



STANDARD OPERATING PROCEDURE FOR POWER ALLOCATION TO INDUSTRIES

DEPARTMENT OF ENERGY

MINISTRY OF ENERGY AND NATURAL RESOURCES

February 2024 (Revision 03)

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1 Introduction

Hydropower is recognized as a strategic national resource and has been one of the primary sources of revenue generation for Bhutan from export after meeting its own growing domestic demand. Further, electricity is an enabler for economic development, a key facilitating factor for the promotion of industries to enhance the economic growth in the country.

The Bhutan Sustainable Hydropower Development Policy (SHDP) 2021, under section 15.4, mandates the Nodal Agency (i.e., the Department of Energy, erstwhile Department of Hydropower and Power Systems) to “*assess and allocate power to an industry based on the recommendation of the Royal Government of Bhutan (RGoB) agencies on the type of industry to be promoted*”. Thus, DoE needs to ensure efficient and reliable supply of power to the industries including the allocation of power to the upcoming/planned industries in a coordinated, rationalized and sustainable manner.

Furthermore, due to the growing domestic demand, the peak demand has surpassed the firm power capacity. Although Bhutan has surplus generation on an annual basis, during the dry winter seasons domestic generations drop to its lowest (firm capacity) and owing to the growing domestic demand, power deficit is forecasted during these lean months. While RGoB will strive to secure energy by enhancing domestic capacity, energy diversification, entering into import mechanisms, promoting energy efficiency and conservation, amongst other viable interventions, it is imperative to utilize the available resource in a strategic manner.

Therefore, to operationalize the mandates stated in the SHDP 2021, this Standard Operating Procedure (SOP) is prepared to serve as a guidance for allocating power to the industries through coordination and harmonization amongst the relevant stakeholder to deliver efficient public services.

2 Objective

To allocate reliable and secure power supply to industries through sound and rationalized assessment and efficient coordination amongst the power sector agencies and utilities for effective public service delivery.

3 Scope

The SOP sets down the process and the responsibilities of relevant agencies in allocating power to industries (new industries as well as existing industries with new expansion plans).

4 Institutional Arrangements

The following institutions identified shall be responsible for the matters related to the power allocation:

i. Department of Energy (DoE)

The DoE under the Ministry of Energy and Natural Resources (MoENR) shall serve as the Nodal Agency of the RGoB responsible for assessing and allocating power to industries through the issuance of Power Clearance and Power Sanction.

ii. Druk Green Power Corporation (DGPC)

The DGPC shall be responsible for submitting the generation and supply status of hydropower plants in the country to DoE including the import mechanism, during any deficit period.

iii. Bhutan Power Corporation Limited (BPC)

The BPC shall be responsible for carrying out the detailed system studies and field assessment on the new/augmentation/modification required for infrastructure expansion for power supply to the industry. BPC shall also be responsible for signing of the Capacity Reserve Agreement (CRA) and the Contract Demand Agreement (CDA) with the Proponent.

iv. Bhutan Power System Operator (BPSO)

The BPSO is responsible for carrying out grid stability and reliability studies including contingency analysis for planning and operation of the national grid in a reliable manner. For allocation of power, BPSO shall be consulted as and when necessary.

5 Issuance of Power Clearance

The Power Clearance is one of the prerequisites, a sectoral clearance for obtaining a license from the Department of Industry (DoI) to set up an industry by a Proponent.

The Proponent should submit the Power Clearance Form (attached as FORM 1& FORM 2) to the Department of Industry (DoI). The Power Clearance shall be valid for one year from the date of issuance of the Power Clearance, or till the validity of Provisional Letter of Interest (PLoI)/Letter of Interest (LoI) issued by the Department of Industry, MoICE, or the issuance of Power Sanction, whichever is earlier.

The Power Clearance shall be contingent on the Terms and Conditions in the Power Clearance Form.

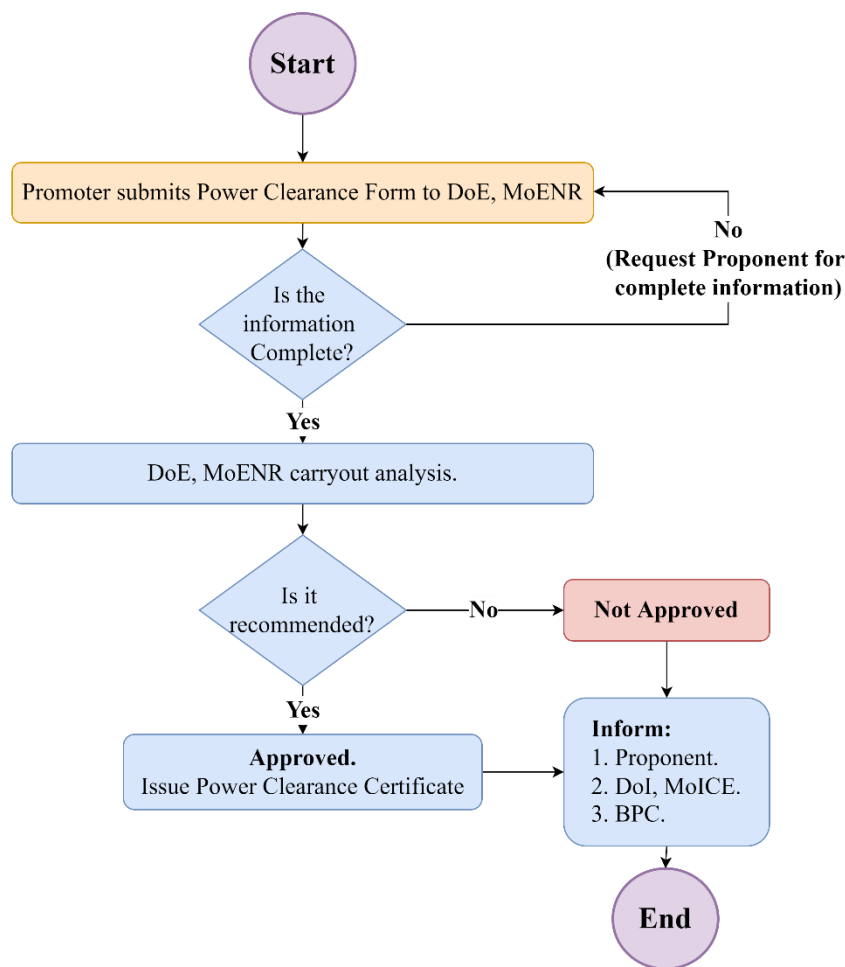
5.1 Application Type

There are three types of applications envisaged for a Power Clearance and submission of the Power Clearance Form is required for all the applications.

1. New Application:

Applicable when setting up of new industry wherein Power Clearance is required to obtain the industry/business license.

The following process (Flowchart 1) will be followed for this type of application:



Flowchart 1: Process for Power Clearance issuance for New Applications

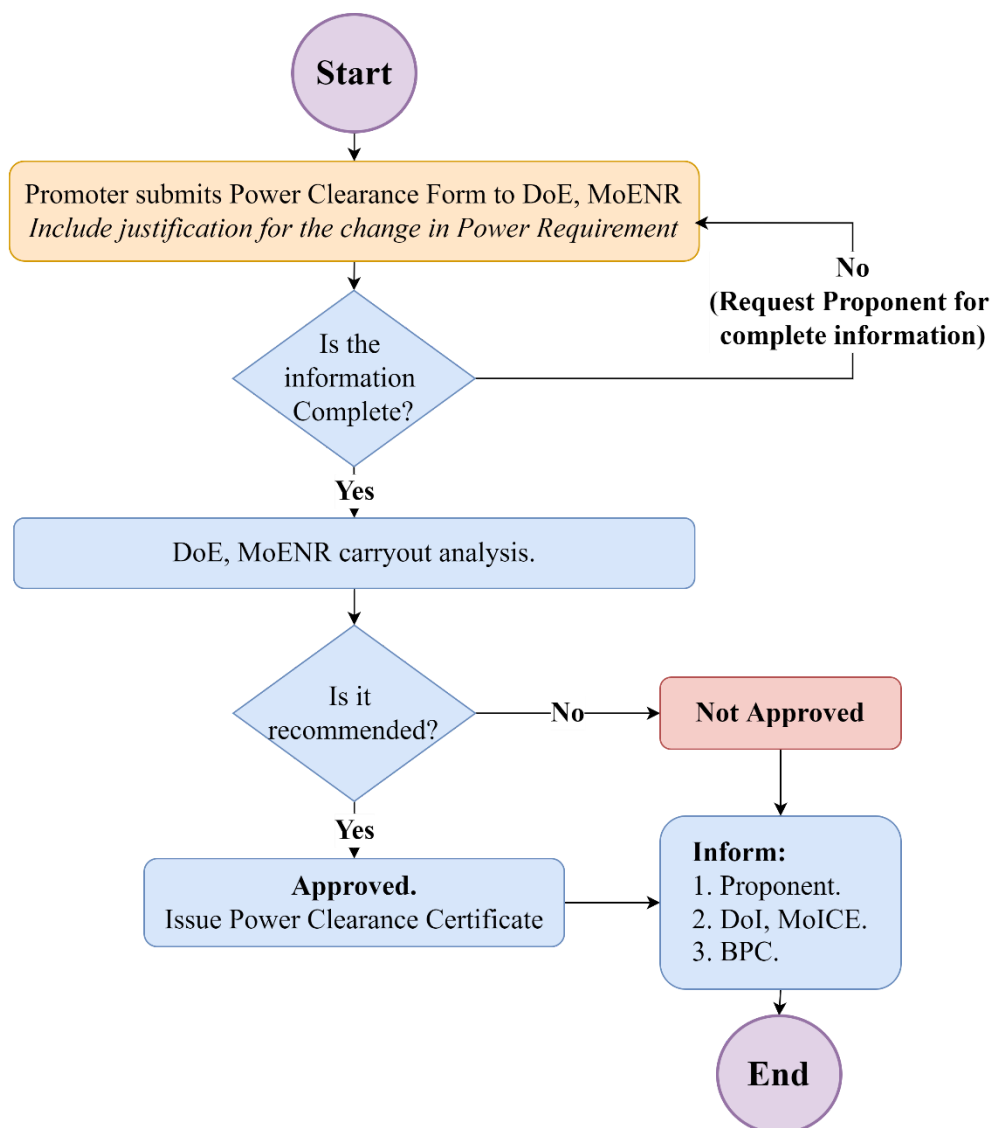
2. Renewal

Application for renewal of Power Clearance shall be submitted to DoE before the expiry of the Power Clearance. Failure to renew on time shall result in cancellation of the Power Clearance. If there is any change during the renewal, the application shall be treated as a new application. One time renewal shall be considered for a period not exceeding one year.

3. Additional Power Requirement

Applicable for requirement of additional power for an existing industry. This is required for an existing industry planning to expand/augment the existing industrial capacity.

The following process (Flowchart 2) will be followed for this type of application:



Flowchart 2: Process for Power Clearance issuance for Additional Power Requirement

5.2 Assessment Criteria

The issuance of the Power Clearance shall be based on the following criteria:

1. Power Supply and Infrastructure

During the assessment, due consideration will be given on the availability of the power supply and viability of infrastructure expansion to cater to the power demand.

2. Promotion of Energy Efficient Equipment

Promotion of energy efficient machines/equipment will be considered during the assessment of the proposal to ensure that strategic hydropower resources are utilized

efficiently as well as ensuring that industries reduce energy intensity to the extent possible.

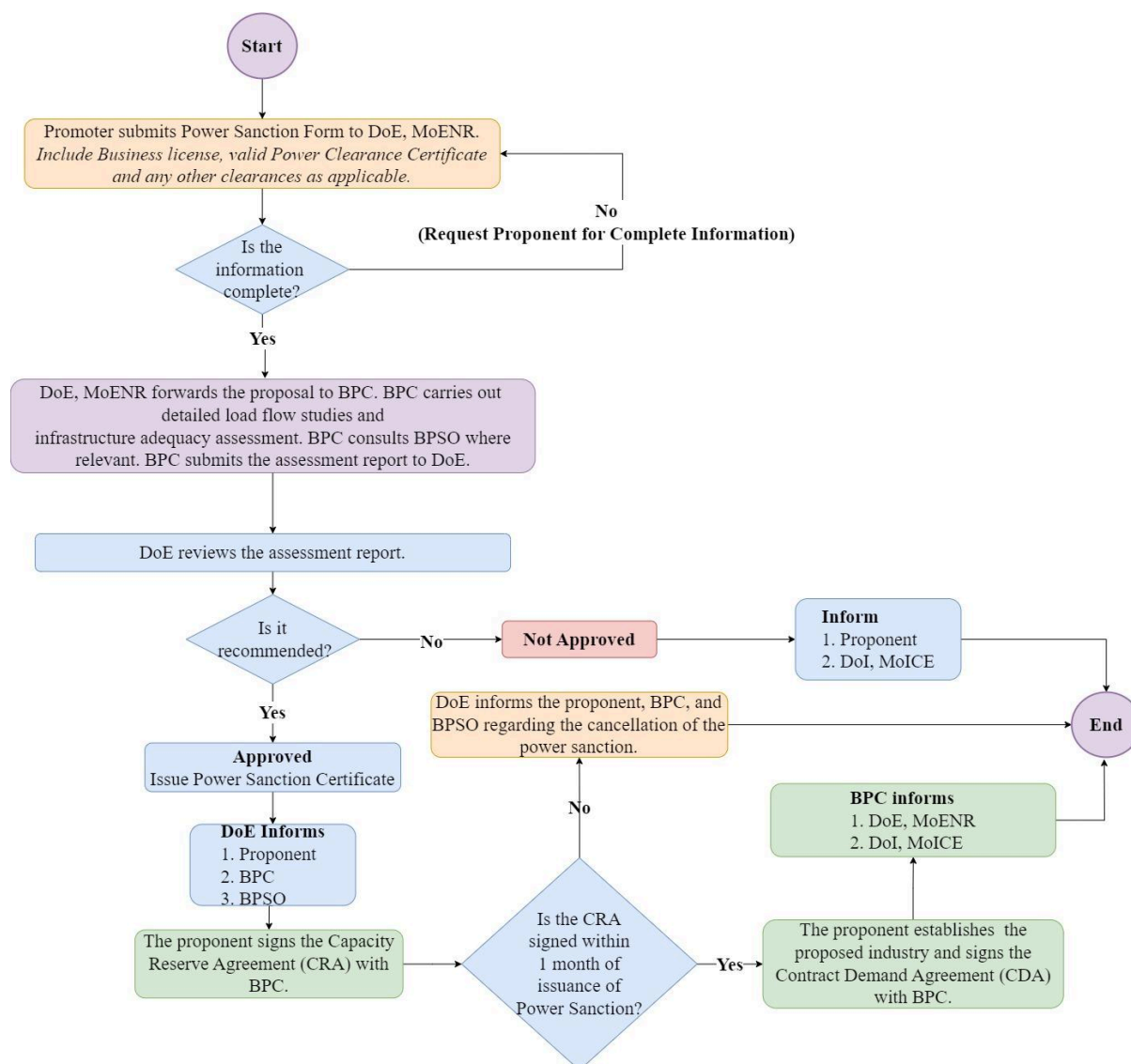
3. National Significance

The strategic nature of the proposed industry/ proposed expansion will be assessed as per the policies and strategies of the Royal Government as per the directives issued by the Ministry.

6 Issuance of Power Sanction

After the Proponent receives the License from the Department of Industry, the Proponent may request for Power Sanction from DoE. Power Clearance does not guarantee the supply of power, however, Power Sanction shall be the basis for providing power supply facilities for an industry.

The Proponent shall submit the application to DoE for issuance of the Power Sanction. Upon issuance of the Power Sanction, BPC will be informed to sign the Capacity Reserve Agreement (CRA) with the Proponent within a month. If the Proponent fails to sign the CRA within a month for any valid reasons, the proponent may apply for renewal with adequate justification before its expiry date. Failure to renew the power sanction shall result in cancellation of the Power Sanction and any request for power allocation shall be treated as new application for power clearance, which shall be subject to review as per the SoP.



Flowchart 3: Process for Power Sanction Issuance

The Power Sanction shall be contingent on the Terms and Conditions in the Power Sanction Form.

7 Adoption and Review

- The revised SOP shall come into effect from 6th February, 2024 and shall supersede the previous SOP(s). However, the Power Clearances and Power Sanctions issued prior to this date shall not be affected.
- The SOP will be reviewed and amended, as deemed necessary by DoE.

8 Glossary

- i. ***Capacity Reserved Agreement*** – Agreement between BPC and the proponent wherein, a mutually agreed date on which BPC shall commence the supply of electricity and the proponent shall be obliged to draw electricity is determined.
- ii. ***Customer*** – shall mean any person or any entity supplied with electrical energy by BPC either as owner or occupier and whose premises are for the time being connected to the BPC's system and also includes a person or an entity whose supply has been disconnected for the time being.
- iii. ***High Voltage (HV)***– Voltage level of 66kV and above.
- iv. ***Industry(ies)*** – Production & Manufacturing and Service Industries
- v. ***License*** – Industry License.
- vi. ***Medium Voltage (MV)***– Voltage level of 6.6kV, 11 kV and 33kV.
- vii. ***Ministry*** – Ministry of Energy and Natural Resources.
- viii. ***Proponent*** – Applicant who wishes to set up an industry or expand an existing industry.



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FORM 1: POWER CLEARANCE FORM FOR NEW APPLICATION/RENEWAL

(Mandatory to fill all information)

1. Date of Application: _____
2. Name of Proponent: _____
3. CID No. of Proponent: _____
4. Contact detail: Mobile No: _____ Email: _____
5. Industry Name: _____
6. Location: _____
7. Type of Industry: _____
8. Raw Materials: _____
9. Final Product/Activity: _____
10. Date of Power Requirement (*Month-Year*): _____
11. Total Power Requirement (In MVA): _____

Undertaking of the Proponent

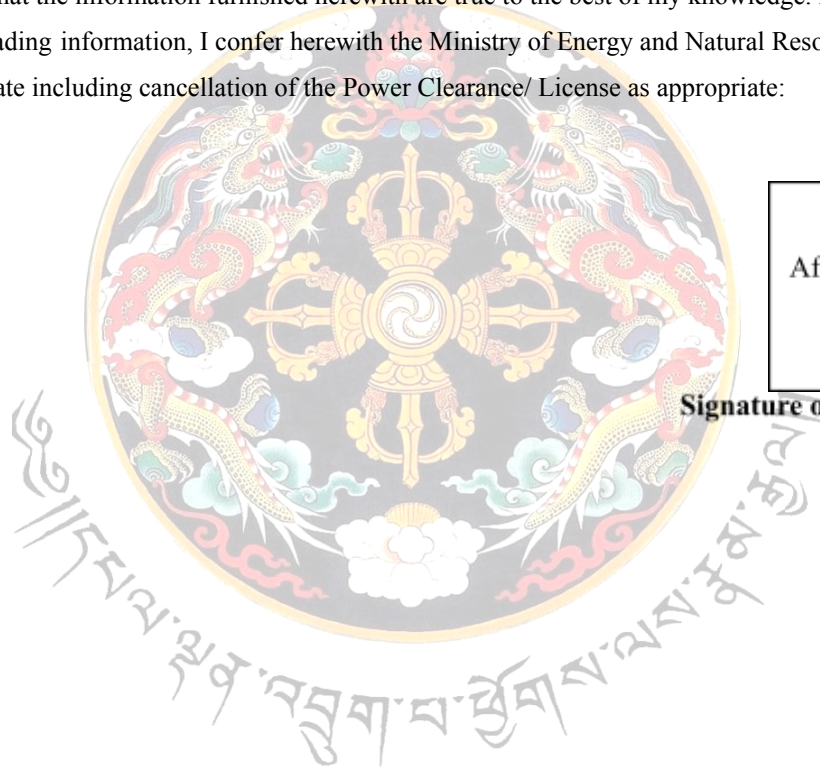
1. I hereby agree that if the electricity is used for any other purpose other than that for which supply is requested for, it shall be considered as an offense and if I, the Proponent is found to be indulging in activities other than the prescribed, shall be liable for penalties as per the prevailing laws of the Kingdom of Bhutan.
2. I undertake to uphold all the laws of the Kingdom of Bhutan and observe all internationally accepted norms, codes⁷ and ethics of business.
3. I understand that the issuance of Power Clearance does not guarantee the supply of power.
4. I hereby agree to inform the RGoB of any major change in the power requirement or usage including any need for additional power, for issuance of new Power Clearance.
5. I hereby agree that all the provisions to draw power from BPC's nearby infrastructure shall be arranged by the Proponent.
6. I hereby agree to allow BPC to supply power to other customers from the lines/substation so built by the Proponent, if BPC requires in the future.
7. For MV/HV connection, the Proponent may sign a Capacity Reserve Agreement (CRA) with the BPC and failure to do so within one month from the date of issuance of this Power Sanction shall result in the expiry of the aforesaid Power Sanction.
8. The cost of import of electricity during deficit period shall be allocated to HV industries as per the Domestic Electricity Tariff Policy 2016 or its amendments thereof.
9. The merit of power supply and load shedding if required, shall be as per the order specified in the Sustainable Hydropower Development Policy 2021.



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10. I hereby agree to submit the quarterly reports on the progress of the establishment to the DoE after the signing of CRA with the BPC.
11. I hereby agree to allow periodic inspection including energy auditing of the Industry during operation period.
12. I hereby agree to undertake power demand scheduling 24 hours ahead in 96 blocks (15 minutes time block) as per the format to be provided by BPC and any deviations from the forecast schedule shall be dealt as per the BPC Service Rules.
13. I hereby agree to adhere to Grid Discipline Mechanism 2023/Grid Code/Distribution code prevalent.
14. I hereby certify that the information furnished herewith are true to the best of my knowledge. In the event of detection of false or misleading information, I confer herewith the Ministry of Energy and Natural Resources to take any action deemed appropriate including cancellation of the Power Clearance/ License as appropriate:



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Signature of the Proponent



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FORM 2: POWER CLEARANCE FORM FOR ADDITIONAL POWER

(Mandatory to fill all information)

1. Date of Application: _____
2. Name of Proponent: _____
3. CID No. of Proponent: _____
4. Contact detail: Mobile No: _____ Email: _____
5. Industry Name: _____
6. Location: _____
7. Type of Industry: _____
8. Raw Materials: _____
9. Final Product/Activity: _____
10. Date of Power Requirement (*Month-Year*): _____
11. Total Capacity (*fill the appropriate box*):

a. Existing

PC

(MVA)

PS

(MVA)

CRA

(MVA)

Operational

(MVA)

b. Additional requested: _____ (MVA)

c. Justification for additional power;



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5. I hereby agree that all the provisions to draw power from BPC's nearby infrastructure shall be arranged by the Proponent.
6. I hereby agree to allow BPC to supply power to other customers from the lines/substation so built by the Proponent, if BPC requires in the future.
7. For MV/HV connection, the Proponent may sign a Capacity Reserve Agreement (CRA) with the BPC and failure to do so within one month from the date of issuance of the Power Sanction shall result in the expiry of the aforesaid Power Sanction.
8. The cost of import of electricity during deficit period shall be allocated to HV industries as per the Domestic Electricity Tariff Policy 2016 or its amendments thereof.
9. The merit of power supply and load shedding if required, shall be as per the order specified in the Sustainable Hydropower Development Policy 2021.
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FORM 3: POWER SANCTION APPLICATION FORM FOR INDUSTRY

(Mandatory to fill all information)

1. Date of Application: _____
2. Name of Proponent: _____
3. CID No. of Proponent: _____
4. Business License Number (attach copy): _____
5. Contact detail: Mobile No: _____ Email: _____
6. Industry Name: _____
7. Location: _____
8. Type of Industry: _____
9. Raw Materials: _____
10. Final Product/Activity: _____
11. Date of Power Requirement (Day-Month-Year): _____
12. Total Power Requirement (in MVA):
13. Is power required in phase-wise manner: (Please tick)
 Yes: ☐ No: ☐
14. If yes in Sl. No. 10: (add rows if required)

Month-Year

Power Requirement (MW)

Month - Year 1

Month - Year 2

Month - Year 3

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