्षेत्र के भीतर वर्षा जल संग्रहण/पुनर्भरण के लिए प्रस्ताव।
- फलशिंग इत्यादि के लिए परिचरुण/परिशोधित जल के पुनः उपयोग वाणिज्यिक प्रयोग के लिए पूरी हो चुकी आधारभूत परियोजनाओं के मामले में को ध्यान में रखते हुए काप्रमिन कोड, 2016 (अनुलग्नक) के अनुसार संगठित जल आवश्यकता का व्यौरा।
- वाणिज्यिक प्रयोग के लिए जल की आवश्यकता वाली आधारभूत परियोजनाओं के लिए संबंधित एजेंसी से पूरा होने का प्रमाणपत्र।

**5.0 भूजल निकासी/संग्रहित प्रभार**

शहरी क्षेत्रों में सभी रेजीडेंसियल अपार्टमेंट/ग्रुप हाउसिंग सोसाइटी/सरकारी जलापूर्ति एजेंसियों को भूजल निकासी के लिए भुगतान करना अपेक्षित होगा।

सुरक्षित, अर्ध गंभीर और गंभीर आकलन यूनितों में भूजल की निकासी वाले सभी उद्योगों/खनन/आधारभूत परियोजनाओं को भूजल निकासी की मात्रा और इस दिशानिर्देश में दिए गए व्यौरों के अनुसार आकलन यूनित की श्रेणी के आधार पर भूजल निकासी प्रभार का भुगतान करना होगा।

अतिदोहित आकलन यूनितों में भूजल की निकासी करने वाले एमएसडी/महिनत सभी मौजूदा खनन/आधारभूत परियोजनाओं और मौजूदा उद्योगों को भूजल निकासी की मात्रा के आधार पर भूजल संग्रहण प्रभार देने होंगे। इसके अतिरिक्त, अतिदोहित क्षेत्रों में नए एमएसएमई, नई अवसंरचना और नवीन परियोजनाओं को भी भूजल संग्रहण प्रभार का भुगतान करना अपेक्षित होगा।

एनओसी देते समय अथवा उसके नवीकरण के समय मौजूद भूजल निबंधनों में निर्धारित शर्तों के अनुकरण में जिन मौजूदा उद्योगों, आधारभूत यूनितों और खनन परियोजनाओं ने कृत्रिम/संरचनाएं स्थापित/निर्मित की हैं, को भूजल निकासी प्रभार/भूजल संग्रहण प्रभार में 50 प्रतिशत की छूट देनी, बशर्ते कि उनका कार्य निष्पादन और जांच संतोषजनक हो।

प्रस्तावित जल निकासी/संग्रहण प्रभार से सूचित राजस्व स्थल विशिष्टपुस्तक मांग/आपूर्ति पक्ष के कार्यों के कार्यान्वयन हेतु अलग निधि में रखा जाएगा।

**5.1 भूजल निकासी/संग्रहण प्रभार की दरें**

I. शहरी क्षेत्रों में रेजीडेंसियल अपार्टमेंट/ग्रुप हाउसिंग सोसाइटी/सरकारी जलापूर्ति एजेंसियों के लिए पेय और घरेलू प्रयोग।

केवल पेय/घरेलू प्रयोग के लिए जल की आवश्यकता वाले रेजीडेंसियल अपार्टमेंट/ग्रुप हाउसिंग सोसाइटी को एनओसी लेने के लिए तालिका 5.1 में दी गई दरों के अनुसार भूजल निकासी प्रभार देना होगा।

तालिका 5.1 में पेय और घरेलू प्रयोग के लिए भूजल निकासी प्रभार

निकाले गए भूजल की मात्रा (घनमीटर/माह)	भूजल निकासी प्रभार की दर (रु. प्रति घनमीटर)
0-25	कोई प्रभार नहीं
26-50	1.00
>50	2.00

सरकारी जलापूर्ति एजेंसियों और सरकारी आधारभूत परियोजनाओं को 50 रु. प्रति घनमीटर की दर से भूजल निकासी प्रभार का भुगतान करना होगा।

**II. सीलबंद पेयजल यूनितें**

सुरक्षित, अर्ध गंभीर और गंभीर आकलन यूनितों में सीलबंद पेयजल के लिए भूजल निकासी प्रभारों की दर तालिका 5.2 क में दी गई है और अतिदोहित आकलन यूनितों में भूजल संग्रहण तालिका 5.2 ख दिए गए हैं।

तालिका 5.2 क: सीलबंद पेयजल यूनिटों के लिए भूजल निकासी प्रभार की दरें (रु. प्रति घनमीटर)

क्र.सं.	क्षेत्र की श्रेणी ↓ भू मिजल प्रयोग →	निकाले गए भूजल की मात्रा				
		50 घनमीटर/ दिन तक	51 से < 200 घनमीटर/दिन	200 से < 1000 घनमीटर/दिन	1000 से < 5000 घनमीटर/दिन	5000 घनमीटर/ दिन और अधिक
1.	सुरक्षित	1.00	3.00	5.00	8.00	10.00
2.	अर्ध-गंभीर	2.00	5.00	10.00	15.00	20.00
3.	गंभीर	4.00	10.00	20.00	40.00	60.00

तालिका 5.2 ख सीलबंद पेयजल यूनिटों के लिए भूजल रेस्टोरेशन प्रभार की दरें (रु. प्रति घनमीटर)

क्र.सं.	क्षेत्र की श्रेणी ↓ भू मिजल प्रयोग →	निकाले गए भूजल की मात्रा				
		50 घनमीटर/ दिन तक	51 से < 200 घनमीटर/दिन	200 से < 1000 घनमीटर/दिन	1000 से < 5000 घनमीटर/दिन	5000 घनमीटर/ दिन और उससे अधिक
1.	अतिदोषित (केवल मौजूदा उद्योग)	8.00	20.00	40.00	80.00	120.00

## III. अन्य उद्योग और आधारभूत परियोजनाएं

सुरक्षित, अर्ध-गंभीर और गंभीर आकलन यूनिटों में अन्य उद्योगों और आधारभूत परियोजनाओं के लिए भू मिजल निकासी प्रभार की दरें तालिका 5.3 क में दी गई हैं और अतिदोषित आकलन यूनिटों में भूजल संग्रहण प्रभार तालिका 5.3 ख में दिए गए हैं।

तालिका 5.3 क: अन्य उद्योगों और आधारभूत परियोजनाओं के लिए भूजल निकासी प्रभार की दरें (रु. प्रति घनमीटर)

क्र.सं.	क्षेत्र की श्रेणी ↓ भू मिजल प्रयोग →	निकाले गए भूजल की मात्रा			
		< 200 घनमीटर/ दिन	200 से < 1000 घनमीटर/दिन	1000 से < 5000 घनमीटर/ दिन	5000 घनमीटर/दिन और उससे अधिक
1.	सुरक्षित	1.00	2.00	3.00	5.00
2.	अर्ध-गंभीर	2.00	3.00	5.00	8.00
3.	गंभीर	4.00	6.00	8.00	10.00

तालिका 5.3 ख: अन्य उद्योगों और आधारभूत परियोजनाओं के लिए भूजल निकासी प्रभार की दरें (रु. प्रति घनमीटर)

क्र.सं.	क्षेत्र की श्रेणी	निकाले गए भूजल की मात्रा			
		< 200 घनमीटर/दिन	200 से < 1000 घनमीटर/दिन	1000 से < 5000 घनमीटर/दिन	5000 घनमीटर/दिन और उससे अधिक
1.	अतिबोहित (वर्तमान दिशा-निर्देशों के अनुसार भूजल उपयोग)	6.00	10.00	16.00	20.00

#### IV. खनन परियोजनाएं

सुरक्षित, अर्धगंभीर और गंभीर आकलन पूरितों में भूजल निकालने वाले खनन के भूजल निकासी प्रभार की दरें तालिका 5.4 क में दी गई हैं और अतिबोहित आकलन पूरितों में भूजल निकासी परियोजनाओं के मामले में भूजल संग्रहण प्रभार तालिका 5.4 ख में दिया गया है।

तालिका 5.4 क: खनन के लिए भूजल निकासी प्रभार की दरें (रु. प्रति घनमीटर)

क्र.सं.	क्षेत्र की श्रेणी	निकाले गए भूजल की मात्रा			
		< 200 घनमीटर/दिन	200 से < 1000 घनमीटर/दिन	1000 से < 5000 घनमीटर/दिन	5000 घनमीटर/दिन और उससे अधिक
1.	सुरक्षित	1.00	2.00	2.50	3.00
2.	अर्धगंभीर	2.00	2.50	3.00	4.00
3.	गंभीर	3.00	4.00	5.00	6.00

तालिका 5.4 ख: खनन के लिए भूजल निकासी प्रभार की दरें (रु. प्रति घनमीटर)

क्र.सं.	क्षेत्र की श्रेणी	निकाले गए भूजल की मात्रा			
		< 200 घनमीटर/दिन	200 से < 1000 घनमीटर/दिन	1000 से < 5000 घनमीटर/दिन	5000 घनमीटर/दिन और उससे अधिक
1.	अतिबोहित	4.00	5.00	6.00	7.00

#### 6.0 प्रचुर जलापूर्ति

भूजल निकालने और उसकी आपूर्ति करने वाले सभी निजी टैंक प्रचुर जलापूर्ति करते हैं, जो भूजल निकासी के लिए एनओसी प्राप्त करना अब जरूरी होगा। सुरक्षित, अर्धगंभीर और गंभीर आकलन इकाइयों में भूजल निकालकर टैंकों के

माध्यम से प्रचुर जलापूर्ति करने वाले आपूर्तिकर्ता को तालिका 6.1 के अनुसार भूजल निकासी प्रभार का भुगतान करना होगा। अति-दोहित आकलन इकाइयों में भूजल निकालने वाले प्रचुर मात्रा में जलसिक्तताओं को तालिका 6.1 के अनुसार भूजल संग्रहण प्रभार का भुगतान करना होगा। सभी हैं करेंगे उनकी मूल्यों में ट/कार्य क्षेत्र की मॉनिटरिंग के लिए जीपीएस आधारित सिस्टम से स्थापित करना होगा।

प्रचुर/उच्च जलापूर्ति के लिए एनजोसी जारी करने की कार्य प्रणालियों/संयोजित राज्य क्षेत्रों के साथ परामर्श करके तैयार की जायेगी और इस संबंध में उपयुक्त विश्लेषण तैयार किए जाएंगे और उनके लिए अलग से जारी किए जाएंगे।

तालिका 6.1 के प्रचुर/टैंकर जलापूर्ति के लिए भूजल निकासी प्रभार	
श्रेणी	प्रति घनमीटर की दर (रु. में)
सुरक्षित	10
अर्ध-गंभीर	20
गंभीर	25

तालिका 6.1 के प्रचुर/टैंकर जलापूर्ति के लिए भूजल निकासी प्रभार	
श्रेणी	प्रति घनमीटर की दर (रु. में)
अतिदोहित	35

#### 7.0 लवणीय भूजल की निकासी

अति-दोहित क्षेत्रों में स्थित आधारभूत/खनन परियोजनाओं द्वारा उद्योग/छिटाटिंग द्वारा प्रयोग के लिए ताजे जल की अपेक्षा सभी गहराइयों पर लवणीय भूजल अथवा अन्यथा लवणीय जल क्षेत्र में लवणीय भूजल की पंपिंग से युक्त क्षेत्रों में लवणीय भूजल की निकासी को प्रोत्साहित किया जाएगा उद्योगों को भूजल निकासी प्रभार का भुगतान करने से छूट दी जाएगी।

डायनामिक भूजल संसाधन के अद्यतन मूल्यांकन के अनुसार सभी इन्फ्लेक्स्ड लवणीय भूजल वाली ऐसी आकलन इकाइयों की सूची सीजीडब्ल्यूए द्वारा उनकी वेबसाइट पर उपलब्ध की जाएगी। तथापि, यूनितों द्वारा बहिष्कार के निपटान के संबंध में पर्याप्त ध्यान दिया जाएगा ताकि जल निकसने पर जलभृतों को प्रदूषण से बचाया जा सके।

इस संबंध में विस्तृत विनिर्देश तैयार कर लिए गए हैं और अलग से जारी कर दिए गए हैं।

#### 8.0 आद्र भूमि क्षेत्रों का संरक्षण

देश में आद्र भूमि क्षेत्र बहुत महत्वपूर्ण होते हैं क्योंकि वे ही ऐंमें भूचाल की उपस्थिति का प्रत्यक्ष प्रतिबिंब होते हैं। आद्र भूमि प्राधिकरणों द्वारा आद्र भूमि क्षेत्रों की सुरक्षा का रखरखाव अल्पे किया जा रहा है। चूंकि आद्र भूमि क्षेत्रों के अस्तित्व के लिए भूजल बहुत महत्वपूर्ण होता है इसलिए आद्र भूमि में किसी भी भूजल विकास की गतिविधि से उस क्षेत्र में जल की मात्रा प्रभावित होती है।

आद्र भूमि क्षेत्रों की 500 मीटर परिधि की सीमा के भीतर आने वाली परियोजनाओं को अनिवार्य रूप से एक विस्तृत प्रस्ताव प्रस्तुत करना होगा जिसमें यह दर्शाया होगा कि परियोजना स्थापना द्वारा निकाले जाने वाले भूजल का संरक्षित आद्र भूमि क्षेत्रों पर प्रभाव नहीं पड़ेगा। इसके अलावा सीजीडब्ल्यूए से अनुमति लेने से परियोजना क्षेत्र में अपनी परियोजनाओं को स्थापित करने के लिए उपयुक्त आद्र भूमि प्राधिकरणों सहमति/अनुमोदन लेना होगा।

#### 9.0 अनापत्ति प्रमाणपत्र में सामान्य अनुपालन की शर्तें

- एनजोसी प्राप्त करने वाले सभी उपयोगकर्ताओं को डिजिटल वॉटर फ्लोमीटर (वीआईएस/आईएस मानकों के अनुरूप) को स्थापित करना और एक्टिवेशन संरचना (ओं) में टेलेमेट्री लगाना अनिवार्य होगा और एनजोसी देने के 90 दिनों के भीतर वे मोर्टल के माध्यम से सीजीडब्ल्यूए को इसकी स्थापना के बारे में सूचित किया जाएगा।

- ii. प्रस्तावकों द्वारा जल प्रवाह गीटर की अधिकृत एंजेंसी से अनिवार्य रूप से एक वर्ष में एक बार जांच कराई जाएगी।
- iii. प्रस्तावक परियोजना क्षेत्र में छत पर वर्षा जल संचयन और पुनर्चण्डन स्थापित करेंगे।
- iv. प्रस्तावक धारा 6 में दी गई दरों के अनुसार भूजल निष्कर्षण की मात्रा के आधार पर भूजल निकालने/पुनर्चण्डन शुल्क का भुगतान करेंगे।
- v. भूजल स्तर निगरानी के उद्देश्य से निर्मित अवलोकन कुओं (पाइपेस) का निर्माण धारा 15 के अनुसार अनिवार्य होगा। जल स्तर का डाटा सीजीडब्ल्यू ए की वेब पोर्टल के माध्यम उपलब्ध कराया जाएगा। पाइजोमीटर के निर्माण के लिए विस्तृत दिशानिर्देश अनुबंध में दिए गए हैं।
- vi. प्रस्तावकों को वर्ष में एक बार निष्कर्षण संरचना (ओं) से भूजल कीवसुणकी निगरानी करनी होगी। मोरवे/गलनू/पो/खोदे गए कुओं से जल के नमूने को हर साल/वर्ष के दौरान एकत्र किया जाएगा और तुलनात्मक मापकों (धनायन और आयन), भारी धातुओं कीटनाशकों/जैविक यौगिकों इत्यादि का एनएचएल अधिकृत प्रयोगशालाओं में विश्लेषण किया जाएगा। जल की शुद्धता के आंकड़ों/वेब पोर्टल के माध्यम से सीजीडब्ल्यू ए को उपलब्ध कराया जाएगा।
- vii. यदि एनओसी की वैधता अवधि के भीतर यांत्रिक विफलता के कारणांशों का अस्तित्व में नहीं रह जाता है तो उपयोगकर्ता वेब पोर्टल पर सीजीडब्ल्यू ए को सूचना देकर इसी तरहदूसरे कुएं का निर्माण कर सकता है। अप्रत्यक्ष कुओं की सील किया जाएगा (अनुबंध का संदर्भ लें)। उपयोगकर्ता को इस संबंध में प्रस्तावकी प्रमाण प्रस्तुत करना आवश्यक होगा। यदि मौजूदा निष्कर्षण संरचनाएं प्रदान करने में विफल रहती हैं और प्रस्तावक उसी परिसर में एक और ट्यूबवेल ड्रिल करने की इच्छा रखते तो प्राधिकरण की पूर्व अनुमति लेना अपेक्षित होगा। यदि प्रतिस्थापन कुएं को दूसरी अलग जगह पट्टा किया जाना है तो प्रस्तावक को नया एनओसी प्राप्त करना होगा।
- viii. जहां कहीं भी संभव होवहां सिसाईकिल्ड/अपशिष्ट जल शोधन से ग्रीनवेल्ड (वागवानी) में जल की आवश्यकता को पूरा किया जाएगा।
- ix. स्वामित्व परिवर्तन के मामले, मंड्योग के नए मालिक द्वारा परिसर पर कब्जा लेने के 60 दिनों के भीतर दस्तावेजी प्रमाण के साथ एनओसी में आवश्यक परिवर्तनों को शामिल करने के लिए आवेदन करना होगा।

#### 10.0 एनओसी शर्तों के अनुपालन की निगरानी

एनओसी की शर्तों के अनुपालन की निगरानी के लिए केन्द्रीय भूजल अधिकरण और राज्य/संघ शासित क्षेत्रों के भूजल प्राधिकरण निम्नलिखित कदम उठाएंगे :

- क. अनुपालन निगरानी के लिए उपयुक्त एमआईएस. विकसित किया जाएगा।
- ख. जिला कलेक्टर/उपायुक्त (डीसी) / जिला मजिस्ट्रेट (डीएम) अनधिकृत भूजल निष्कर्षण संरचनाओं को सील करना, विजली काटना, एनओसी की शर्तों का उल्लंघन करने वालों के खिलाफ अभियोजन शुरू करना और पर्यावरण क्षतिपूर्ति की कार्यवाई से वाध्यकारी उपायों को करने के अधिकृत हैं।
- ग. सक्षम प्राधिकारी के अनुमोदन से सीजीडब्ल्यू/सीजीडब्ल्यू ए और राज्य भूजल संगठनों के तकनीकी अधिकारियों को निगरानी और आवधिक निरीक्षण की कार्यवाई करने के लिए अधिकृत किया जाता है।
- घ. एनओसी शर्तों में किसी भी तरह के उल्लंघन के मामले प्रस्तावक धारा 16 के अनुसार दंड का भुगतान करने के लिए उत्तरदायी होंगे।

#### 11.0 एनओसी का नवीनीकरण

एनओसी का समय-समय पर नवीनीकरण किया जाएगा, जिसमें निम्नलिखित शर्तों का अनुपालन किया जाएगा:

- i. आवेदक को इसकी वैधता की समाप्ति से कम से कम 90 दिन पहले एनओसी नवीकरण के लिए आवेदन करना होगा।
- ii. एनओसी के नवीकरण का आवेदन अनुपालन रिपोर्ट के साथ होगा।



iii. नवीनीकरण प्रदान करने से पहले के द्रीय भू जल प्राधिकरण या राज्य / संघ राज्य क्षेत्र प्राधिकरण को स्वयं संतुष्ट करेगा कि एनओसी की शर्तों का अनुपालन किया गया है।

iv. मूल्यांकन क्षेत्रों में परिवर्तन के माग्लेईई क्षेत्रों में निर्धारित शर्तों के साथ नवीनीकरण की अनुमति दी जाएगी

v. निर्दिष्ट शर्तों के अनुसार विभिन्न उपयोगों के लिए एनओसी कार्यानीकरण निम्नानुसार किया जाएगा:

श्रेणी	उपयोग	नवीनीकरण की अवधि
नदी और, अर्ध-नदी और और सु रक्षित	पीने और घरेलू उपयोग एवं शहरी जल आपूर्ति एंजें शि के लिए नु निगामी या चा परियोजनाएं	5 वर्ष
	इंडस्ट्रीज	3 वर्ष
	खान	2 वर्ष
अति-दोषित	अति-दोषित क्षेत्रों में सभी उपयोगकर्ता	2 वर्ष

vi. यदि नवीनीकरण का आवेदन समय पर प्रस्तुत किया गया है औसीजीडब्ल्यू ए/ संघ राज्य क्षेत्र / संघ राज्य क्षेत्र के प्राधिकरण, समय पर आवेदन की प्रक्रिया को आगे बढ़ाने में असमर्थ होएँ नओसी को एनओसी के नवीनीकरण की तारीख से बढ़ाया जाना माना जाएगा।

vii. यदि प्रस्तावक एनओसी की समाप्ति की तारीख से 3 महीने के भी नवीनीकरण के लिए आवेदन करने में विफल रहता है तो प्रस्तावक पर एनओसी की समाप्ति की तारीख से शुरू होने की अवधि और सक्षम प्राधिकारी द्वारा नवीनीकरण किए जाने की तारीख तक पर्यावरण क्षतिपूर्ति के भुगतान का उत्तरदायित्व है।

#### 12.0 एनओसी का विस्तार

यदि प्रस्तावक वास्तविक कारणों से एनओसी की वैधता अवधि में (कुछों) का निर्माण करने में असमर्थ रहता है तो प्रस्तावक को एनओसी के विस्तार के लिए आवेदन करना होगा। स्तर के आवेदन में विलंब के कारणों को दस्तावेजों के आधार पर पुष्ट किया जाना चाहिए। एनओसी को विस्तार दिए जाने की अन्य शर्तें, नई एनओसी के समान ही होंगी।

एनओसी को अधिकतम दो वर्षों के लिए बढ़ाया जाएगा। इस बढ़ाई गई अवधि की समाप्ति के बाद इसमें कोई और विस्तार नहीं दिया जाएगा। ऐसी स्थिति में, आवेदन को एनओसी लेने के लिए नए सिरे से आवेदन करना होगा।

#### 13.0 अवैध भूजल निकासी के खिलाफ शक्तियों का प्रत्यायोजन

के द्रीय भू जल प्राधिकरण ने प्रत्येक राजस्व जिला/ सब डिविजनल जिला मजिस्ट्रेटों/जिला कलेक्टरों/ सब डिविजनल मजिस्ट्रेटों को प्राधिकृत अधिकारी नियुक्त किया, जिन्हें अवैध कुओं को सील करने/ कुओं को मिलने वाली विजली को काटने, उल्लंघन करने वालों के खिलाफ अभियोजन इत्यादि शुरू करने की शक्ति प्रदान की गई है जिसमें उनके संबंधित अधिकार क्षेत्र में भू जल से संबंधित शिकायतों का निवारण शामिल है।

दिशा-निर्देशों के अनुसार निगरानी और अनुपालन तंत्र को और अधिक प्रभावी और मजबूत बनाने के लिए ज्यों/संघ राज्य क्षेत्रों के राजस्व और उद्योगों के संबंधित विभागों के अधिकारियों को राज्य/संघ राज्य क्षेत्रों की सरकारों के परामर्श से प्राधिकृत अधिकारी के रूप में नियुक्त किया जाएगा।

सीजीडब्ल्यू ए द्वारा एनओसी एप्लीकेशन पोर्टल (एनओसीएपी) में एनओसी की एक प्रति संबंधित जिला मजिस्ट्रेट/जिला कलेक्टर को भेजी जाएगी। के द्रीय भू जल प्राधिकरण निर्देशों के उल्लंघन और एनओसी में निर्धारित शर्तों को पूरा न करने की स्थिति में प्राधिकृत अधिकारी, पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 15 से 21 के तहत उचित शक्तियाँ/भू जल आवेदन आदि उचित न्यायालयों में शायर करेंगे।

#### 14.0 भूजल स्तर की निगरानी

भू जल स्तर की निगरानी के लिए सभी परियोजना प्रस्तावकों (1000 एम/डी से अधिक भू जल निकासी) को अपने परिसर के भीतर अनिवार्य रूप से पाईज़ोमीटर (अवलोकन कुओं) का निष्पन्न करना पड़ता है। अनुपालन शर्तों की ऐसी व्यवस्था यह सुनिश्चित करने के लिए बनाई गई है जिससे कि हर महीने परिसर क्षेत्र में भू जल स्तर की निगरानी और अवलोकन किया जा सके। इस संबंध में परियोजना प्रस्तावकों द्वारा पाईज़ोमीटर के माध्यम से जल स्तर की निगरानी के आवश्यक माग्लेई डों को तालिका 15.1 में दिया गया है।

निर्माण किए जाने वाले पीजोमीटर और जल स्तर निगरानी तंत्र प्रणाली की तालिका 15.1					
क्र.सं.	भू जल निकासी की मात्रा (सीयू एम/डी)	अपेक्षित पीजोमीटर की संख्या	निगरानी प्रणाली		
			मैनुअल	डीडब्ल्यूएस तंत्र	डीडब्ल्यूएसआरके साथ रेलीमेंटरी
1	<10	0	0	0	0
2	11-50	1	1	0	0
3	51-500	1	0	1	0
4	>500	2	0	1	1

पाईजोमीटर उपयुक्त ढंग से स्थापित किया जाएगा जिससे पाईजोमीटर टैप किए गए जलभंडार क्षेत्र की समानता में बदलाव के समान सुनिश्चित हो सके।

#### 15.0 पर्यावरणीय क्षतिपूर्ति

उपयुक्त प्राधिकरण से वैध एमथोसी लिए बिना उद्योगों फ्रास्ट्रक्चर इकाइयों और खदान परिवोजनाओं द्वारा व्यावसायिक उपयोग के लिए भू जल निष्कर्षण अवैध माना जाएगा और इस तरह भू जल निकासी की मात्रा के लिए पर्यावरण क्षतिपूर्ति के भुगतान के लिए उत्तरदायी होंगे। नीचे उल्लिखित फ्रेमवर्क नियंत्रण बोर्ड (सीपीसीबी) द्वारा निर्धारित मानदंडों का उपयोग पर्यावरणीय क्षतिपूर्ति की गणना के लिए किया जाएगा:

ईसीआईडब्ल्यू = प्रतिदिन भू जल खपत पर्यावरण क्षतिपूर्ति दर (ईसीआरजीडब्ल्यू) दिन की संख्या निवारण घटक

जहां भू जल खपत घन मीटर/दिन और ईसीआरजीडब्ल्यू रु./सीयू एम है

#### 15.1 पर्यावरणीय क्षतिपूर्ति की दरें:

मूल्य कन इकाइयों की विभिन्न श्रेणियों में अलग-अलग उपयोगकर्ताओं की पर्यावरणीय क्षतिपूर्ति (ईसीआरजीडब्ल्यू) की दर तालिका 15.1 से 15.3 में दी गई हैं।

तालिका 15.1 : पै के जड पे यजल इकाइयों के लिए ईसीआरजीडब्ल्यू

क्र.सं.	क्षेत्र वर्गीकरण	जल की खपत (सीयू एम/दिन)			
		<200/	200 to <1000	1000 to <5000	5000 & above
		पर्यावरणीय क्षतिपूर्ति दर (ईसीआरजीडब्ल्यू) रु./घन मीटर			
	सुरक्षित	12	18	24	30
2	अर्ध-गंभीर	24	36	48	60
3	गंभीर	36	48	66	90
4	अति-दोषित	48	72	96	120

टिप्पणी: न्यूनतम ईसीआईडब्ल्यू 1,00,000/रुपए से कम नहीं होगा।

तालिका 15.2: खनन/ई फ्रास्ट्रक्चर डिवाटरिंग परियोजनाओं के लिए ईसीआरजीडब्ल्यू

क्र.सं.	क्षेत्र वर्गीकरण	जल खपत (सीयू एमदिन)			
		<200	200 to <1000	1000 to <5000	5000 & above
पर्यावरणीय क्षतिपूर्ति (ईसीआरजीडब्ल्यू) रु./घन मीमें .					
1	सुरक्षित	15	21	30	40
2	अर्ध गंभीर	30	45	60	75
3	गंभीर	45	60	85	115
4	अति-दोषित	60	90	120	150

टिप्पणी: न्यूनतम ईसीजीडब्ल्यू 1,00,000/रूप से कम नहीं होगा।

टिप्पणी: न्यूनतम ईसीआरजीडब्ल्यू 1,00,000/रुपए से कम नहीं होगा।

तालिका 15.3: औद्योगिक इकाईयों के लिए ईसीआरजीडब्ल्यू

क्रं.सं.	क्षेत्र वर्गीकरण	जल की खपत (सीयू एमदिन)			
		<200	200 to <1000	1000 to <5000	5000 & above
		पर्यावरणीय क्षतिपूर्ति दर ईसीआरजीडब्ल्यू रु./घन मीमें.			
1	सुरक्षित	20	30	40	50
2	अर्ध-गंभीर	40	60	80	100
3	गंभीर	60	80	110	150
4	अति-दोषित	80	120	160	200

टिप्पणी:-न्यूनतम ईसीजीडब्ल्यू 1,00,000/रुपए से कम नहीं होगा।

टिप्पणी: न्यूनतम ईसीआरजीडब्ल्यू 1,00,000/रुपए से कम नहीं होगा।

15.2 नुकसान और पर्यावरणीय क्षति की भरपाई के लिए निवारक कारक (पैकेज्ड पेयजल यूनिट्स, खनन, उद्योग और इंफ्रास्ट्रक्चर से जुड़ी परियोजनाओं के लिए)

अवैध भूजल निष्कर्षण की अवधि के आधार पर निम्नलिखित निवारक कारकों को नुकसान और पर्यावरणीय क्षति की भरपाई का विवरण तालिका 15.4 में दिया गया है।

तालिका 15.4: भूजल निकासी की मात्रा और अवैध निकासी के वर्षों की संख्या के आधार निवारक कारक

क्र.सं.	जल की खपत	निवारक कारक		
		< 2 वर्ष	2-5 वर्ष	>5 वर्ष
1	<1000 के एलडी	1.00	1.00	1.25
2	1000-5000 के एलडी	1.00	1.00	1.50
3	>5000 के एलडी	1.00	1.25	2.00

टिप्पणी: के एलडी- किलोमीटर प्रतिदिन

## 16.0 दंड का प्रावधान

उपयुक्त प्राधिकारी द्वारा जारी एनओसी शर्तों का पालन न करने की स्थिति में प्रस्तावकों पर जुर्माना लगाया जाएगा। एनओसी की विभिन्न शर्तों का पालन नहीं करने की प्रस्तावित दंड क्रिदरे तालिका 6.1 में दी गई हैं। जल शक्ति मंत्रालय में सक्षम प्राधिकारी के अनुमोदन से दंड की दरों की सम्भव पर समीक्षा की जाएगी।

## तालिका 16.1: एनओसी शर्तों का अनुपालन न करने पर दंड का प्रावधान

क्र.सं.	मदें	शुल्क रुपए में
1	टे लीमे ट्री सिस्टम के साथ स्थापित नहीं होना/ दोषपूर्ण डिजिटॉइडर फ्लो मीटर।	200000
2	अतिरिक्त भू जल निष्कर्षण संरचनाओं का अप्रकटीकरण/निर्माण क) गैरकार्यात्मक संरचनाएं। ख) अप्रचलित/परित्यक्त टिप्पणी: दी गई बरे गैरकार्यात्मक/अप्रचलित/परित्यक्त संरचनाओं के लिए हैं। सगे किंतु इसके लिए इस तरह की संरचनाओं की संख्या के साथ इसे गुणा किया जाएगा।	200000 100000
3	ताजे जल क्षेत्रों की रिपोर्टिंग आवेदन में त्रुटि/विचलन क्षेत्रों के रूप में	200000
4	पारिजोगीटर गो स्थापित नहीं किया जाता।	200000
5	दोषपूर्ण डीडब्ल्यू एलआरटे लीमे ट्री प्रणाली/ स्थापित नहीं होना	100000
6	पुनर्भरण की अपर्याप्त क्षमता/ जल संरक्षण संरचनाओं का निर्माण नहीं होना	500000
7	पुनर्भरण संरचनाओं का रखरखाव न होना।	200000
8	शोधित/दिना शोधित जल को जलभूत प्रणाली में पहुंचाना। नोट: जुर्माने के अलावा स्थावक पर्यावरण (संरक्षण) अधिनियम 1886 के प्रावधानों के अनुसार जलभूत सुधार लागत वहन करेगा।	1000000
9	जल स्तर/ जल गुणवत्ता डाटा को प्रस्तुत नहीं करना।	50000
10	भूजल की दैनिक निकासी/निष्कर्षण आंकड़ों की लॉग बुक का रखरखाव करना।	50000
11	पुनर्भरण संरचना (ओं) की तस्वीर न प्रस्तुत करना।	50000
12	अपनी अनुपालन रिपोर्ट प्रस्तुत न करना।	100000
13	प्राधिकृत/अपंजीकृत ड्रिलिंग रिम्स (प्रति संरचनाओं) द्वारा भूजल निष्कर्षण संरचनाओं का निर्माण।	100000
14	जलापूर्ति टैंकों का अपंजीकरण न करना।	500000
15	गलत सूचना/ वचन देना।	100000

मौजूदा जारी एनओसी पत्र में सुधार/ संशोधन के लिए शुल्क का भुगतान भी करना होगा। ऐसे शुल्कों का विवरण तालिका 16.2 में दिया गया है।

## तालिका 16.2: जारी मौजूदा एनओसी में सुधार/ संशोधन के लिए प्रस्तावित शुल्क

क्र.सं.	मदें	शुल्क रुपए में
1	पुनर्भरण मात्रा में बदलाव	10000
2	उपयोगकर्ता आईडी में परिवर्तन।	5000
3	फर्म के नाम में बदलाव	5000
4	एनओसी को बढ़ाया जाना	5000
5	एनओसी को प्रतिरूप में जारी करना	5000
6	एनओसी के शुद्धिपत्र को जारी करना	5000
7	कोई अन्य मद/ सुधार आदि	5000

## 17.0 अन्य गहत्वपूर्ण शर्तें (सभी पर लागू):

- केंद्रीय भू जल बोर्ड/राज्य भू जल प्राधिकरण से जारी होने वाली वैध एनओसी के विनियम/एजेंसी को भू जल की विक्री करने की अनुमति नहीं है।
- इंफ्रास्ट्रक्चर परियोजनाओं में भू जल समावेशन/भंडारण सुनिश्चित करने के पक्ष / पार्किंग क्षेत्र को इंटरलॉकिंग / फिक्स्ड टाईलों या अन्य उपयुक्त उपायों के साथ कवर किया जाना चाहिए।
- इंफ्रास्ट्रक्चर परियोजनाओं के मामले में, सेंकर्स/संस्था, परियोजनाओं में दोहरी जलापूर्ति प्रणाली के कार्यान्वयन सुनिश्चित करेंगी। इसका अनुपालन वेब पोर्टल के माध्यम से प्रस्तुत किया जाएगा।
- एनओसी में उल्लिखित शर्तों का अनुपालन करने पर प्रदान की गई एनओसी के रद्द होने / एनओसी के नवीकरण न होने का पर्याप्त कारण माना जा सकता है।
- संबंधित क्षेत्रों में निर्दिष्ट पुष्पावस्थाओं के बिना किसी भी कारण पर विचार नहीं किया जाएगा।
- निष्कर्षण संरचना (ओं) को परियोजना संप्ति परिसर के अंतर्गत होना चाहिए।
- एनओसी में निर्धारित शर्तों का अनुपालन उपयोगकर्ताओं द्वारा सीडब्ल्यू ए / राज्य भू जल प्राधिकरण के वेब पोर्टल में ऑनलाइन रिपोर्ट किया जाएगा।
- निर्धारित प्रसंस्करण शुल्क यदि कोई हो, समय-समय पर विभिन्न सेवाओं के लिए, लिया जाएगा।

## टिप्पणी:

- दिशानिर्देश समयसमय पर संशोधन के अधीन हैं।
- इस दस्तावेज़ में अनुलग्नक सहित हिंदी और अंग्रेजी संस्करणों के किसी भी विषयगत मामले में, अंतिम वाला मान्य होगा।

अनुलग्नक।

## पेयजल और घरेलू उपयोग के लिए जल की आवश्यकताओं का अनुमान

(स्रोत: नेशनल बिल्डिंग कोड 2016, वीआईएस)

## क) आवासीय भवन:

आवास	आवादी
1 शयनकक्ष आवास इकाई	4
2 शयनकक्ष आवास इकाई	5
3 शयनकक्ष आवास इकाई	6
4 शयनकक्ष आवास इकाई और उससे अधिक	7

## टिप्पणियां :

- उपरोक्त आंकड़े सहयोगी कार्मिकों सहित घरेलू परिवारों पर विचार करते हैं जहां कहीं भी लागू हो।
- प्लॉट किए गए विकास में घरेलू परिवार इकाइयों की अपेक्षित संख्या और इनके प्रकार पर विचार करने के बाद आवादी का अनुमान लगाया जा सकता है।
- ईडब्ल्यू एस श्रेणी के तहत आवासीय इकाई में अपेक्षित आवादी और स्टूडियो अपार्टमेंट में अपेक्षित आवादी 2 होगी।

एक सामान्य नियम के अनुसार घरेलू और नैरेटू जरूरतों के लिए प्रति व्यक्ति प्रति दिन निम्नलिखित दरों पर पम्पिंग किया जा सकता है :

## क) 20,000 तक की आवादी वाले समुदायों के लिए:

1)	स्टैंड पोस्ट के माध्यम से जलापूर्ति:	40 एलपीएचडी (न्यूनतम)
2)	घरेलू सेवा के माध्यम से जलापूर्ति: कनेक्शन	70 से 100 एलपीएचडी

ख) उन समुदायों के लिए:

100 से 135 एलपीएचडी

पूर्ण फ्लशिंग प्रणाली के साथ 20,000

से 100,000 की एक साथ आबादी

ग) उन आबादी वाले समुदायों के लिए:

150 से 200 एलपीएचडी

पूर्ण फ्लशिंग प्रणाली के साथ 100,000

से अधिक आबादी के लिए

टिप्पणी: गौशूदा परिवारियों और जल की उपलब्धता पर निर्भरता को ध्यान में रखते हुए गृहस्थ आय समूह (एमआईजी) और निम्न आय वर्ग (एलआईजी) और आर्थिक रूप से कमजोर वर्ग (ईडब्ल्यूएस) के लिए घरों में प्रति 150 से 200 लीटर प्रति व्यक्ति के हिसाब से की जाने वाली जलापूर्ति को प्रतिन 135 लीटर तक घटाया जा सकता है। 150 से 200 लीटर प्रति दिन प्रति व्यक्ति में से 45 लीटर प्रति व्यक्ति जल की गाम्प्लेशिंग और दूसरे धरे लू उद्देश्यों में प्रयोग की जा सकती है।

क. आवासीय इमारतों के अलावा अन्य भवनों में जल की आवश्यकता

क्र. सं.	भवन का प्रकार	घरेलू लीटर प्रति व्यक्ति प्रतिदिन	फ्लशिंग लीटर प्रति व्यक्ति प्रतिदिन	कुल खपत लीटर प्रति व्यक्ति प्रतिदिन
1.	कैंटीन सहित कारखाने जहां लानगृह उपलब्ध कराना आवश्यक है	30	15	45
2.	कैंटीन सहित कारखाने जहां लानगृह उपलब्ध कराना आवश्यक नहीं है	20	10	30
3.	अस्पताल (कपड़े धोना और रसोई को छोड़कर):			
	क) विस्तरों की संख्या 100 से अधिक नहीं	230	110	340
	ख) विस्तरों की संख्या 100 से अधिक	300	150	450
	ग) बाह्य रोगी विभाग (ओपीडी)	10	5	15
4.	नर्सों के घर और मेडिकल स्टॉर	90	45	135
5.	हॉस्टल	90	45	135
6.	होटल (3 सितारा तक) कपड़े धोना रसोई, कर्मचारियों और जल निकासों को छोड़कर	120	60	180
7.	होटल (4 सितारा और इससे अधिक) कपड़े धोना रसोई, कर्मचारियों और जल निकासों को छोड़कर	260	60	320
8.	कार्यालय (कैंटीन सहित)	25	20	45
9.	रसोई के लिए अपेक्षित जल सहित रेस्तरां और फूड कोर्ट:			
	क) रेस्तरां	55 प्रति सीट	15 प्रति सीट	70 प्रति सीट
	ख) फूड कोर्ट	25 प्रति सीट	10 प्रति सीट	35 प्रति सीट
10.	क्लब हाउस	25	20	45
11.	स्टेडियम	4	6	10
12.	सिनेमा, कॉन्सर्ट हॉल, थियेटर और मल्टीप्लेक्स	5 प्रति सीट	10 प्रति सीट	15 प्रति सीट
13.	13. स्कूल/शैक्षणिक संस्थान			
	क) विना बोर्डिंग सुविधाओं के	25	20	45
	ख) बोर्डिंग सुविधाओं सहित	90	45	135

14.	धरीदारी और खुदरा (मॉल)			
	क) कर्मचारी	25	20	45
	ख) आगंतुक	5	10	15
15.	ट्रेफिक टर्मिनल स्टेशन			
	क) हवाई अड्डे	40	30	70
	ख) खान की सुविधा सहित रेलवे स्टेशन (जंक्शन)	40	30	70
	ग) बिना खान की सुविधा वाले रेलवे स्टेशन (जंक्शन)	30	15	45
	घ) खान की सुविधा सहित रेलवे स्टेशन (इंटरमीडिएट)	25	20	45
	ड) बिना खान की सुविधा वाले रेलवे स्टेशन (इंटरमीडिएट)	15	10	25
	च) अंतरराष्ट्रीय बस टर्मिनल	25	20	45
	छ) अंतरराष्ट्रीय बस टर्मिनल/मेट्रो स्टेशन	10	5	15

## टिप्पणियां:

- आगंतुकों के लिए जल की मांग की गणना प्रति दिन प्रति व्यक्ति 5 लीटर की खपत हो सकती है।
- जल की मांग में रोगियों/परिचारकों, आगंतुकों और कर्मचारियों की आवश्यकता शामिल है। रसोईपड़े धोना और क्लीनिकल जल की अतिरिक्त मांग की गणना वास्तविक आवश्यकताओं के आधार पर की जाएगी।
- कर्मचारियों और विक्रेताओं द्वारा प्रयोग की जा रही सुविधाओं/परिचार करते हुए स्टेशनों द्वारा नियंत्रित किए जाने वाले यात्रियों की औसत संख्या के आधार पर लोगों की संख्या का निर्धारण किया जाएगा।
- औसत सीजनल पीक आवश्यकताओं पर विचार किया जाना चाहिए।
- अस्पतालों को श्रेणी क (25 से 50 विस्तर) श्रेणी ख (51 से 100 विस्तर) श्रेणी ग (101 से 300 विस्तर) श्रेणी घ (301 से 500) और श्रेणी ड (501 से 750 विस्तर) में वर्गीकृत किया जा सकता है।

## अनुलग्नक II

## पाईजोमीटर के निर्माण और भूजल स्तर और गुणवत्ता की निगरानी के लिए दिशानिर्देश

पाईजोमीटर एक बोरवेल/ट्यूबवेल है जिसका उपयोग केवल टेप कोक/साउंडर या स्वचालित / डिजिटली जल स्तर मापने वाले उपकरण के तौर पर किया जाता है। जब भी जरूरत होती है तो जल की गुणवत्ता के परीक्षण के लिए जल नमूना लेने के लिए भी इसका उपयोग किया जाता है। पाईजोमीटरों को स्थापित करने के सामान्य दिशानिर्देश निम्नानुसार हैं:

- पंपिंग कुएं से 50 मीटर की न्यूनतम दूरी पर पाईजोमीटर स्थापित/निर्माण किया जाना होता है जहां से भूजल निकाला जा रहा है। पाईजोमीटर का व्यास लगभग चार इंच से छह इंच होना चाहिए।
- पाईजोमीटर की गहराई पंपिंग कुएं से समान होनी चाहिए जहां से भूजल निकाला जा रहा है। अग्रेष से अधिक पंपिंग कुओं का निर्माण एक्स्फ़ोर्स को अलग-अलग गहराई पर करने के लिए किया जाता है तो एक से अधिक पाईजोमीटरों को अलग-अलग एक्स्फ़ोर्स को टेप करने वाले कुओं की तरह बनाने की आवश्यकता होती है।
- आसपास के ट्यूबवेल से पंपिंग को लगभग चार से छह घंटे के लिए बंद करने के बाद ही पाईजोमीटर में जल स्तर की माप ली जानी चाहिए।

- उद्योगों और खनन द्वारा जल की निष्कासी के लिए प्रमाणित न (अग्रे स / मई) की अवधि के दौरान वर्ष में एक बार भू जल गुणवत्ता की निगरानी की जानी चाहिए। एनएवीएल मान्यता प्राप्त प्रयोगशाला से भू जल के नमूनों का विश्लेषण किया जाना चाहिए।
- मानव डों और पहचान के लिए पाईजोमीटर / ट्यू बवे ल की संख्याहराई और पाईजोमीटर / ट्यू बवे ल ज्ञान टे प की जानकारी उपलब्ध कराने के लिए पाईजोमीटर / ट्यू बवे ल साइट एक स्थायी डिस्प्ले बोर्ड स्थापित किया जाना चाहिए।
- मापन के लिए सुरक्षा और पहुंच के संबंध में किसी अन्य साइजिंग आवश्यकताओं का ध्यान रखा जा सकता है।

### अनुलग्नक III

#### प्रदूषणकारी उद्योगों / परियोजनाओं के संयंत्र परिसर में प्रदूषण की रोकथाम को सुनिश्चित करने के लिए अपनाए जाने वाले उपाय

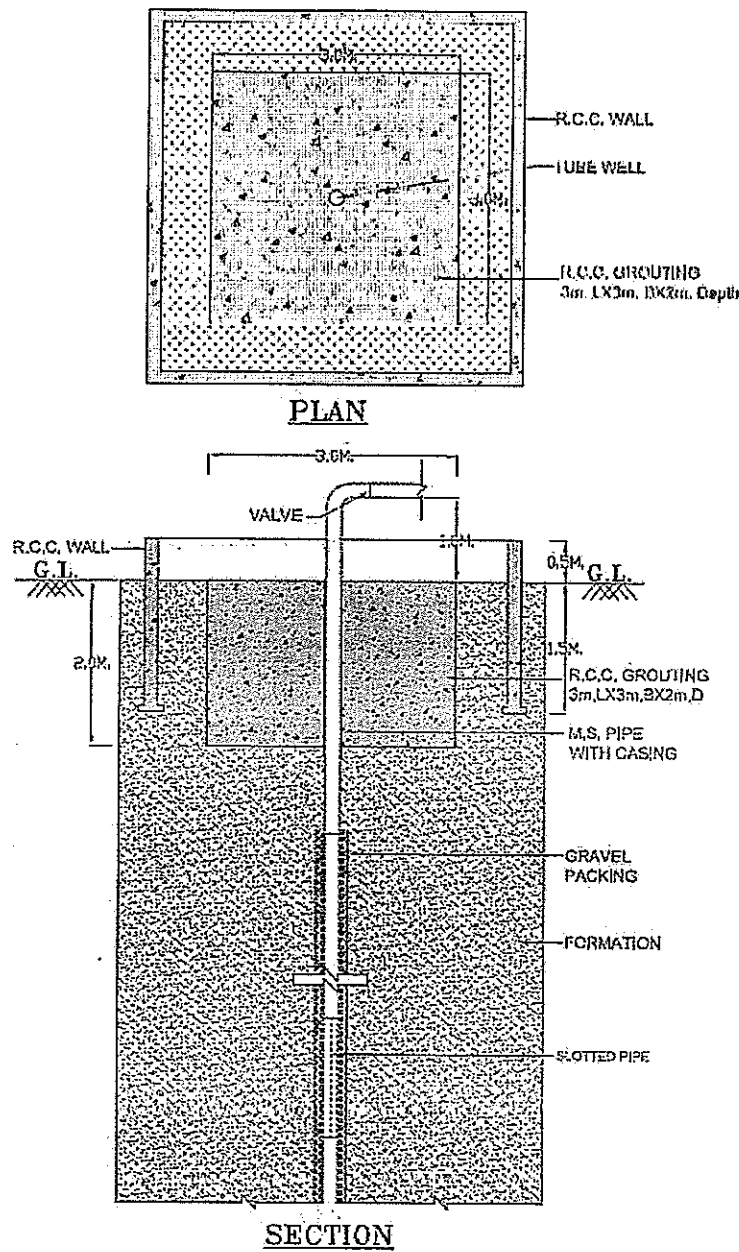
यह देखा गया है कि चर्म शोधनलॉटर हाउस, डाई, केमिकल कोलवाशरी, अन्य खतरनाक इकाइयों आदि जै से प्रदूषित उद्योगिक स्थलों में और इसके आसपास के क्षेत्रों में भू जल प्रदूषित है। भू जल की गुणवत्ता में और अधिक गिरावट को रोकने के लिए आवश्यक है कि इसको संरक्षित करने के सभी ज़रूरी किए जाएं। इस श्रेणी के अंतर्गत आने वाले सभी उद्योग / परियोजनाओं को भौज दा और नई श्रेणी दोनों के तहत निम्नलिखित प्रक्रिया का पालन करने का निर्देश दिया जाता है।

1. किसी भी नलकूप / बोरवे ल / कुएं का निर्माण प्रसंस्करण इकाई आसपास के क्षेत्र में नहीं किया जाना चाहिए। नलकूप / बोरवे ल का निर्माण उस स्थान पर किया जाना चाहिए जहां स्वच्छ है।
2. असेंबली / केसिंग और पीवीसी (पॉली विनाइल क्लोराइड) केलिए केवल हल्के स्टील पाइप का उपयोग किया जाना चाहिए या इस तरह के अन्य पाइप का उपयोग नहीं किया जाना चाहिए। पीवीसी या इसी तरह के दूसरे पाइप वाले ट्यू बवे ल / बोरवे ल को छोड़ दिया जाना चाहिए और उसे भर दे नहिं।
3. नलकूप / बोरवे ल के आसपास आरसीसी (प्रवर्तित कं क्रीट सीमेंट) 3 मीटर (लंबाई 3 मीटर (चौड़ाई) x 2 मीटर (गहराई) की ग्राउटिंग की जानी चाहिए। नलकूप / बोरवे ल के पाइप को जमीन के स्तर (1 एमएजीएल) से 1 मीटर ऊपर उठाया जाना चाहिए। किसी भी सतही संदूषण को रोकने के लिए नलकूप / बोरवे ल को 0.5 मीटर ऊंचाई और 1.5 मीटर गहराई की आरसीसी दीवार से घिरा होना चाहिए जिससे निर्माथीन ट्यू बवे ल / बोरवे ल में संदूषण को रोका जा सके। योजना / अनुभागीय आरेख को संदर्भ के लिए (परिशिष्ट 1 और 2) संलग्न किया गया है।
3. नलकूप / बोरवे ल में नॉन रिटर्न बॉल्व लगाया जाना चाहिए जिससे यह सुनिश्चित हो सके कि निर्मित नलकूप / बोरवे ल का उपयोग केवल भू जल निष्कर्षण के लिए किया जाता है।
4. किसी भी समय निर्माथीन नलकूप / बोरवे ल / पाईजोमीटर जल या तरल पदार्थ नहीं जाना चाहिए।
5. इस श्रेणी के अंतर्गत आने वाले उद्योगों / परियोजनाओं को संरक्षित क्षेत्र के भीतर किसी भी तरह के पुनर्भरण उपाय लागू नहीं करने चाहिए।
6. एसटीपी (सीवेज ट्रीटमेंट प्लांट) या ईटीपी (एफ्लुएं ट्रीटमेंट प्लांट) के आसपास के क्षेत्र में स्थित किसी भी नलकूप / बोरवे ल को छोड़ दिया जाना चाहिए और उसे भर देना चाहिए।
7. निगरानी के उद्देश्य से बनाए जाने वाले पाईजोमीटर में नलकूप / बोरवे ल के निर्माण में अपनाई जाने वाली प्रक्रिया का पालन होना चाहिए।



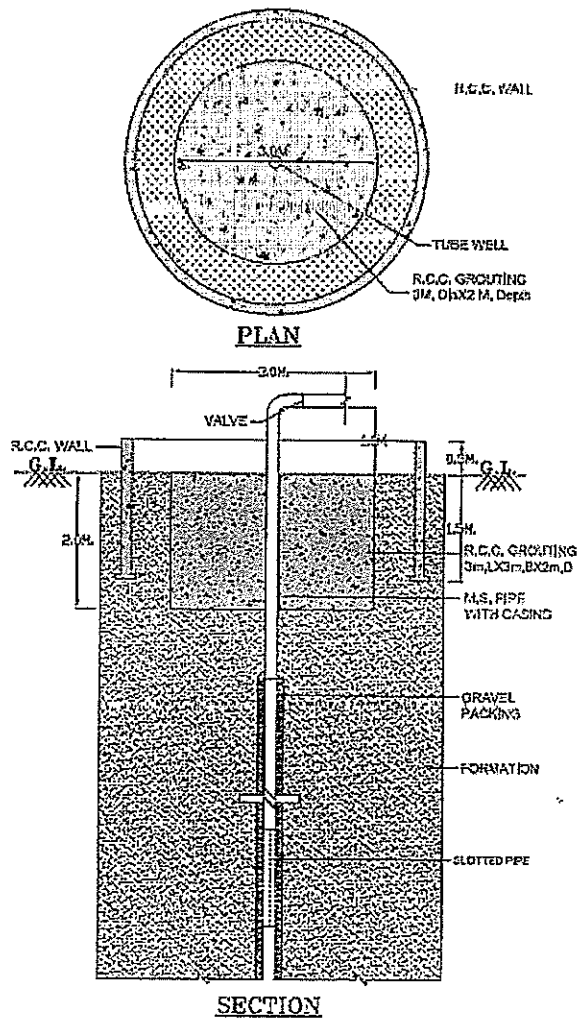
परिशिष्ट 1

कुएं की ऊपरी हिस्से को सुरक्षित करने की योजना / अनु भागसिखा



परिशिष्ट 2

कुएं की ऊपरी हिस्से को सुरक्षित करने की योजना / अन्तर्भागियद्वार



## अनुबंध-IV

उद्योगों द्वारा एनबीसी प्राप्त करने के लिए हाइड्रो-जियोलॉजिकल रिपोर्ट की रूपरेखा

1. प्रस्तावित परियोजना के बारे में परियोजना क्षेत्र का सीमांकन करते हुए इसकी जगह का विवरण निर्देशांक तालिका / टोपोग्राफ मानचित्र आदि का संक्षिप्त विवरण।
2. परियोजना और उसके आसपास के क्षेत्र में जल स्तर और इसकी गुणवत्ता आंकड़ों एवं गवशों सहित इससे जुड़े मुद्दों को शामिल करते हुए भूजल की स्थिति यदि कोई हो। खदान के मामले में कोर और वफर जोन दोनों में भूजल स्थिति का वर्णन किया जाना चाहिए।
3. प्रस्तावित निर्माण ग्राहक / बोरेल का विवरण। इसमें डिज़िग्नर, व्यास, संभावित लिथोलॉजिकल लॉग कम किए जाने वाले पंप का विवरण, पंप का एचएमिलकूपों / बोरेलों की संभावित निकासी आदि को शामिल किया जाता है। जहाँ को साइट योजना / मानचित्र पर चिह्नित किया जाना चाहिए। प्रस्तावित पाईपलाइन की जगह।
4. परियोजना और उसके आसपास क्षेत्र में किए गए जियो-जियोलॉजिकल अध्ययनों का विवरण। परियोजना वाले प्लॉक में भूजल संसाधन की गणना।
5. खदानों के मामले में स्वीकृत खदान योजना और खान / इंफ्रास्ट्रक्चरियोजनाओं के मामले में विस्तृत-डिटेलिंग परियोजनाएं।
6. खनन / इंफ्रास्ट्रक्चर डिवाइसिंग परियोजनाओं के मामले में पंप किए गए जल का प्रस्तावित उपयोग।
7. परियोजना और उसके आसपास क्षेत्र में भूजल पर पड़ने वाले प्रभावनात्मक मूल्यांकन और इसके जोखिमों को उजागर करते हुए किसी भी महत्वपूर्ण पर्यावरणीय मुद्दों के समाधान लिए प्रस्तावित प्रबंधन रणनीतियाँ।
8. लवणता युक्त जल निकालने वाले उद्योगों द्वारा अपशिष्ट जल के निपटारे लिए प्रस्तावित उपाय।
9. जल संरक्षण के लिए अपनाए जाने वाले उपायों में-सिद्धिकिंग, पुनः उपयोग शोधन आदि उपाय शामिल हैं, इसमें फर्म द्वारा अपनाए जा रहे जल संतुलन चार्ट के साथ अपनाए जाने वाले जल संरक्षण के तरीके भी शामिल रहते हैं - परियोजना के अंतर्गत मौजूदा / प्रस्तावित एसटीपी / ईटीपी/ईपीटी की क्षमता और प्रवाह चार्ट का संक्षिप्त लेख।  
- भूजल बचाने के लिए अपनाए जाने वाले जल संरक्षण उपायों का विवरण।  
- विभिन्न प्रक्रियाओं में जल के उपयोग को दर्शाने वाला कुल जल संतुलन।
10. परियोजना से संबंधित कोई अन्य विवरण।

## अनुलग्नक-V

## भूजल स्थितियों पर रिपोर्ट का फॉर्मेट

- परिचय
- परियोजना वर्णन
- पृष्ठ भूमि
- लक्ष्य और अवसर
- क्षेत्रीय व्यवस्था
- स्थान
- भूमि उपयोग
- जलवायु
- स्थलाकृतिक और जल विकास
- भूविज्ञानक्षेत्रीय और स्थानीय

- सामान्य हाइड्रोज्योलॉजी (जलीय प्रकार, जलीय गहराई, जोन टे प किया गया आदि) भू जल स्थिति (कोर और वफर जोन में)
- भू जल गुणवत्ता के जल स्तर में स्थानिक और लै किक भिन्नता (खिन्न और गहरा जलभू त)
- स्थानीय भू जल पर भू जल निष्कर्ष ण का प्रभाव जल स्तर का जलक्षेत्रनिरानी कु ओं में दावमापी ऐतिहासिक और जल स्तर के प्रचलन विश्लेषण शु द्ध विश्लेषण है। (भू जल क्षेत्र वृद्धिदिशा)
- अनु भीदित खनन योजना के अनु सार वर्षा वार/बैं चवार खनन जलविकासन का अभिकलन
- निष्कर्ष

अनुलग्नक-VI

परियोजनाओं के आधारभू त सं रचना का निम्न शास्त्र सू ची

वाणिज्यिक इमारतों सहित आवासीय नगर क्षेत्र

कार्यालय इमारत

विद्यालय कॉलेज

विश्वविद्यालय

सेज

मेट्रो स्टेशन

बस डिपो

हाइवे आधारभू त सं रचना

दमकल केन्द्र

गोदाम

व्यापार प्लाजा

मॉल और मल्टीप्लेक्स

अस्पताल

नर्सिंग होम

रिजॉर्ट

होटल/रेस्टोरेन्ट/फुड प्लाजा

होलीडे होम/अतिथि गृह/छात्रावास

बैंक टहॉल/

मैरिज गार्डन

आईटी कॉम्प्लेक्स

आईटी कॉम्प्लेक्स

लॉजिस्टिक एण्ड कारगो

क्लब्स

व्यापार केन्द्र

## बनसुलनक-VII

2009 के सिविल रिट याचिका में सुप्रीम कोर्ट के आदेश में यथास्थिति वेध कूपों और नल कूपों में उनके गिरने के कारण छोटे बच्चों के घातक दुर्घटनाओं के रोकथाम के लिए नये अवसरों में परित्यक्त वेध कूपों और नल कूपों में उनके गिरने के कारण छोटे बच्चों के घातक दुर्घटनाओं के रोकथाम के लिए पैमानेमानरतीय संघ और संगठनउत्तर देने वाला आदेशवर्तमान रिट याचिका में कुछ नहीं है, विषय में हल्के इसके साथ न्यायालय के आदेश दिनांक 11 फरवरी 2010 के जारी किये गए आपेक्षित दिशनिर्देश दे दिए।

अनुसंधान इस प्रकार है :

- i) जमीन/परिसर के मालिक को वेध कूप/नल कूप बनाने के लिए कबग तलाने से पहले क्षेत्र में संबंधित अधिकारी को लिखित में सूचना देना चाहिए। है, जिलाधिकारी, जिला मजिस्ट्रेट/ग्राम पंचायत के सरपंच/कोई अन्य संबंधित अधिकारी/भूजल विभाग के संबंधित अधिकारी/स्वास्थ्य/नगर निगम जैसे सागागता हो सकते हैं, वेध कूप/नल कूप के निर्माण के लिए।
- ii) सभी डिजिटिंग एजेंसियों का संबंधित मुख्यतः सरकारी/अर्द्ध सरकारी निजीइत्यादि जिला प्रशासन/वैक्सेक अधिकारी जहां भी लागू हो के साथ अनिवार्य होना चाहिए।
- iii) निम्नलिखित विवरण के साथ कुएं के समीप निर्माण के समसूचना पट्ट की स्थापना:
  - (क) कुएं के सुधार/निर्माण के समय पर डिजिटिंग एजेंसी का पूरा पता
  - (ख) कुएं के मालिक/उपयोग करने वाले एजेंसी का पूरा पता
- iv) निर्माण के दौरान कुएं के चारों ओर कांटेदार तार के बाधक/अन्य उपयुक्त वेरा का स्थापना।
- v) कुएं के चारों ओर के आवरण से (0.30 मीटर जमीन स्तर से ऊपर और 0.30 मीटर जमीन स्तर से नीचे) 0.50x0.50x0.60 मीटर की दूरी पर कोंक्रीट प्लेट फार्म/सिमेंट का निर्माण।
- vi) बोल्ट्स और नट्स के साथ पाइप के आवरण को फिक्स करने के एलिजबूत कैप उपलब्ध कराते हुए स्टील की वेल्डिंग द्वारा कुएं के सज्जीकरण का कैपिंग।
- vii) पम्प मरम्मत के मामले में नल कूप को खुला नहीं छोड़ना चाहिए।
- viii) कार्य के पूरे होने के पश्चात् कीचड़ के गड्ढे और नालिनको भर।
- ix) परित्यक्त वेध कूपों को नीचे से जमीन स्तर तक मिट्टी/कंकड़/डिल कटिंग आदि से भरना।
- x) खास जगह पर डिजिटिंग प्रचालन के पूरे होने, डिजिटिंग के शुरू होने से पहले जमीन के स्थिति का मरम्मत करना।
- xi) जिलाधिकारी को सत्यापित करने अधिकार होना चाहिए कि उपरोक्त निशा-निर्देश को अनुसरण और उचितनिगरानी किया जा रहा है, केन्द्रीय सरकार एजेंसियों/संबंधित राज्य द्वारा नल कूपों/वेध कूपों की स्थिति के विषय में जांच का ख्याल रखा जा रहा है।
- xii) जिला स्तर पर जिला/प्रखण्ड/ग्राम-वार ड्रिलड नल कूपों/वेध कूपों की स्थिति जिला/प्रखण्ड/ग्रामार अर्थात् उपयोग में कूपों की संख्यापरित्यक्त वेध कूप/खूले पाये गए नल कूपों की संख्यापरित्यक्त वेध कूपों/जमीनी स्तर तक उचितसे भरे गए नल कूपों और परित्यक्त वेध कूपों/जमीनी स्तर तक भरे गये नल कूपों को बनाए रखा जाता है।
 

ग्रामीण क्षेत्रों में उपरोक्त निगरानी कृषि विभाग से कार्य पालक और सरपंच द्वारा किया जाता है। गहरी क्षेत्र के मामले में, उपरोक्त निगरानी कनिष्ठ अभियंता और संबंधित भूजल विभाग से कार्य पालक/लोक स्वास्थ्य/नगर निगम आदि द्वारा किया जाता है।
- xiii) यदि कोई स्तर पर परित्यक्त वेध कूप/नल कूप, जो संबंधित भूजल विभाग/लोक स्वास्थ्य/नगर निगम/निजी ठेकेदार आदि से एक प्रमाण पत्र पूर्व कथित एजेंसी द्वारा लेनी चाहिए परित्यक्त वेध कूप और नल कूप उचितरूप से जमीन स्तर तक भरा गया। संबंधित विभाग/एजेंसी को कार्य पालक द्वारा बिना सोचे समझे जांच किया जाना है। उपरोक्त ऐसी सभी आंकड़ों की सूचना राज्य खण्ड विकास कार्यालय/जिला अधिकारी के पास उपलब्ध होनी है।

हमें सूचना दिया गया कि दिनांक 11 फरवरी 2010 के पहले आदेश का अंतिम पैराग्राफ से संबंधित पब्लिसिटी का विधिवत अनुपालन किया गया है।

उपरोक्त के अधिन रिट पाठिका का निपटारा किया गया है।

.....सीजे आई

[एस.एच.कपाडिया]

के एस राधाकृष्णन

स्वतंत्र न कु मार

नई दिल्ली,

06 अगस्त, 2010

अनुलग्नक-VIII

सीजीडब्ल्यू ए द्वारा राज्यों/संघीय प्रदेशों की सूची जहां भूचमर्पण नियंत्रित किया जाता है

1. अंडमान और निकोबार
2. असम
3. अरुणाचल प्रदेश
4. बिहार
5. छत्तीसगढ़
6. दादर और नगर हवेली और दमन और दीव
7. गुजरात
8. हरियाणा
9. झारखंड
10. मध्य प्रदेश
11. महाराष्ट्र
12. मणिपुर
13. मेघालय
14. मिजोरम
15. नागालैंड
16. ओडिशा
17. पंजाब
18. राजस्थान
19. सिक्किम
20. त्रिपुरा
21. उत्तर प्रदेश
22. उत्तराखंड
23. आंध्र प्रदेश (केवल खनन परियोजनाएं)
24. तेलंगाना (केवल खनन परियोजनाएं)

## अनुलग्नक-IX

प्रयुक्त तकनीकी शब्दों के शब्दावली

- 1) सुरक्षित क्षेत्र: सीजीडब्ल्यू वी और राज्य भू जल सं गठनों द्वारा संयुक्त रूपकिए गये नवीनतम भू जल सं साधनों के आकलन के आधार पर भू जल सं साधनों की दृष्टिकोण से सुरक्षित क्षेत्रमेंरूपकीकृत किया गया है। एनओसीएपी और सीजीडब्ल्यू वी के वे बसाइट पर विवरण उपलब्ध है।
- 2) धर्द्ध-नाजुक क्षेत्र: सीजीडब्ल्यू वी और राज्य भू जल सं गठनों द्वारा संयुक्त रूपकिए गये नवीनतम भू जल सं साधनों के आकलन के आधार पर भू जल सं साधनों की दृष्टिकोण और सीजीडब्ल्यू वी के वे बसाइट पर विवरण उपलब्ध है।
- 3) गालुक क्षेत्र: सीजीडब्ल्यू वी और राज्य भू जल सं गठनों द्वारा संयुक्त रूपकिए गये नवीनतम भू जल सं साधनों के आकलन के आधार पर भू जल सं साधनों की दृष्टिकोण से गालुक क्षेत्रमेंरूपकीकृत किया गया है। एनओसीएपी और सीजीडब्ल्यू वी के वे बसाइट पर विवरण उपलब्ध है।
- 4) अतिबोहित क्षेत्र: सीजीडब्ल्यू वी और राज्य भू जल सं गठनों द्वारा संयुक्त रूपकिए गये नवीनतम दृष्टिकोण से अतिबोहित के रूप में वर्गीकृत किया गया है। एनओसीएपी और सीजीडब्ल्यू वी के वे बसाइट पर विवरण उपलब्ध है।
- 5) जलभृत: भू वैज्ञानिक सं रचना भू जल सं चारण और भंडारण के लिए सक्षम है।
- 6) गहरा जलभृत: यदुधा जलभृत प्रणाली के क्षेत्र में ऊपर वाले जलभृत के नीचे लक्षित हुई।
- 7) कुंवा: भू जल के निष्कर्षण के लिए उपयोग किया जाने वाला कोईभीचा जिसमें खुले कुएं खोदे गए कुोरखे ल खोदने वाले कुएंल कूल फिल्टर प्वां इट कलेक्टर कुएंघु सपै ठ गैलरियरिचार्ज कुएं या उनके किमी भी सं योजन या विविधताएं शामिल है।
- 8) सरकारी ऐजेंसी: के न्दीय या राज्य सरकार का निकाय हो सकता है।
- 9) आपूर्तिकर्ता: सरकार/सरकार ने जल आपूर्ति ऐजेंसी को मंजूरी दी।
- 10) खनन: खनन के पश्चात् परित्यक्त क्षेत्र या क्षेत्र जहां खनन गतिविधिचल रही है।
- 11) गैर कानूनी भूजल निष्कर्षण संरचना: के न्दीय जल प्राधिकरण से ठोस एनओसी के बिना भू जल को निकालने के लिए प्रयोग किया जा रहा है जो कोई ऊर्जा वान निष्कर्षण सं रचनाइसलिए त डगवे जलकूप वैध कूप।
- 12) वर्षाजल संचयन: भू जल के रिचार्ज के लिए या भविष्य के उपयोग के लिएट्रैफंसं चयन को शामिल करते हुए सूक्ष्म जल विभाजक पैमाने पर वर्षा जल के भंडारण और जमाव की प्रणालीरखैकनीक।
- 13) खनन परियोजना: परियोजना जो खनन गतिविधि को शामिल करती है या तो खुलिकास्ट या भूमिगत या दोनों।
- 14) भूजल प्रारूप: भू जल निकासी का अपेक्षित मात्रा।
- 15) लवणीय जल: 25° से . पर 2500M साइमे न्स/क्षे .मी. की अधिकता में लवणता वाला जल युक्त जल।
- 16) वाटर टेबल इंटरसेक्शन: खनन या अन्य गतिविधियों के कारण ऑवर ले ईंग सामग्री की छुआई पंर जल वाटर टेबल इंटरसेक्शन।
- 17) पेय और घरेलू उपयोग: पेय और घरेलू उपयोग के अलावाहरेणी अस्पताल, होटल, मॉल और मल्टीप्लेक्स सं स्थानों कार्यलय वैंकेट हॉल्कायर स्टेशन मेंट्रो स्टेशनरेलवे स्टेशनहवाई अड्डा, वंदगाह स्टेडियम आदि औद्योगिक प्रक्रिया के लिए आवश्यक जल नहीं बल्कि औद्योगिक के पेय जरूरतों को कवररेगी।
- 18) रिसाइकल/पुनः उपयोग: विभिन्न उद्देश्यों के लिए ट्रिटेटेड वेस्ट जल का उपयोग/वहूस्त्रयोग के लिए जल को रखना।
- 19) सरकारी विभाग: के न्दीय या तो राज्य।
- 20) नगरपालिका: नगरपालिका, नगर निगमया अन्य दू सरे नाम द्वारा स्थानीय शहरी शासन कसमान निकाय।

- 21) भूजल : पानी जो संतुष्टि के क्षेत्र में सतह के नीचे मौजूद है और किसी अन्य माध्यम से निकाला जा सकता है वा झरनों और नदियों में झरनों और आधार प्रवाह के रूप में उभरता है।
- 22) बीजीएल : जमीनी स्तर के नीचे।
- 23) बीसएम : बिलियन क्यूबिक मीटर।
- 24) भूजल निष्कर्षण संरचना : भूजल निकासी के लिए प्रयुक्त संरचना जैसे वैद्युत नाल/गल ब्रेक/ड्रिप कम बोरेल/सुरंग कुआँ।
- 25) अवलोकन कुआँ या पीजीमीटर : एक गोरबेल/जल स्तर मापने के लिए केवल प्रयुक्त नल/पीजीमीटर ड्रिप हेड और समय-समय पर पानी का नमूना लेने के किया जाता है किन भूजल प्रदूषण के लिए इसका उपयोग नहीं किया जाता है।
- 26) वाटर ऑडिट : पानी के उपयोग को कम करने और अक्सर अनावश्यक पानी का उपयोग पर पैसे बचाने के उद्देश्य से सरल या जटिल प्रणालियों में पानी की उपयोग की मात्रा निर्धारित करने की एक विधि।
- 27) भूजल प्रदूषण : यदि भूजल में किसी भी पैरामीटर की सांद्रता भारतीय मानक्युरो द्वारा निर्धारित पेयजल की अधिकतम अनुज्ञेय सीमा से अधिक है।
- 28) सहकारी समूह हाउसिंग सोसायटी/बिल्डर फ्लैट : एक हाउसिंग सोसायटी एक आवासीय परिसर के भीतर घर के मालिकों द्वारा गठित एक सोसायटी है। गठित हाउसिंग सोसायटी को औपचारिक रूप से सहकारी समितियों के रजिस्ट्रार के साथ पंजीकृत होना चाहिए।
- 29) केएलडी - प्रतिदिन कि.मी
- 30) ईसीजीडब्ल्यू - अवैध भूजल निकासी के लिए पर्यावरण क्षतिपूर्ति।
- 31) ईसीजीडब्ल्यूआर - अवैध भूजल निकासी के लिए पर्यावरण क्षतिपूर्ति दर।

अनुलग्नक-X

उद्योगों द्वारा वार्षिक वाटर ऑडिट (नोट-(11))

वाटर ऑडिट उद्देश्यपूर्ण तरीके से वितरण प्रणाली के माध्यम से निकासी या उपचार के स्थल से जल के प्रवाह को मापकर और इसका उपयोग किये जाने वाले क्षेत्रों में और अंततः छिद्रा जाता है। वाटर ऑडिट आयोजित करने में जल के संतुलन की गणना का उपयोग और जल का वचन के तरीकों की पहचान करना शामिल है।

वाटर ऑडिट में प्रारंभिक जल सर्वेक्षण और विस्तृत जल लेखा शामिल हैं। प्रारंभिक जल सर्वेक्षण संबंधित गतिविधियों की खपत और जल निर्वहन पैटर्न और जल विलिंगड्रो और जल उपकरण के बोरेल में पृष्ठभूमि की जानकारी एकत्र करके लिए किया जाता है। उद्योग से एकत्र किए गए माध्यमिक आंकड़ों विश्लेषण के वापसित जल ऑडिट आयोजित की जाती है, जिसमें निम्नलिखित चरण शामिल हैं:-

- साइट पर प्रशिक्षण और सुविधा प्रबंधक और कर्मियों के साथ चर्चा
- जल प्रणाली विश्लेषण
- आधारभूत जल मानचित्र का परिमाण
- दबाव और प्रवाह मीटर और विभिन्न अन्य उपकरणों का उपयोग करके निगरानी और माप
- अक्षमताओं और लीक की मात्रा
- पानी की गुणवत्ता लोड और निर्वहन की मात्रा



- प्रवाह और गुणवत्ता मानकों में परिवर्तनशीलता की मात्रा
- जल उपचार और पुनः उपयोग का प्रत्यक्ष उपयोग के लिए रणनीति।

एक विस्तृत जल संतुलन आखिरकर विकसित होता है। विभिन्नभिन्न उपयोगकर्ता क्षेत्रों में पानी की गुणवत्ता की आवश्यकता पैप की गई है जो रीसाइक्लिंग और पुनः उपयोग के अवसरों को विकसित करने में मदद करता है।

विस्तृत वाटर ऑडिट रिपोर्ट में निम्नलिखित शामिल हैं:

- पानी की खपत और अपशिष्ट जल उत्पादन पैटर्न
- विशिष्ट जल का उपयोग संरक्षण
- सुविधाका पूर्ण जल संतुलन
- जल के वृत्त के अवसर
- प्रस्तावों को लागू करने की विधि
- पूर्ण विवरण और आंकड़ें
- निवेश की आवश्यकता

जल संरक्षण के लिए उद्योग निम्नलिखित उपाय कर सकते हैं:

- जल ब्रजट के लिए मानदंड स्थापित करना
- जल के खपत को कम करने के लिए औद्योगिक प्रक्रिया का आधुनिकीकरण
- पुनः परिसंचारी शीतलन प्रणाली के साथ पुनर्चक्रित जल
- ओजोनेशन कूलिंग वाटर एप्रोच जिसके परिणाम स्वरूप पारंपरिक रासायनिक उपचार की तुलना में पांच गुना कमी हो सकती है।
- कुल प्लेनम फ्लश को समाप्त करके डी आयोनाइज्ड जल केन.पु.उपयोग में कभी निरंतर प्रवाह से एक आंतरिक प्रवाह प्रणाली में परिवर्तन करना और उपयोग पर निबंधन में सुविधा
- वागवानी के लिए अपशिष्ट जल का उपयोग
- निपटान के मानदंडों का पालन करने के लिए अपशिष्टों का क्वार्टर प्रसंस्करण।

## MINISTRY OF JAL SHAKTI

(Department Of Water Resources, River Development And Ganga Rejuvenation)

(CENTRAL GROUND WATER AUTHORITY)

## NOTIFICATION

New Delhi, the 24th September, 2020

S.O. 3289(E).—WHEREAS, on the directions of Hon'ble Supreme Court vide its order dated the 10th December, 1996 passed in Civil writ Petition No 4677 of 1985, MC Mehta Vs Union of India, the Central Government constituted the Central Ground Water Authority (hereafter referred to as the 'Authority') vide notification number S.O. 38 (F), dated the 14th January, 1997 to exercise powers under Section 5 of the Environment (Protection) Act, 1986 (29 of 1986) for the purposes of regulation and control of Ground Water management and development and to exercise certain powers and perform certain functions relating thereto;

AND WHEREAS, the Authority has been regulating ground water development and management by way of issuing 'No Objection Certificates' for ground water extraction to industries or infrastructure projects or Mining Projects etc., and framed guidelines in this connection from time to time in twenty two States and two Union territories, where ground water development is not being regulated by the State Government Union Territory administration concerned;

AND WHEREAS, some of the State Governments or, Union territories enacted legislations and issued regulatory directions or orders for regulating ground water development and management;

AND WHEREAS, the Hon'ble National Green Tribunal, New Delhi vide order dated the 15th April 2015 in OA Nos. 204/205/206 of 2014 has issued directions to the Authority to ensure that any person operating tube-well, or any means to extract ground water shall obtain permission from the Authority and shall operate the same subject to the law in force, even if such unit is existing unit or the unit is yet to be established;

AND WHEREAS, the said Hon'ble Tribunal vide its order dated the 09th July, 2015 in OA Nos. 34 and 37 of 2014 directed all industrial units which are members of the Common Effluent Treatment Plants (CETPs) to approach the Authority through State Pollution Control Board for obtaining 'No Objection Certificate' in accordance with the law;

AND WHEREAS, the aforesaid Hon'ble Tribunal vide order dated the 13th July, 2017 in OA No 200- of 2014 directed that every industry should be directed to pay for extraction of such water, that too, subject to the conditions stated in the order permitting such extraction;

AND WHEREAS, the said Hon'ble Tribunal vide its order dated the 28th August, 2018 in O.A. Nos. 176 of 2015 and 59 of 2012 respectively directed the Ministry of Water Resources, River Development and Ganga Rejuvenation to forthwith review the existing mechanism so as to ensure effective steps for conserving the groundwater resources;

AND WHEREAS, in pursuance of the directions of the Hon'ble National Green Tribunal and powers conferred by sub-section (3) of section 3 and section 5 of the Environment (Protection) Act, 1986 the Authority, with a view to protect the ground water resources had circulated the draft guidelines for grant of 'No Objection Certificate' on the 11th October, 2017 inviting comments and suggestions from all the stakeholders;

AND WHEREAS, all objections and suggestions received in response to the said draft guideline have been duly considered by the Central Government, the Authority notified the guidelines to regulate groundwater over-exploitation and to conserve the groundwater resources in the country vide notification number S.O. 6140 (E), dated the 12th December, 2018;

AND WHEREAS, the aforesaid Hon'ble Tribunal vide order dated the 03rd January 2019 in the OA No. 176 of 2015 directed that the above mentioned notification dated the 12th December, 2018 may not be given effect to as it is unsustainable if tested on 'Precautionary Principle, Sustainable development as well as Inter-generational Equity Principles' and if implemented, will result in fast depletion of groundwater and damage to water bodies and will be destructive of the fundamental right to life under Article 21 of the Constitution of India;

AND WHEREAS, the said Hon'ble Tribunal vide order dated the 11th September, 2019 constituted a committee to deliberate on steps for preventing depletion of groundwater, robust monitoring mechanism

against unauthorised extractions and fulfillment of 'No Objection Certificate' conditions, environment compensation etc and to submit a report;

AND WHEREAS, the aforesaid committee submitted the report along-with draft guidelines to regulate groundwater extraction and groundwater conservation in Hon'ble Tribunal on the 16<sup>th</sup> March, 2020;

AND WHEREAS, the above said Hon'ble Tribunal vide order dated the 20<sup>th</sup> July, 2020 directed to comply with certain points for sustainable groundwater management while issuing 'No Objection Certificates' to commercial establishments by the Authority,

Now therefore, in pursuance of the directions of Hon'ble National Green Tribunal and the powers conferred by sub-section (3) of Section 3 read with Section 5 of the Environment (Protection) Act, 1986 (29 of 1986), the Department of Water Resources, River Development & Ganga Rejuvenation, hereby notifies the guidelines to regulate and control groundwater extraction in the country in supersession to this Ministry notification vide S.O. 6140 (E), dated the 12<sup>th</sup> December, 2018 as per the Schedule below:

#### SCHEDULE

Guidelines to regulate and control ground water extraction in India  
(with immediate effect)

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[F. No. CGWA-21/4/2020-CGWA]

ASHISH KUMAR, Director

## ANNEXURES

- Annexure I: Estimation of water requirements for drinking and domestic use.
- Annexure II: Guidelines for construction of piezometers and monitoring of groundwater levels and quality.
- Annexure III: Measures to be adopted to ensure prevention from pollution in the plant premises of polluting industries/ projects.
- Annexure IV: Outline of hydro-geological report for obtaining No Objection Certificate for industries.
- Annexure V: Format of the Report on ground water conditions (for mining projects).
- Annexure VI: Indicative list of Infrastructure projects.
- Annexure VII: Supreme Court Order in Civil Writ petition 36 of 2009 regarding measures for prevention of fatal accidents of small children due to their falling into abandoned bore wells and tube wells.
- Annexure VIII: List of States/ Union territories where ground water extraction is being regulated by Central Ground Water Authority (CGWA)
- Annexure IX: Glossary of technical terms used
- Annexure X : Annual water audits by the industries

Guidelines to regulate and control groundwater extraction in IndiaPreamble and Background:

On the directions of Hon'ble Supreme Court vide its order dated 10th December, 1996 passed in Civil writ Petition No 4677 of 1985, MC Mehta Vs Union of India, the Central Government had constituted the Central Ground Water Board as Authority vide notification number S.O. 38 (E), dated the 14<sup>th</sup> January, 1997 to exercise powers under sub section (3) of section 3 of the Environment (Protection) act, 1986 (29 of 1986) for the purposes of regulation and control of Ground Water Management and Development and to exercise certain powers and perform certain functions as per the said Act.

The Authority has been regulating ground water development and management by way of issuing 'No Objection Certificates' for ground water extraction to industries or infrastructure projects or Mining Projects etc., and framed guidelines in this connection from time to time applicable in twenty two States and two Union territories, where ground water development is not being regulated by the State Government and Union territory administration concerned.

To have sustainable management of water resources in the country groundwater abstraction guidelines have been prepared to regulate groundwater extraction and conserve the scarce groundwater resources in the country.

These guidelines will come into force with immediate effect from the date of Gazette Notification and will supersede all earlier guidelines issued by the Central Ground Water Authority (CGWA).

These guidelines will have pan India applicability. Ground water abstraction in States/ Uts (which are not regulating ground water abstraction) shall continue to be regulated by Central Ground Water Authority.

Further, wherever States/ Uts have come out with their own groundwater abstraction guidelines, which are inconsistent with the CGWA guidelines, the provisions of CGWA guidelines will prevail. However, in case the guidelines followed by such States/ Uts contain some more stringent provisions than CGWA guidelines, such provisions may also be given effect to by the States/ Uts Authorities in addition to those contained in the CGWA guidelines. States may be at liberty to suggest additional conditions/ criteria based on the local hydro-geological situations which shall be reviewed by CGWA/Ministry of Jal Shakti, Government of India before acceptance.

All new/existing industries, industries seeking expansion, infrastructure projects and mining projects abstracting ground water, unless specifically exempted under Para 1.0 below, will be required to seek No Objection Certificate from Central Ground Water Authority or, the concerned State/ UT Ground Water

Authority as the case may be. The entire process of grant of No Objection Certificate shall be online through a web based application system.

Water management plans shall be prepared by all the State Ground Water Authorities/ Organizations for all Over-exploited, Critical and Semi-critical assessment units starting with Over-exploited units. Water management plans shall be reviewed and updated periodically. Water management plans, data on water availability and scarcity and policy framed in this regard shall be placed on the websites of Central Ground Water Authority/ State Ground Water Authority.

#### **1.0 Exemptions from seeking No Objection Certificate:**

Following categories of consumers shall be exempted from seeking No Objection Certificate for ground water extraction:

- (i) Individual domestic consumers in both rural and urban areas for drinking water and domestic uses.
- (ii) Rural drinking water supply schemes.
- (iii) Armed Forces Establishments and Central Armed Police Forces establishments in both rural and urban areas.
- (iv) Agricultural activities.
- (v) Micro and small Enterprises drawing ground water less than 10 cum/day.

#### **1.1 Registration of Drilling Rigs**

State / Ut Governments shall be responsible for registering drilling rigs operating within their jurisdiction and for maintaining the database of wells drilled by them. Appropriate link shall be provided in CGWA portal for making the data available to CGWA.

#### **2.0 Drinking & Domestic use for Residential apartments/ Group Housing Societies/ Government water supply agencies in urban areas**

For grant of No Objection Certificate for ground water extraction, the project proponent has to furnish the details as per the guidelines issued by the CGWA in proper format as available in CGWA website. No Objection Certificate for new /existing wells shall be granted only in such cases where the local Government water supply agency is unable to supply requisite amount of water in the area.

No Objection Certificate shall be granted subject to the following specific conditions:

- i) Installation of Sewage Treatment Plants shall be mandatory for all residential apartments/ Group Housing Societies where ground water requirement is more than 20 m<sup>3</sup>/day. The water from Sewage Treatment Plants shall be utilized for toilet flushing, car washing, gardening etc.
- ii) The No Objection Certificate shall be valid for a period of five years from the date of issue or till such time local Government water supply is provided to the project area, whichever is earlier. In case the project proponent receives water supply from the concerned local Government Water Supply Agency during the validity of the No Objection Certificate, intimation regarding availability of public water supply shall be sent by the project proponent to CGWA and No Objection Certificate will be cancelled by the Authority. In other cases, the project proponent will apply for renewal of No Objection Certificate, ninety days before the expiry of No Objection Certificate.
- iii) Proponents shall be liable to pay ground water abstraction charges for the quantum of ground water proposed to be extracted, as per rates mentioned in Table 5.1.

#### **Documents to be submitted with the application**

- a) Details of water requirement computed as per National Building Code, 2016 (Annexure I), taking into account recycling/ reuse of treated water for flushing etc.
- b) Affidavit on non-judicial stamp paper of Rs. 10/- by the applicant, confirming non/ inadequate availability of public water supply in case of users requiring ground water up to 10 m<sup>3</sup>/ day for drinking/ domestic use.
- c) Certificate of non-availability of water from local government water supply agency in cases requiring ground water in excess of 10 m<sup>3</sup>/ day for drinking/ domestic use. Government water supply agencies

applying for No Objection Certificate shall submit copy of government approval of the scheme/project proposed to be implemented.

- d) Ground water quality data of existing bore well/ tube well/ dug well from any National Accreditation Board for Testing and Calibration Laboratories (NABL) accredited laboratory or Govt. approved laboratory (in case of existing projects applying for no objection certificate)
- e) Proposal for rain water harvesting/ recharge within the premises as per Model Building Bye Laws issued by Ministry of Housing & Urban Affairs.

### 3.0 Agriculture Sector

Agriculture sector is the backbone of the Indian economy. As per Minor Irrigation Census 2013-14, 87.86% of wells are owned by marginal, small and semi-medium farmers having land holding up to 4 hectares (ha). Around 9.18 % of wells are owned by medium farmers having land holding 4 – 10 ha and 2.96% of the wells are owned by big farmers having land holding more than 10 ha.

Considering the number of ground water abstraction structures, regulation of ground water in agriculture sector through a 'command and control' strategy will prove to be an arduous task. Therefore, a participatory approach for sustainable ground water management would be more productive.

States/UTs are advised to review their free/subsidized electricity policy to farmers, bring suitable water pricing policy and may work further towards crop rotation/diversification/other initiatives to reduce over-dependence on groundwater.

Agriculture sector shall be exempted from obtaining No Objection Certificate for ground water extraction.

### 4.0 Commercial Use

No new major industries shall be granted No Objection Certificate in over-exploited assessment areas except as per the policy guidelines.

Availability of ground water resources shall be given due regard while considering applications for grant of No Objection Certificate for commercial use.

Commercial entities extracting ground water shall be required to submit online annual water audit report including an audit of water use as mentioned in the relevant sections. CGWA/ State Ground Water Authority (SGWA) shall publish all such audit reports online.

CGWA/ SGWAs shall engage independent agencies to verify the compliance of No Objection Certificate conditions periodically.

### 4.1 Industrial Use

In Over-exploited assessment units, No Objection Certificate shall not be granted for ground water abstraction to any new industry except those falling in the category of Micro, Small and Medium Enterprises (MSME). However, No Objection Certificate for drinking/ domestic use for work force, green belt use by these new industries shall be permitted. Expansion of existing industries involving increase in quantum of ground water abstraction in over-exploited assessment units shall not be permitted. No Objection Certificate shall not be granted to new packaged water industries in Overexploited areas, even if they belong to MSME category.

No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:

- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m<sup>3</sup>/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to CGWA. All such industries shall be

required to reduce their ground water use by at least 20% over the next three years through appropriate means.

- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in Section 15 shall be mandatory for industries drawing/ proposing to draw more than 10 m<sup>3</sup>/day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 15 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Detailed guidelines for design and construction of piezometers are given in Annexure II. Monthly water level data shall be submitted to the CGWA through the web portal.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution (Annexure III).
- viii) All industries drawing ground water in safe, semi-critical and critical assessment units shall be required to pay ground water abstraction charges as applicable as per Tables 5.2 A and 5.3 A.
- ix) All existing industries drawing ground water in over-exploited assessment units shall be liable to pay ground water restoration charges as applicable as per Tables 5.2 B and 5.3 B.

#### Documents to be submitted with the application

- (a) An affidavit on non judicial stamp paper of Rs. 10/- regarding non availability of water supply from local government agencies in cases where ground water requirement is up to 10 m<sup>3</sup>/day.
- (b) Certificate regarding non/ partial availability of fresh water/ treated waste water supply from the local government water supply agency in cases where requirement of ground water is more than 10 m<sup>3</sup>/day.
- (c) Ground water quality data of existing bore well/ tube well/ dug well from any NABL accredited laboratory or Govt. approved laboratory (in case of existing projects applying for No Objection Certificate)
- (d) Water quality data of bore well/ tube well/ dug well in respect of existing industries from NABL accredited laboratories/Government approved laboratories.
- (e) Proposal for rain water harvesting/ recharge within the premises as per Model Building Bye Laws issued by Ministry of Housing & Urban Affairs.
- (f) **Impact Assessment report:** All projects extracting/proposing to extract ground water in excess of 100 m<sup>3</sup>/day in Over-exploited, Critical and Semi-critical areas shall have to mandatorily submit impact assessment report of existing/ proposed ground water withdrawal on the ground water regime and also socio-economic impacts report prepared by accredited consultants. Pro-forma for the report is given in Annexure IV.

#### 4.2 Mining Projects

All existing as well as new mining projects will be required to obtain No Objection Certificate for ground water abstraction. Since mining projects are location specific, there will be no ban on grant of No Objection Certificate for abstraction of ground water for such projects in over-exploited assessment units.

No Objection Certificate for mining projects shall be granted subject to the following specific conditions:

- i) It shall be mandatory for all the mining industries to ensure that water available from de-watering operations is properly treated and should be gainfully utilized for supply for irrigation, dust

- suppression, mining process, recharge in downstream and for maintaining flows in the river system.
- ii) Construction of observation well(s) (piezometers) along the periphery in the premises, for monthly ground water level monitoring, shall be mandatory for mines drawing/ proposing to draw more than 10 m<sup>3</sup>/day of ground water. Depth and aquifer zone tapped in the piezometer shall be commensurate with that of pumping well/ wells.
  - iii) In addition, the proponent shall monitor ground water levels by establishing observation wells (piezometers) in the core and buffer zones as specified in the No Objection Certificate.
  - iv) In case of coal and other base metal mining the project proponent shall use the advance dewatering technology (by construction of series of dewatering abstraction structures) to avoid contamination of surface water.
  - v) In addition to this, all mining units shall also monitor the water quality of mine seepage and mine discharge through NABL accredited/ Govt. approved laboratories and the same shall be submitted at the time of self compliance.
  - vi) All mining projects drawing ground water in safe, semi-critical and critical assessment units shall be required to pay ground water abstraction charges as applicable as per Tables 5.4 A.
  - vii) All mining projects drawing ground water in over-exploited assessment units shall be liable to pay ground water restoration charges as per Table 5.4 B.

#### Documents to be submitted with the application

- (a) Mining plan approved by the concerned Govt. agency/ department.
- (b) Proposal for rain water harvesting/ recharge within the premises as per Model Building Bye Laws issued by Ministry of Housing & Urban Affairs.
- (c) Comprehensive report prepared by accredited consultant on ground water conditions in both core and buffer zones of the mine, depth wise and year wise mine seepage calculations, impact assessment of mining and dewatering on ground water regime and its socio-economic impact, details of recycling, reuse and recharge, reduction of pumping with use of technology for mining and water management to minimize and mitigate the adverse impact on ground water, based on local conditions. Format for report is given in Annexure V.

#### 4.3 Infrastructure projects:

Since infrastructure projects are location specific, grant of No Objection Certificate to such projects located in over-exploited assessment units shall not be banned. New infrastructure projects/ residential buildings may require dewatering during construction activity and/ or use ground water for construction. In both cases, applicants shall seek No Objection Certificate from CGWA before commencement of work. However, in over-exploited assessment units, use of ground water for construction activity shall be permitted only if no treated sewage water is available within 10 km radius of the site. New as well as existing Infrastructure projects shall also be required to seek No Objection Certificate for abstraction of ground water.

No 'No Objection Certificate' shall be granted for extraction of groundwater for Water Parks, Theme Parks and Amusement Parks in over-exploited assessment units.

Indicative list of Infrastructure projects is given in Annexure VI

The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:

- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data through the web portal to CGWA/SGWA as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by CGWA/SGWA.



- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m<sup>3</sup>/day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc.
- iii) For infrastructure dewatering/ construction activity, No Objection Certificate shall be valid for specific period as per the detailed proposal submitted by the project proponent.
- iv) All infrastructure projects drawing ground water in safe, semi-critical and critical assessment units shall be required to pay ground water abstraction charges as applicable as per Table 5.3 A.
- v) All infrastructure projects (new/ existing) drawing ground water in over-exploited assessment units shall be liable to pay ground water restoration charges as per Table 5.3 B.

**Documents to be submitted with the application**

- (a) In cases where dewatering is involved, submission of impact assessment report prepared by an accredited consultant on the ground water situation in the area giving detailed plan of pumping, proposed usage of pumped water and comprehensive impact assessment of the same on the ground water regime shall be mandatory. The report should highlight environmental risks and proposed management strategies to overcome any significant environmental issues such as ground water level decline, land subsidence etc.
- (b) An affidavit on non judicial stamp paper of Rs. 10/- regarding non availability of water from any other source in case water is required for construction in safe and semi critical areas.
- (c) Certificate from a government agency regarding non availability of treated sewage water for construction within 10 km radius of the site in critical and over-exploited areas.
- (d) Certificate of non-availability of water from local government water supply agency in respect of all categories of assessments units for commercial use.
- (e) Proposal for rain water harvesting/ recharge within the premises as per Model Building Bye Laws issued by Ministry of Housing & Urban Affairs.
- (f) Details of water requirement computed as per National Building Code, 2016 (Annexure I), taking into account recycling/ reuse of treated water for flushing etc. (in case of completed infrastructure projects for commercial use).
- (g) Completion certificate from the concerned agency for infrastructure projects requiring water for commercial use.

**5.0 Ground water abstraction/ restoration charges**

All residential apartments/ group housing societies/ Government water supply agencies in urban areas shall be required to pay ground water abstraction charges.

All industries/mining/ infrastructure projects drawing ground water in safe, semi-critical and critical assessment units will have to pay ground water abstraction charges based on quantum of ground water extraction and category of assessment unit as per details given in this guideline.

All existing mining/ infrastructure projects and existing industries including MSME drawing ground water in over-exploited assessment units will have to pay ground water restoration charges based on quantum of ground water extraction. Further, new MSME, new infrastructure and new Mining projects in over exploited areas shall also be required to pay ground water restoration charges.

Existing industries, infrastructure units and mining projects which have installed/constructed artificial recharge structures in compliance of the conditions prescribed in the groundwater guidelines prevailing at the time of grant of No Objection Certificate or its renewal shall be eligible for a rebate of 50% (fifty percent) in the ground water abstraction charges/ground water restoration charges, subject to their satisfactory performance and verification.

The revenue generated from the proposed water abstraction/ restoration charges shall be kept in a separate fund for implementation of site specific suitable demand/ supply side interventions.

## 5.7 Rates of Ground water abstraction /restoration charges

## I. Drinking and domestic use for residential apartments/ group housing societies/ Government water supply agencies in Urban areas

All residential apartments/ Group Housing Societies requiring water only for drinking/domestic use requiring No Objection Certificate would pay ground water abstraction charges as per rates given below in Table 5.1.

Table 5.1 Ground Water Abstraction charges for Drinking &amp; Domestic use.

Quantum of Groundwater withdrawal (m <sup>3</sup> /month)	Rate of ground water abstraction charges (Rs. per m <sup>3</sup> )
0-25	No charge
26-50	1.00
>50	2.00

Government water supply agencies and Government infrastructure projects shall pay Ground water abstraction Charges @ Rs. 0.50 per m<sup>3</sup>.

## II. Packaged Drinking Water units

Rates of ground water abstraction charges for packaged drinking water units in safe, semi-critical and critical assessment units are given in Table 5.2 A and those for ground water restoration charges in over-exploited assessment units are given in Table 5.2 B.

Table 5.2 A: Rates of ground water abstraction charges for packaged drinking water units (Rs per m<sup>3</sup>)

S.No.	Category of area ↓ Ground water use →	Quantum of ground water withdrawal				
		Up to 50m <sup>3</sup> /day	51 to <200 m <sup>3</sup> /day	200 to <1000 m <sup>3</sup> /day	1000 to <5000 m <sup>3</sup> /day	5000 m <sup>3</sup> /day and above
1.	Safe	1.00	3.00	5.00	8.00	10.00
2.	Semi-critical	2.00	5.00	10.00	15.00	20.00
3.	Critical	4.00	10.00	20.00	40.00	60.00

Table 5.2 B: Rates of ground water restoration charges for packaged drinking water units (Rs per m<sup>3</sup>)

S.No.	Category of area ↓ Ground water use →	Quantum of ground water withdrawal				
		Up to 50 m <sup>3</sup> /day	51 to <200 m <sup>3</sup> /day	200 to <1000 m <sup>3</sup> /day	1000 to <5000 m <sup>3</sup> /day	5000 m <sup>3</sup> /day and above
1.	Over-exploited (existing industries only)	8.00	20.00	40.00	80.00	120.00

## III. Other Industries &amp; infrastructure projects

Rates of ground water abstraction charges for other industries and infrastructure projects in safe, semi-critical and critical assessment units are given in Table 5.3 A and those for ground water restoration charges in over-exploited assessment units are given in Table 5.3 B.

**Table 5.3 A: Rates of Ground Water abstraction charges for other industries & infrastructure projects (Rs per m<sup>3</sup>)**

S.No.	Category of area ↓ Ground water use →	Quantum of ground water withdrawal			
		< 200 m <sup>3</sup> /day	200 to <1000 m <sup>3</sup> /day	1000 to <5000 m <sup>3</sup> /day	5000 m <sup>3</sup> /day and above
1.	Safe	1.00	2.00	3.00	5.00
2.	Semi-critical	2.00	3.00	5.00	8.00
3.	Critical	4.00	6.00	8.00	10.00

**Table 5.3 B: Rates of ground water restoration charges for other industries & infrastructure projects (Rs per m<sup>3</sup>)**

S.No.	Category of area ↓ Ground water use →	Quantum of ground water withdrawal			
		< 200 m <sup>3</sup> /day	200 to <1000 m <sup>3</sup> /day	1000 to <5000 m <sup>3</sup> /day	5000 m <sup>3</sup> /day and above
1.	Over-exploited (existing industries / new Industries as per the present Guidelines)	6.00	10.00	16.00	20.00

## IV. Mining projects

Rates of ground water abstraction charges for mining, which are drawing ground water in safe, semi-critical and critical assessment units are given in Table 5.4 A and those for ground water restoration charges in case of projects drawing ground water in over-exploited assessment units are given in Table 5.4 B.

**Table 5.4 A: Rates of ground water abstraction charges for mining (Rs. per m<sup>3</sup>)**

S.No.	Category of area ↓ Ground water use →	Quantum of ground water withdrawal			
		< 200 m <sup>3</sup> /day	200 to <1000 m <sup>3</sup> /day	1000 to <5000 m <sup>3</sup> /day	5000 m <sup>3</sup> /day and above
1.	Safe	1.00	2.00	2.50	3.00
2.	Semi-critical	2.00	2.50	3.00	4.00
3.	Critical	3.00	4.00	5.00	6.00

Table 5.4 B: Rates of ground water restoration charges for mining (Rs. per m<sup>3</sup>)

S.No.	Category of area ↓ Ground water use →	Quantum of ground water withdrawal			
		< 200 m <sup>3</sup> /day	200 to <1000 m <sup>3</sup> /day	1000 to <5000 m <sup>3</sup> /day	5000 m <sup>3</sup> /day and above
1.	Over-exploited	4.00	5.00	6.00	7.00

### 6.0 Bulk Water Supply

All private tankers abstracting ground water and use it for supply as bulk water suppliers will now mandatorily seek No Objection Certificate for ground water abstraction. The bulk water suppliers through tankers drawing ground water in safe, semi critical and critical assessment units shall pay groundwater abstraction charges as per the Table-6.1 A. The bulk water suppliers drawing ground water in over-exploited assessment units shall pay the groundwater restoration charges as per the Table-6.1 B. All tankers will have to install GPS based system for their monitoring of movement/area of operation.

Modalities for issue of No Objection Certificate for bulk/tanker water supplies shall be worked out in consultation with States/Uts and suitable guidelines in this regard will be framed and issued separately for the same.

Table-6.1A: Groundwater abstraction charges for Bulk/Tanker water supplies

Category	Rate per m3 (in Rs.)
Safe	10
Semi Critical	20
Critical	25

Table-6.1B: Groundwater abstraction charges for Bulk/Tanker water supplies

Category	Rate per m3 (in Rs.)
Over Exploited	35

### 7.0 Abstraction of Saline ground water

Abstraction of saline ground water in areas having either saline ground water at all depths or pockets of saline ground water in an otherwise fresh water area for use by industries/ dewatering by infrastructure/ mining projects including those located in over exploited areas would be encouraged. Such industries shall be exempted from paying ground water abstraction charges.

The list of such assessment units having saline ground water at all depths as per the latest assessment of dynamic ground water resources will be made available by the CGWA in their website. However, due care shall be taken in respect of disposal of effluents by the units so as to protect the water bodies and the aquifers from pollution.

Detailed guidelines in this regard shall be prepared and issued separately.

### 8.0 Protection of Wetland Areas

The wet land areas in the country are very crucial as they are direct reflection of the presence of ground water in such areas. The protection of the wetland areas is being separately handled by the Wetland Authorities. Since ground water is very crucial for the survival of the wetland area, any excessive ground water development within the zone of wetland area would affect the volume of water in that wetland.

Projects falling within 500 m from the periphery of demarcated wetland areas shall mandatorily submit a detailed proposal indicating that any ground water abstraction by the project proponent does not affect the protected wetland areas. Furthermore, before seeking permission from CGWA, the projects shall take consent/approval from the appropriate Wetland Authorities to establish their projects in the area.

**9.0 General compliance conditions in No Objection Certificate**

- i. Installation of digital water flow meter (conforming to BIS/ IS standards) having telemetry system in the abstraction structure(s) shall be mandatory for all users seeking No Objection Certificate and intimation regarding their installation shall be communicated to the CGWA within 30 days of grant of No Objection Certificate through the web portal.
- ii. Proponents shall mandatorily get water flow meter calibrated on from an authorized agency once in a year.
- iii. Proponents shall install roof top rain water harvesting & recharge systems in the project area.
- iv. Proponents shall pay Ground Water Abstraction/ Restoration Charges based on quantum of ground water extraction as applicable as per the rates given in Section 6.
- v. Construction of purpose-built observation wells (piezometers) for ground water level monitoring shall be mandatory as per Section 15. Water level data shall be made available to CGWA through web portal. Detailed guidelines for construction of piezometers are given in Annexure-II.
- vi. Proponents shall monitor quality of ground water from the abstraction structure(s) once in a year. Water samples from bore wells/ tube wells / dug wells shall be collected during April/May every year and analysed in NABL accredited laboratories for basic parameters (cations and anions), heavy metals, pesticides/ organic compounds etc. Water quality data shall be made available to CGWA through the web portal.
- vii. If the existing well becomes defunct due to mechanical failure within the validity period of No Objection Certificate, the user can construct a replacement well under intimation to CGWA on web portal. The defunct well shall be properly sealed (Refer Annexure VII). The user will be required to submit documentary proof in this regard. However, if the existing abstraction structures fails to yield water and he proponent desires to drill another tubewell in the same premises, prior permission of the Authority shall be required. If the replacement well is to be drilled in some different place, the proponent shall obtain fresh No Objection Certificate.
- viii. Wherever feasible, requirement of water for greenbelt (horticulture) shall be met from recycled / treated waste water.
- ix. In case of change of ownership, new owner of the industry will have to apply for incorporation of necessary changes in the No Objection Certificate with documentary proof within 60 days of taking over possession of the premises.

**10.0 Monitoring of compliance of No Objection Certificate Conditions**

To monitor the compliance of No Objection Certificate conditions, Central Ground Water Authority and State/ UT Ground Water Authorities shall take the following steps:

- a. Suitable MIS will be developed for compliance monitoring.
- b. District Collectors/Deputy Commissioners (DCs) /District Magistrates (DMs) are authorized to take enforcement measures like sealing of unauthorized ground water abstraction structures, disconnection of electricity, launching of prosecution against those violating the No Objection Certificate conditions and taking action for imposition of Environmental Compensation.
- c. Technical officers of CGWB/ CGWA and State groundwater organizations are authorized to take actions with respect to monitoring and periodic inspections with the approval of competent authority.
- d. In case of violation of any of the No Objection Certificate conditions, the proponents shall be liable to pay the penalties as per Section 16.

**11.0 Renewal of No Objection Certificate**

No objection certificate shall be renewed periodically, subject to the compliance of the conditions mentioned therein:

- i. The applicant shall apply for renewal of No Objection Certificate at least ninety days prior to expiry of its validity.
- ii. Application for renewal of No Objection Certificate shall be accompanied by the Compliance Report.
- iii. Before granting renewal, Central Ground Water Authority or State/ Ut Authority shall satisfy itself that the conditions of No Objection Certificate have been complied with.
- iv. In case of change in category of the assessment unit, renewals would be granted with conditions as laid down for new category.
- v. No Objection Certificate will be renewed for the terms specified for various uses as follows.

Category	Use	Term of renewal
Critical, Semi-critical and safe	Infrastructure projects for drinking & domestic use and urban Water Supply Agencies	5 years
	Industries	3 years
	Mines	2 years
Over exploited	All users in 'Over-exploited areas'	2 years

- vi. If the application for renewal is submitted in time and the CGWA/ the respective State/ Ut Authority is unable to process the application in time, No Objection Certificate shall be deemed to be extended till the date of renewal of No Objection Certificate.
- vii. If the proponent fails to apply for renewal within 3 months from the date of expiry of No Objection Certificate, the proponent shall be liable to pay Environmental Compensation for the period starting from the date of expiry of No Objection Certificate till No Objection Certificate is renewed by the competent authority.

**12.0 Extension of No Objection Certificate**

If the proponent is unable to construct the well(s) during the validity period of No Objection Certificate for genuine reasons, the proponent will have to apply for extension of No Objection Certificate. Application for extension should be supported by documents justifying the reasons for delay. Other conditions for grant of extension of No Objection Certificate will be the same as that for fresh No Objection Certificate.

Extension of No Objection Certificate will be granted for a maximum period of two years. No further extension will be granted after the expiry of the extended period. In that case, the applicant will have to apply afresh for grant of No Objection Certificate.

**13.0 Delegation of powers against illegal groundwater withdrawal**

Central Ground Water Authority has appointed the District Magistrate/ District Collector/ Sub Divisional Magistrates of each Revenue District/Sub division as Authorized Officers, who have been delegated the power to seal illegal wells, disconnect electricity supply to the energised well, launch prosecution against offenders etc. including grievance redressal related to ground water in their respective jurisdictions.

In order to further decentralise and strengthen the monitoring and compliance mechanism as per the guidelines, officials of concerned Departments of Revenue and Industries of the States/Uts shall be appointed as Authorised Officers in consultation with the State/Ut Governments.

A copy of the No Objection Certificate issued by the CGWA in the No Objection Certificate Application Portal (NOCAP) will be forwarded to the respective District Magistrate/ District Collector. In case of any violation of the directions of Central Ground Water Authority and non-fulfilment of the conditions laid

down in the No Objection Certificate, the Authorised Officers will file appropriate Petition/Original Application etc under sections 15 to 21 of the Environment (Protection) Act, 1986 in appropriate Courts.

#### 14.0 Ground Water Level Monitoring

All the project proponents (drawing ground water more than 10 cum/d) have to mandatorily construct Piezometers (observation wells) within their premises for monitoring of the ground water levels. Such a mechanism of compliance conditions has been made to ensure that every month the ground water level in the project area can be monitored and observed. In this regard the necessary criteria for monitoring of water levels through piezometers by the project proponents is given in Table 14.1.

Table 14.1 No. of Piezometers to be constructed & Type of Water Level Monitoring Mechanism					
S.No.	Quantum of Ground water withdrawal (cum/d)	No. of piezometer required	Monitoring mechanism		
			Manual	DWLR	DWLR with Telemetry
1	<10	0	0	0	0
2	11-50	1	1	0	0
3	51-500	1	0	1	0
4	>500	2	0	1	1

The piezometer shall be suitably located to ensure that zone of aquifer tapped in the piezometer is the same as that of the pumping well.

#### 15.0 Environmental Compensation

Extraction of ground water for commercial use by industries, infrastructure units and mining projects without a valid No Objection Certificate from appropriate authority shall be considered illegal and such entities shall be liable to pay Environmental Compensation for the quantum of ground water so extracted. The norms prescribed by Central Pollution Control Board (CPCB) shall be utilized for calculating the Environmental compensation as mentioned below:

$$EC_{GW} = \text{Ground water consumption per day} \times \text{Environmental Compensation rate (ECR}_{GW}) \times \text{No. of days} \times \text{Deterrence factor}$$

where ground water consumption is in m<sup>3</sup>/day and ECR<sub>GW</sub> in Rs./ cum

#### 15.1 Rates of Environmental Compensation:

Rates of Environmental Compensation (ECR<sub>GW</sub>) for various types of users in different categories of assessment units are given in Table 15.1 to 15.3.

Table 15.1 : ECR<sub>GW</sub> for Packaged Drinking Water units

S.No.	Area Category	Water Consumption (cum/day)			
		<200/	200 to <1000	1000 to <5000	5000 & above
		Environmental Compensation Rate (ECR <sub>GW</sub> ) in Rs./m <sup>3</sup>			
	Safe	12	18	24	30
2	Semi critical	24	36	48	60
3	Critical	36	48	66	90
4	Over- exploited	48	72	96	120

Note :-Minimum ECR<sub>GW</sub> shall not be less than Rs 1,00,000/-

Table 15.2: ECR<sub>GW</sub> for Mining/ infrastructure dewatering projects

S No	Area Category	Water Consumption (cum/day)			
		<200	200 to <1000	1000 to <5000	5000 & above
		Environmental Compensation Rate (ECR <sub>GW</sub> ) in Rs./m3			
1	Safe	15	21	30	40
2	Semi critical	30	45	60	75
3	Critical	45	60	85	115
4	Over- exploited	60	90	120	150

**Note :-**Minimum ECR<sub>GW</sub> shall not be less than Rs 1,00,000/

Table 15.3: ECR<sub>GW</sub> for Industrial units

S.No.	Area Category	Water Consumption (cum/day)			
		<200	200 to <1000	1000 to <5000	5000 & above
		Environmental Compensation Rate (ECR <sub>GW</sub> ) in Rs./m3			
1	Safe	20	30	40	50
2	Semi critical	40	60	80	100
3	Critical	60	80	110	150
4	Over- exploited	80	120	160	200

Note :-Minimum ECR<sub>GW</sub> shall not be less than Rs 1,00,000/-

### 15.2 Deterrent Factors to compensate losses and environmental damage (for packaged drinking water units, mining, industries and infrastructural dewatering projects)

The following deterrent factors based on the duration of illegal ground water extraction shall be levied to compensate for the losses and environmental damages as detailed in Table 15.4.

Table 15.4: Deterrent factor based on quantum of ground water withdrawal and number of years of illegal withdrawal

S.No.	Water Consumption	Deterrence Factor		
		< 2 years	2-5 years	>5 years
1	<1000 KLD	1.00	1.00	1.25
2	1000-5000 KLD	1.00	1.00	1.50
3	>5000 KLD	1.00	1.25	2.00

Note: KLD Kilolitre per day

### 16.0 Provision of Penalty

Penalty shall be imposed on the proponents for non-compliance of No Objection Certificate conditions issued by the appropriate authority. Rates of penalty proposed for non-compliance of various conditions of No Objection Certificate are given in Table 16.1. The rates of the penalty shall be reviewed periodically with the approval of competent authority in Ministry of Jal Shakti.



Table 16.1: Penalty provision for non Compliance of No Objection Certificate conditions

S. No.	Items	Charges in Rs.
1	Non installation/faulty Digital water Flow meter with telemetry system.	200000
2	Non disclosure/ construction of additional groundwater abstraction structures a) Non-functional Structures. b) Defunct/Abandoned Note: Given rates are for unit non-functional/defunct/abandoned structures. This shall be multiplied with total such structures to arrive at consolidated penalty.	200000 100000
3	Reporting of fresh water zones as Brackish / Saline zones in application.	200000
4	Non installation of Piezometer.	200000
5	Non Installation/faulty DWLR/Telemetry system	100000
6	Non Construction/Inadequate capacity of Recharge / Water conservation structures.	500000
7	Non maintenance of Recharge structures.	200000
8	Injection of treated/untreated water into the aquifer system. Note: In addition to penalty, the proponent shall bear the cost of aquifer remediation as per the provisions of Environment (Protection) Act, 1986.	1000000
9	Non Submission of Water level/Water quality Data.	50000
10	Non-maintenance of log book of daily withdrawal/non submission of Groundwater abstraction data.	50000
11	Non submission of photograph of recharge structure(s).	50000
12	Non Submission of Self Compliance report.	100000
13	Construction of groundwater abstraction structures by un authorized/unregistered Drilling Rigs (per structures).	100000
14	Non registration of water supply tankers.	500000
15	Submission of false information/ undertaking.	100000

Charges shall also be payable for correction/modification in the existing issued No Objection Certificate letter. The details of such charges are given in Table 16.2.

Table 16.2: Proposed Charges for correction/Modification in the existing issued No Objection Certificate

S. No.	Items	Charges in Rs.
1	Change in recharge quantum	10000
2	Change in User ID.	5000
3	Change in firm Name	5000
4	Extension of No Objection Certificate	5000
5	Issuance of duplicate No Objection Certificate	5000
6	Issuance of corrigendum to No Objection Certificate	5000
7	Any other items/corrections etc	5000

**17.0 Other important Conditions (Applicable to all):**

- i. Sale of ground water by a person/ agency not having valid no objection certificate from CGWA/State Ground Water Authority is not permitted.
- ii. In infrastructure projects, paved/parking area must be covered with interlocking/perforated tiles or other suitable measures to ensure groundwater infiltration/harvesting
- iii. In case of Infrastructure projects, the firm/entity shall ensure implementation of dual water supply system in the projects. Compliance of the same shall be submitted through the web portal.
- iv. Non compliance of conditions mentioned in the No Objection Certificate may be taken as sufficient reason for cancellation of no objection certificate accorded/ non-renewal of No Objection Certificate.
- v. No application shall be entertained without supporting documents as specified in relevant sections.
- vi. Abstraction structure(s) should be located inside the premises of project property.
- vii. Self compliance of conditions laid down in the no objection certificate shall be reported by the users online in the web portal of Central Ground Water Authority/state Ground Water Authority.
- viii. Processing fee prescribed, if any, from time to time shall be charged for various services.

**Note:**

1. Guidelines are subject to modification from time to time.
2. In case of any discrepancy between Hindi and English versions of this document including the annexures, the English version shall prevail.

**Annexure I****Estimation of Water Requirements for drinking and domestic use****(Source: National Building Code 2016, BIS)****a) Residential Buildings:**

Accommodations	Population
1 Bedroom dwelling unit	4
2 Bedroom dwelling unit	5
3 Bedroom dwelling unit	6
4 Bedroom dwelling unit and above	7

**Notes:**

- 1) The above figures consider a domestic household including support personnel, wherever applicable.
- 2) For plotted development, the population may be arrived at after due consideration of the expected number and type of domestic household units.
- 3) Dwelling unit under EWS category shall have population requirement of 4 and studio apartment shall have population requirement of 2.

As a general rule the following rates per capita per day may be considered for domestic and non-domestic needs:

**a) For communities with populations up to 20,000:**

1)	Water supply through stand post:	40 lphd (Min)
2)	Water supply through house service: connection	70 to 100 lphd

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[भाग II—खण्ड 3(ii)]

भारत का राजपत्र : असाधारण

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- b) For communities with: 100 to 135 lphd  
population 20,000 to 100,00 together with  
full flushing system
- c) For communities with population: 150 to 200 lphd  
above 100,000 together with  
full flushing system

**Note**—The value of water supply given as 150 to 200 litre per head per day may be reduced to 135 litre per head per day for houses for Medium Income Group (MIG) and Low Income Groups (LIG) and Economically Weaker Section of Society (EWS), depending upon prevailing conditions and availability of water.

Out of the 150 to 200 litre per head per day, 45 litre per head per day may be taken for flushing requirements and the remaining quantity for other domestic purposes.

**A. Water Requirements for Buildings Other than Residences**

Sl No.	Type of Building	Domestic litres per head/ day	Flushing Litres per head/ day	Total Consumption Litres per head/ day
1.	Factories including canteen where bath rooms are required to be provided	30	15	45
2.	Factories including canteen where no bath rooms are required to be provided	20	10	30
3.	Hospital (excluding laundry and kitchen):			
	a) Number of beds not exceeding 100	230	110	340
	b) Number of beds exceeding 100	300	150	450
	c) Out Patient Department (OPD)	10	5	15
4.	Nurses' homes and medical quarters	90	45	135
5.	Hostels	90	45	135
6.	Hotels (up to 3 star) excluding laundry, kitchen, staff and water bodies	120	60	180
7.	Hotels (4 star and above) excluding laundry, kitchen, staff and water bodies	260	60	320
8.	Offices (including canteen)	25	20	45
9.	Restaurants and food court including water requirement for kitchen:			
	a) Restaurants	55 per seat	15 per seat	70 per seat
	b) Food Court	25 per seat	10 per seat	35 per seat
10.	Clubhouse	25	20	45
11.	Stadiums	4	6	10

12.	Cinemas, concert halls and theatres and multiplex	5 per seat	10 per seat	15 per seat
13.	Schools/Educational institutions:			
	a) Without boarding facilities	25	20	45
	b) With boarding facilities	90	45	135
14.	Shopping and retail (mall)			
	a) Staff	25	20	45
	b) Visitors	5	10	15
15.	Traffic Terminal stations			
	a) Airports	40	30	70
	b) Railway stations (Junction) with bathing facility	40	30	70
	c) Railway stations (Junction) without bathing facility	30	15	45
	d) Railway stations (Intermediate) with bathing facility	25	20	45
	e) Railway stations (Intermediate) without bathing facility	15	10	25
	f) Interstate bus terminals	25	20	45
	g) Intrastate Bus Terminals/Metro Stations	10	5	15

## Notes:

1. For calculating water demand for visitors, consumption of 15 litre per head per day may be taken.
2. The water demand includes requirement of patients, attendants, visitors and staff. Additional water demand for kitchen, laundry and clinical water shall be computed as per actual requirements.
3. The number of persons shall be determined by average number of passengers handled by stations, with due considerations given to the staff and vendors who are using these facilities.
4. Consideration should be given for seasonal average peak requirements.
5. The hospitals may be categorized as Category A (25 to 50 beds), Category B (51 to 100 beds), Category C (101 to 300 beds), Category D (301 to 500) and Category E (501 to 750 beds).

## Annexure II

## Guidelines for construction of Piezometers and monitoring of Ground Water Levels and Quality

Piezometer is a borewell/tubewell used only for measuring the water level by lowering a tape/sounder or automatic / digital water level measuring equipment. It is also used to take water sample for water quality testing whenever needed. General guidelines for installation of piezometers are as follows:

- The piezometer is to be installed/constructed at the minimum distance of 50 m from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about four inches to six inches.
- The depth of the piezometer should be the same as that of the pumping well from which ground water is being abstracted. If, more than one pumping wells are constructed tapping aquifers at different depths, more than one piezometers shall be required to be constructed tapping different aquifers as in the pumping wells.

- The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tubewells has been stopped for about four to six hours.
- The ground water quality has to be monitored once in a year during pre-monsoon (April/ May) period by industries and mines drawing ground water. Samples of ground water should be analyzed from NABL accredited laboratory.
- A permanent display board should be installed at Piezometer/ Tubewell site for providing the location, piezometer/ tubewell number, depth and zone tapped of piezometer/tubewell for standard referencing and identification
- Any other site specific requirement regarding safety and access for measurement may be taken care off.

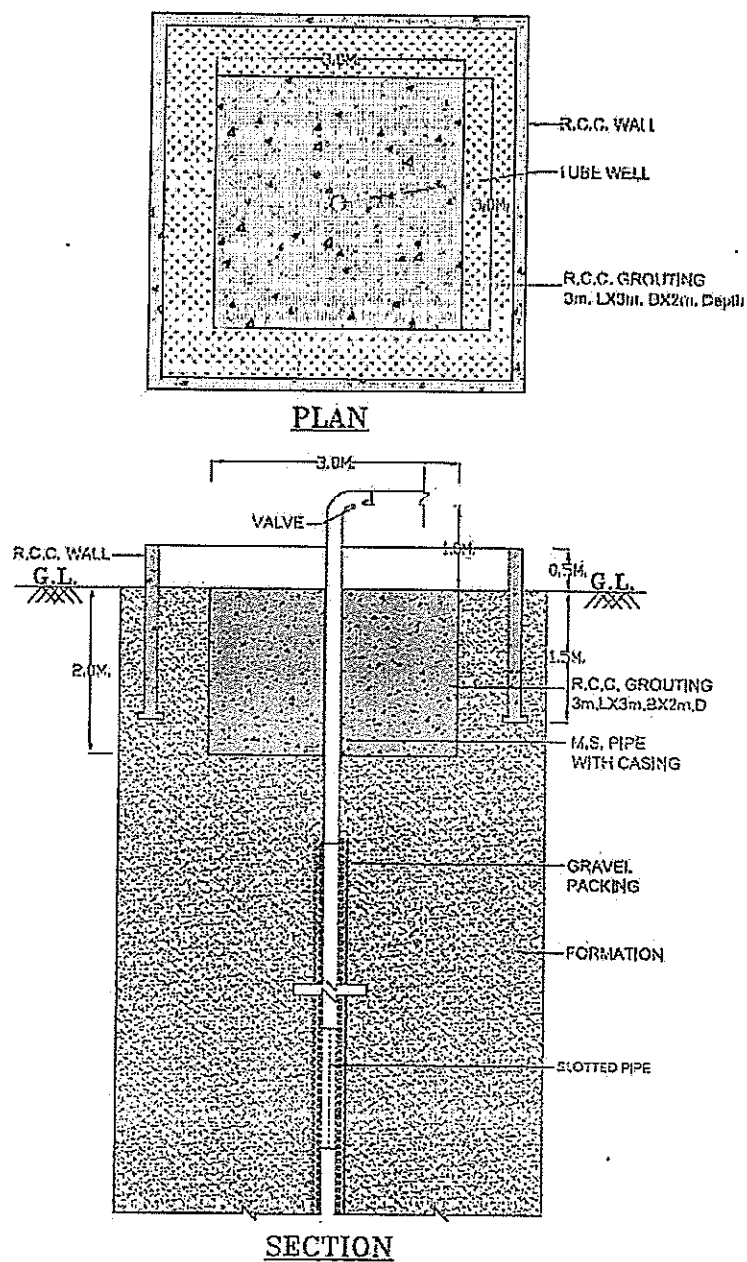
**Annexure III****Measures to be adopted to ensure prevention from pollution in the plant premises of polluting industries/ projects**

It has been observed that ground water in and around polluting industries like Tannery, Slaughter Houses, Dye, Chemical, Coalwashery, other hazardous units, etc., is polluted. In order to prevent further deterioration of ground water quality, it is essential to take all necessary measures for well head protection. All industries/ projects falling under this category are hereby directed to follow the under mentioned procedure both for existing and new category.

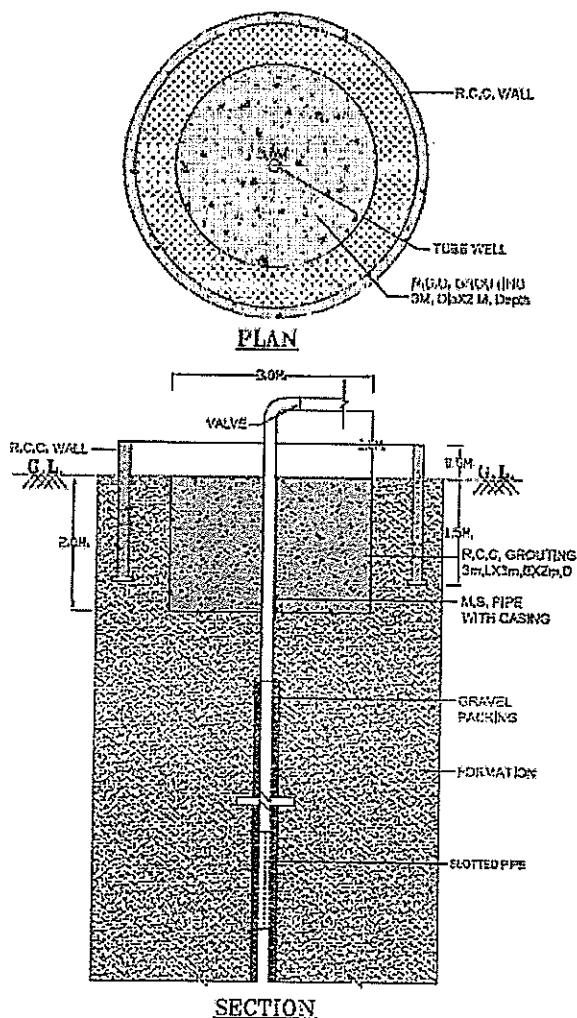
1. No tube well/ bore well / dug well should be constructed in the vicinity of the processing unit. Tube well/ bore well should be constructed at the place which is hygienically maintained.
2. Only Mild Steel pipe should be used for assembly/ casing and PVC (Poly Vinyl Chloride) or similar pipes should not be used. The tube well/ bore well having PVC or similar pipes should be abandoned and filled back.
3. Around the tube well/ bore well, RCC (Reinforced Concrete Cement) grouting of 3 meters (length) x 3 meters (width) x 2 meters (depth) must be provided. The pipe of the tube well/ bore well must be raised 1 meter above ground level (1 magl). The tube well/ bore well must be surrounded by RCC wall of 0.5 meter height and 1.5 meter depth to prevent any surface contamination to enter the constructed tube well/ bore well. Plan/Sectional diagram is enclosed for reference (Appendix 1 and 2).
3. The tube well/ bore well must be fitted with NRV (Non Return Valve) in order to ensure that the constructed tube well/ bore well is exclusively used for abstraction of ground water only.
4. At no point of time there should be any injection of any water or fluid into the constructed tube well/ bore well/ Piezometer.
5. The industries/ projects under this category should not implement any recharge measures within the plant premises.
6. Any tube well/ bore well located/ constructed in the vicinity of STP (Sewage Treatment Plant) or ETP (Effluent Treatment Plant) should be abandoned and filled back.
7. The piezometer to be constructed for monitoring purpose should follow the same procedure as that for tube well/ bore well for such industries/ projects.

## Appendix 1

Plan/ Sectional diagram showing well head protection



Plan/ Sectional diagram showing well head protection



## Annexure-IV

Outline of hydro-geological Report for obtaining No Objection Certificate for industries

1. Brief about the proposed project giving location details, coordinates, google/ toposheet maps, etc demarcating the project area.
2. Ground water situation in and around the project area including water level and quality data and maps along with quality issues, if any. In case of mines, ground water conditions in both core and buffer zone should be described.
3. Details of the tubewells/ borewells proposed to be constructed. This includes the drilling depth, diameter, tentative lithological log, details of pump to be lowered, H.P. of pump, tentative discharge of tubewells/ borewells, etc. Locations to be marked on the site plan/ map. Location of proposed piezometers.

4. Details of Geophysical studies carried out in and around the project area. Ground water resources computation of the block in which the project falls
5. Approved Mine plan in case of mines and detailed dewatering plan in case of mine/ infrastructure dewatering projects.
6. Proposed usage of pumped water in case of mining/ infrastructure dewatering projects.
7. Comprehensive assessment of the impact on the ground water regime in and around the project area highlighting the risks and proposed management strategies proposed to overcome any significant environmental issues
8. Proposed measures for disposal of waste water by industries drawing saline water.
9. Measures to be adopted for water conservation which include recycling, reuse, treatment, etc. This includes the water balance chart being adopted by the firm along with details of water conservation methods to be adopted.
  - Brief write up along with capacity and flow chart of Sewage Treatment Plants / Effluent Treatment Plants / Combined Effluent Treatment Plants existing/ proposed within the project.
  - Details of water conservation measures to be adopted to reduce/ save the ground water.
  - Total water balance chart showing the usage of water for various processes.
10. Any other details pertaining to the project.

## Annexure V

Format of the Report on ground water conditions (for mining projects)

Introduction

Project description

Background

Objectives and scope

Regional setting

Location

Landuse

Climate

Topography and drainage

Geology –Regional and Local

General Hydrogeology (aquifer types, aquifer depth, zone tapped etc.)

Groundwater condition (In core and buffer zones)

Spatial and temporal variations in water levels Groundwater quality (Shallow and deep aquifer)

Impact of groundwater extraction on local groundwater

Hydrograph of water level/piezometer in monitoring wells

Trend analysis of historical water levels Flow net analysis (groundwater flow direction)

Year wise/ bench wise mine dewatering computation as per approved mine plan

Conclusions



## Indicative list of Infrastructure projects

Residential townships including commercial buildings
Office building
School
College
University
Special Economic Zone
Metro Station
Railway Station
Bus Depot
Airport
Seaport
Highway infrastructure
Fire station
Warehouse
Business Plaza
Malls & Multiplex
Hospitals
Nursing Homes
Resort
Hotel/ Restaurant/ Food Plaza
Holiday home/Guest house/ Hostels
Banquet Hall/ Marriage Gardens
IT Complex
Logistics & Cargo
Clubs
Trade Centre

**Supreme Court Order in Civil Writ petition 36 of 2009 regarding measures for prevention of fatal accidents of small children due to their falling into abandoned bore wells and tube wells**

In Re: Measures for prevention of fatal accidents of small children due to their falling into abandoned bore wells and tube wells

Union of India and Ors.

Respondents(s)

## ORDER

With this Court issuing requisite guidelines vide order dated 11th February, 2010, subject to slight modifications, nothing survives in the present writ petition.

That modification is as follows:

- (i) The owner of the land/ premises, before taking any steps for constructing bore well/ tube well must inform in writing to the concerned authorities in the area, i.e., District Collector/ District Magistrate/ Sarpanch of the Gram Panchayat/ any other Statutory Authority/ concerned officers of the Department of Ground Water/ Public Health/ Municipal Corporation, as the case may be, about the construction of bore well/ tube well.
- (ii) Registration of all the drilling agencies, namely, Government/ Semi Government, Private etc. should be mandatory with the district administration/ Statutory Authority wherever applicable.
- (iii) Erection of signboard at the time of construction near the well with the following details.-
  - (a) Complete address of the drilling agency at the time of construction/ rehabilitation of well
  - (b) Complete address of the user agency/owner of the well.
- (iv) Erection of barbed wire fencing or any other suitable barrier around the well during construction.
- (v) Construction of cement/ concrete platform measuring 0.50x0.50x0.60 meter (0.30 meter above ground level and 0.30 meter below ground level) around the well casing.
- (vi) Capping of well assembly by welding steel plate or by providing a strong cap to be fixed to the casing pipe with bolts & nuts.
- (vii) In case of pump repair, the tube well should not be left uncovered.
- (viii) Filling of mud pits and channels after completion of works.
- (ix) Filling up abandoned bore wells by clay/sand/boulders/pebbles/drill cuttings etc. from bottom to ground level.
- (x) On completion of the drilling operations at a particular location, the ground conditions are to be restored as before the start of drilling.
- (xi) District Collector should be empowered to verify that the above guidelines are being followed and proper monitoring check about the status of bore holes/ tube wells are being taken care through the concerned state/ Central Government agencies.
- (xii) District/ Block/ Village wise status of bore wells/tube wells drilled viz. No. of wells in use, No. of abandoned bore wells/ tube wells found open, No. of abandoned bore wells/ tube wells properly filled up to ground level and balance number of abandoned bore wells/ tube wells to be filled up to ground level is to be maintained at District Level.

In rural areas, the monitoring of the above is to be done through Village Sarpanch and the Executive from the Agriculture Department.

In case of urban areas, the monitoring of the above is to be done through Junior Engineer and the Executive from the concerned Department of Ground Water/Public Health/ Municipal Corporation etc.

- (xiii) If a bore well/ tube well is 'Abandoned' at any stage, a certificate from the concerned department of Ground Water/ Public Health/ Municipal Corporation/ Private Contractor etc. must be obtained by the aforesaid agencies that the 'Abandoned' bore well/tube well is properly filled up to the ground level. Random inspection of the abandoned wells is also to be done by the Executive of the concerned agency/ department. Information on all such data on the above are to be maintained in the District Collector/ Block Development Office of the State.

We are informed that the last paragraph of the earlier order dated 11th February, 2010, concerning publicity has been duly complied with.

Subject to the above, the writ petition is disposed of.

.....CJI.  
[S H KAPADIA]

.....J.  
[K.S. RADHAKRISHNANA]

.....J  
[SWA TANTER KUMAR]

New Delhi,  
August 6, 2010

**ANNEXURE VIII****List of States/Union territories where ground water extraction is being regulated by Central Ground Water Authority**

1. Andaman and Nicobar Islands
2. Assam
3. Arunachal Pradesh
4. Bihar
5. Chhattisgarh
6. Dadra and Nagar Haveli and Daman and Diu
7. Gujarat
8. Haryana
9. Jharkhand
10. Madhya Pradesh
11. Maharashtra
12. Manipur
13. Meghalaya
14. Mizoram
15. Nagaland
16. Odisha
17. Punjab
18. Rajasthan
19. Sikkim
20. Tripura
21. Uttar Pradesh
22. Uttarakhand
23. Andhra Pradesh (only mining projects)
24. Telangana (only mining projects)

Glossary of technical terms used

1. **Safe area:** Area categorized as SAFE from the ground water resources point of view, based on the latest ground water resources assessment carried out jointly by CGWB and State ground water organizations. Details available on the websites of NOCAP and CGWB.
2. **Semi-critical area:** Area categorized as SEMI-CRITICAL from the ground water resources point of view, based on the latest ground water resources assessment carried out jointly by CGWB and State ground water organizations. Details available on the websites of NOCAP and CGWB.
3. **Critical area:** Area categorized as CRITICAL from the ground water resources point of view, based on the latest ground water resources assessment carried out jointly by CGWB and State ground water organizations. Details available on the websites of NOCAP and CGWB.
4. **Over-exploited area:** Area categorized as OVER-EXPLOITED from the ground water resources point of view, based on the latest ground water resources assessment carried out jointly by CGWB and State ground water organizations. Details available on the websites of NOCAP and CGWB.
5. **Aquifer:** Geological formation capable of storing and transmitting ground water.
6. **Deeper Aquifer:** In areas having multiple aquifer system, the aquifer(s) occurring below the uppermost aquifer.
7. **Well:** Any structure used for the extraction of groundwater, including open wells, dug wells, bore wells, dug-cum-bore wells, tube wells, filter points, collector wells, infiltration galleries, recharge wells, or any of their combinations or variations.
8. **Government Agency:** May be Central or State Government body.
9. **Supplier:** Government/ Government approved Water Supply Agency.
10. **Mine:** Area where mining activity is taking place, or area abandoned after mining.
11. **Illegal Ground Water abstraction Structure:** Any energized abstraction structure viz. dugwell, tubewell, borewell which is being used to withdraw ground water without valid No Objection Certificate from Central Ground Water Authority.
12. **Rainwater Harvesting:** The technique or system of collection and storage of rainwater, at micro watershed scale, including roof-top harvesting, for future use or for recharge of groundwater.
13. **Mining Project:** Project which involves mining activity either open cast or underground or both.
14. **Ground Water Draft:** Quantum of ground water withdrawal.
15. **Saline Water:** Water having salinity in excess of 2500  $\mu$ siemens/cm at 25°C.
16. **Water Table Intersection:** Intersection of the water table on excavation of the overlying material due to mining or other activities.
17. **Drinking and domestic use:** Besides drinking & domestic use of households, this category will cover drinking requirement of industries not requiring water for industrial process; drinking, washing, cleaning use etc. in case of hospitals, hotels, malls & multiplexes, institutions, offices, banquet halls, fire stations, metro stations, railway stations, airports, sea ports, stadia etc.
18. **Recycle/Reuse:** Using treated waste water for various purposes/ putting water to multiple uses.
19. **Government Department:** Either Central Government or State Government.
20. **Municipality:** Municipality, a Municipal Corporation or similar body of local urban governance by any other name.
21. **Groundwater:** Water, which exists below the surface in the zone of saturation and can be extracted through wells or any other means or emerges as springs and base flows in streams and rivers;
22. **Bgl :** Below Ground Level.
23. **BCM :** Billion cubic metres.

24. **Groundwater Abstraction structure:** Structure used to withdraw groundwater like bore well / tube well / dug well/dug cum bore well/tunnel well.
25. **Observation well or Piezometer:** A bore well/tube well used only for measuring the water level/piezometric head and to take water sample periodically but not used for groundwater abstraction.
26. **Water Audit:** A method of quantifying water use in simple or complex systems, with a view to reducing water usage and often saving money on otherwise unnecessary water use.
27. **Ground water pollution:** If concentration of any parameter in ground water exceeds the maximum permissible limit for drinking water prescribed by the Bureau of Indian Standards.
28. **Cooperative Group Housing Societies/ Bullder flats:** A Housing Society is a society formed by house owners within a residential complex. The housing society formed must be formally registered with registrar of co-operatives.
29. **KLD – Kilo Litre per day**
30. **EC<sub>GW</sub>** - Environmental compensation for drawing illegal ground water
31. **EC<sub>GWR</sub>** - Environmental compensation rates for drawing illegal ground water.

**ANNEXURE X****Annual water audits by the industries (Source – CII)**

Water audit is a systematic process of objectively obtaining a water balance by measuring flow of water from the site of water withdrawal or treatment, through the distribution system, and into areas where it is used and finally discharged. Conducting a water audit involves calculating water balance, water use and identifying ways for saving water.

Water audit involves preliminary water survey and detailed water audit. Preliminary water survey is conducted to collect background information regarding plant activities, water consumption and water discharge pattern and water billing, rates and water cess. After the analysis of the secondary data collected from the industry, detailed water audit is conducted, which involves the following steps:

- On site training and discussion with facility manager and personnel
- Water system analysis
- Quantification of baseline water map
- Monitoring and measurements using pressure and flow meters and various other devices
- Quantification of inefficiencies and leaks
- Quantification of water quality loads and discharges
- Quantification of variability in flows and quality parameters
- Strategies for water treatment and reuse or direct use

A detailed water balance is finally developed. Water quality requirement at various user areas is mapped, which helps in developing 'recycle' and 'reuse' opportunities.

The detailed water audit report contains the following:

- Water consumption and wastewater generation pattern
- Specific water use and conservation
- Complete water balance of the facility
- Water saving opportunities
- Method of implementing the proposals
- Full description and figures
- Investment required

Industries can undertake following measures for water conservation:

- Setting up of norms for water budgeting
- Modernization of industrial process to reduce water consumption
- Recycling water with a re-circulating cooling system
- Ozonation cooling water approach which can result in five fold reduction in blow down when compared to traditional chemical treatment
- Reduction in reuse of de-ionized water by eliminating some plenum flushes, converting from a continuous flow to an intermittent flow system and improving control on the use
- Use of waste water for gardening
- Proper processing of effluents to adhere to the norms of disposal.