# **Request for Proposal**

#### **Document**

For

# Setting up of Grid Connected Solar PV Projects of Total Capacity 100 MW in Bihar





# **ISSUED BY**

# **Bihar State Power (Holding) Company Limited**

Vidyut Bhawan, Jawahar Lal Nehru Marg, Patna – 800 021 (Bihar) Tel: 0612-2504020/2504371

Fax: 0612-2504557

Date of Issue of RfP: 04.06.2014

Cost: Rs. 15,000/-

Request for Proposal for Setting up of Grid connected Solar PV Projects (total capacity 100 MW) in State of Bihar for supply of power to Bihar State Power (Holding) Company Limited (Procurer).

#### NOTES:

- 1. Though adequate care has been taken while preparing the RfP Documents, the Bidder shall satisfy himself that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately. If no intimation is received from any Bidder within ten days from the date of issue of the RfP documents, it shall be considered that the RfP document is complete in all respects and has been received by the Bidder.
- 2. Bihar State Power Holding Company Limited (BSPHCL) reserves the right to modify, amend or supplement this RfP Document including PPA.
- 3. Authorized Person for Correspondence:

Designation : Chief Engineer, Transmission (O&M)

Address : Bihar State Power (Holding) Company Limited

Vidyut Bhawan, Jawahar Lal Nehru Marg,

Patna - 800 021 (Bihar)

Tel : 0612 – 2504020/2504371

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#### **DISCLAIMER**

- 1. This Request for Proposal (RfP) document is not an agreement or offer by the BSPHCL to the prospective Bidders or any other party. The purpose of this RfP is to provide interested parties with information to assist the formulation of their Bid.
- 2. While this RfP has been prepared in good faith, neither BSPHCL nor their employees or advisors make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this RfP, even if any loss or damage is caused by any act or omission on their part.
- 3. The assumptions, assessments, statements and information contained in this RfP may not be complete, accurate, adequate or correct. Each Bidder should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this RFP and obtain independent advice from appropriate sources.
- 4. BSPHCL also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this RfP.
- 5. BSPHCL may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this RfP. Further, BSPHCL reserves the right to amend/cancel the tender notice without assigning any reasons whatsoever and without any liability.
- 6. The issue of this RfP does not imply that BSPHCL is bound to select a Bidder or to appoint the Selected Bidder or Developer, as the case may be, for the Project and BSPHCL reserves the right to reject all or any of the Bidders or Bids without assigning any reason whatsoever.
- 7. The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by BSPHCL or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and the Authority shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding Process.

# SECTION 1 INTRODUCTION & BACKGROUND

#### 1.0 INTRODUCTION & BACKGROUND

- 1.1 India is a tropical country, where sunshine is available for longer hours per day and in great intensity. About 5,000 trillion kWh per year energy is incident over India's land area with most parts receiving 4-7 kWh per sq. m per day which is far more than the total energy consumption of the country today. But, India produces a very negligible amount of solar energy i.e. a merely 0.2 percent compared to other energy resources. Solar energy, therefore, has great potential as future energy source.
- 1.2 Solar energy is environmentally friendly as it has zero emissions while generating electricity or heat. From an energy security perspective, solar is the most secure of all sources, since it is abundantly available. It is also clear that given the large proportion of poor and energy un-served population in the country, every effort needs to be made to exploit the relatively abundant sources of energy available to the country. The Govt. of India, in all its recent policies relating to power sector has given due importance to harness the sun's energy in various ways.
- 1.3 Along with the rest of the world and our country, the Government of Bihar has also recognized that climate change is one of the gravest threats we face and urgent action in the State is required and that investment in renewable energy especially Solar is a good way of stimulating the economy of the State and is committed to increasing the proportion of energy we use from green energy sources by ensuring necessary investment in sustainable energy.
- 1.4 At the same time, the State with the lowest per capita consumption of electricity in the country (133 units against the national average of 883 units) and peak demand shortages in the range of 22-23% has been reeling under acute power crises that is threatening to derail the significant progress achieved in the past few years. Unlike conventional power projects that require significant time period to develop, Solar Power projects can be established in very short period of time. Further, Solar power, being one of the cleanest forms of energy that is abundantly available in the State can be harnessed to reduce the dependency on other non-renewable sources of energy.
- 1.5 Bihar receives an average annual global solar radiation in the range of 4.83 kWh/sq.m. and has about 280 300 sunny days in a year. In order to catalyze the development and application of Solar energy in the State by taking advantage of the State's resources and reducing energy scarcity, it is proposed to establish 100 MW of Solar PV projects within the State on Public-Private Partnership (PPP) basis.
- 1.6 Bihar State Power (Holding) Company Limited (BSPHCL), a company engaged in planning, promoting and developing the power sector in the state of Bihar, has been designated by Energy Department, Govt. of Bihar for undertaking the bid process management for selection of the private developers.
- 1.7 The selected Solar Power developers shall enter into a Power Purchase Agreement (PPA) with BSPHCL or its Distribution Companies and the term of PPA will be for a period of 25 years.

# **SECTION 2**

# **DEFINITIONS**

#### 2.0 DEFINITIONS

- "Affiliate" shall mean a Company that, directly or indirectly,
  - i) controls, or
  - ii) is controlled by, or
  - iii) is under common control with, a Company developing a Project or a Member in a Consortium developing the Project and control means ownership by one Company of at least 26% (twenty six percent) of the voting rights of the other Company;
- "Bid or "Proposal" or "Response to RfP" shall mean the Non-financial Bid and Financial Bid submitted by the Bidder, in response to this RfP, in accordance with the terms and conditions hereof.
- "Bidder" shall mean Bidding Company or a Bidding Consortium submitting the Bid. Any reference to the Bidder includes Bidding Company / Bidding Consortium/ Consortium, Member of a Bidding Consortium including its successors, executors and permitted assigns and Lead Member of the Bidding Consortium jointly and severally, as the context may require":
- "Bidding Company" shall refer to such single company that has submitted the response in accordance with the provisions of this RfP;
- "Bidding Consortium" or "Consortium" shall refer to a group of companies that has collectively submitted the response in accordance with the provisions of this RfP;
- **"BERC"** shall mean the Bihar Electricity Regulatory Commission constituted under sub section (1) of Section-82 of the Electricity Act, 2003 or its successors;
- "BERC Approved Applicable Tariff" shall mean the Tariff for Solar PV projects as proposed by Bihar Electricity Regulatory Commission (BERC) vide its Order no. SMP-09/2013 dated 14<sup>th</sup> June 2013 under Suo-Motu Proceedings No. 9 of 2013 for the Solar PV projects to be commissioned on or before 31<sup>st</sup> March 2015;
- "Capacity Utilization Factor (CUF)" shall have the same meaning as provided in CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2009 as amended from time to time;
- "Chartered Accountant" shall mean a person practicing in India or a firm whereof all the partners practicing in India as a Chartered Accountant(s) within the meaning of the Chartered Accountants Act, 1949;
- "Company" shall mean a body corporate incorporated in India under the Companies Act, 1956/2013.
- "Commercial Operation Date (COD)" shall mean the actual commissioning date of respective unit(s) of the Solar PV Project where upon the Seller starts injecting power from the Project to the Delivery Point;
- "Conflict of Interest" A Bidder may be considered to be in a Conflict of Interest with one or more Bidders in the same bidding process under this RfP if they have a relationship with each other, directly or indirectly through a common company, that puts them in a position to have access to information about or influence the Bid of another Bidder;
- "Consents, Clearances and Permits" shall mean all authorizations, licenses, approvals, registrations, permits, waivers, privileges, acknowledgements, agreements, or concessions

required to be obtained from or provided by any concerned authority for the purpose of setting up of the Project;

"Contracted Capacity" shall mean the Solar PV power (AC) in MW contracted with the Procurer for the sale of such Power in MU's by the Seller corresponding to Capacity Utilization Factor of 19% at Delivery Point.

"Discom" shall mean North Bihar Power Distribution Company Limited and/or South Bihar Power Distribution Company Limited;

"Delivery Point" shall be 33/11 kV Power sub-station of Discom or 132/33 kV Grid sub-station of Bihar State Power Transmission Company Limited;

"Effective Date" shall mean the date of execution of Power Purchase Agreement (PPA) by both the parties;

"Electricity Act 2003" shall mean the Electricity Act, 2003 and any rules, amendments, regulation, notifications, guidelines or policies issued there under from time to time.

"Financial Closure or Financial Close or Project Financing Arrangements" means arrangements of necessary funds by the Project Developer either by way of commitments of funds by the company from its internal resources and / or tie up of funds through a bank/financial institution by way of sanction of a loan.

"Financially Evaluated Company" shall mean the company which has been evaluated for the satisfaction of the financial requirement set forth herein in the RfP.

"Force Majeure conditions" means any event or circumstance which is beyond the reasonable direct or indirect control and without the fault or negligence of the Solar Power Producer and which results in Solar Power Producers inability, notwithstanding its reasonable best efforts, to perform its obligations in whole or in part and may include rebellion, mutiny, civil unrest, riot, strike, fire, explosion, flood, cyclone, lightening, earthquake, act of foreign enemy, war or other forces, theft, burglary, ionizing radiation or contamination, inaction or restrictions, accidents or an act of God or other similar causes.

"Group Company" of a Company means (i) a Company which, directly or indirectly, holds 10% (ten percent) or more of the share capital of the Company or (ii) a Company in which the Company, directly or indirectly, holds 10% (ten percent) or more of the share capital of such Company or (iii) a Company in which the Company, directly or indirectly, has the power to direct or cause to be directed the management and policies of such Company whether through the ownership of securities or agreement or any other arrangement or otherwise or (iv) a Company which, directly or indirectly, has the power to direct or cause to be directed the management and policies of the Company whether through the ownership of securities or agreement or any other arrangement or otherwise or (v) a Company which is under common control with the Company, and control means ownership by one Company of at least 10% (ten percent) of the share capital of the other Company or power to direct or cause to be directed the management and policies of such Company whether through the ownership of securities or agreement or any other arrangement or otherwise.

Provided that a financial institution, scheduled bank, foreign institutional investor, non banking financial Company, and any mutual fund shall not be deemed to be Group Company, and its shareholding and the power to direct or cause to be directed the management and policies of a Company shall not be considered for the purposes of this definition unless it is the Project Company or a Member of the Consortium developing the Project.

- "Grid Code" / "IEGC" or "State Grid Code" shall mean the Grid Code specified by the Central Commission under clause (h) of sub-section (1) of Section 79 of the Electricity Act and/or the State Grid Code as specified by BERC referred under clause (h) of sub-section (1) of Section 86 of the Electricity Act, as applicable;
- "Grid/Distribution System" means 132 / 33 KV Grid S/s of BSPTCL & 33 / 11 KV Power S/s of Discoms through which Delivered Energy shall be evacuated and distributed.
- "Inter-connection Point" shall mean the point where the power from the power station switchyard bus of the Seller is injected into the transmission system of BSPTCL/ NBPDCL/ SBPDCL (including the dedicated transmission line connecting the power station with the Delivery Point);
- "Law" shall have the same meaning as ascribed thereto in the PPA;
- "Lead Member of the Bidding Consortium" or "Lead Member": There shall be only one Lead Member, having the shareholding of more than 50% in the Bidding Consortium and cannot be changed till the completions of 1 year of the Commercial Operation Date (COD) of the Project;
- "Letter of Intent" or "LOI" shall mean the letter to be issued by Procurer to the Successful Bidder(s) for Setting up of Solar power plant to supply of solar power to Procurer;
- "Limited Liability Partnership" or "LLP" shall mean a Company governed by Limited Liability Partnership Act 2008;
- "LLC" shall mean Limited Liability Company;
- "Member in a Bidding Consortium" or "Member" shall mean each Company in a Bidding Consortium. In case of a Technology Partner being a member in the Consortium, it has to be a Company;
- "Parent Company" shall mean a Company, which holds at least twenty six percent (26%) of the paid up equity capital, either directly or indirectly in the Bidding Company or in the Member of a Bidding Consortium developing the Project, as the case may be;
- "Power Purchase Agreement or" "PPA" shall mean the agreement to be entered into between the Procurer and the Seller pursuant to which the Seller shall supply power to the Procurer as per the terms and conditions specified therein and a draft of which is attached as Format 6.13 to this RfP, including all its schedules, annexure, and all amendments or modifications;
- "Procurer" shall mean Bihar State Power (Holding) Company Limited (BSPHCL) or Discom who will directly purchase generated power from the Solar PV Projects to be selected through this RfP;
- "Project" shall mean solar PV project with single point of injection in to the Discom substation/State Transmission Utility's grid substation;
- "Project Company" shall mean the Company incorporated by the Bidder as per the Companies Act, 1956/2013 (as applicable) in accordance with Clause 3.5;
- "RfP" shall mean this Request for Proposal along with all formats and RfP Project Documents attached hereto and shall include any modifications, amendments alterations or clarifications thereto;

- "RfP Project Documents" shall mean the following documents to be entered into by the parties to the respective agreements in connection with the supply of power.
- a) PPA
- b) Default Escrow Agreement;
- c) Agreement to Hypothecate-cum-deed of Hypothecation; and
- d) any other agreements designated as such, from time to time by BSPHCL;
- "Scheduled Commercial Operation Date" or "Scheduled COD" for allocated capacity Solar Power Project shall be 15 (Fifteen) months from the date of signing of PPA;
- "Selected Bidder(s) or Successful Bidder(s)" shall mean the Bidder(s) selected pursuant to this RfP to set up the Project and supply of power as per the terms of PPA;
- "Seller" shall mean the Successful Bidder who shall submit the Contract Performance Guarantee and execute the PPA and other Project related Documents specified in RfP with the Procurer and who shall be responsible for supplying power to the Procurer at the Delivery Point.
- "Solar PV Project" or "Project" or "SPV" shall mean the Solar Photo Voltaic power project that uses sunlight for direct conversion into electricity through Photo Voltaic technology;
- "Statutory Auditor" shall mean the auditor of a Company appointed under the provisions of the Companies Act, 1956/2013 (as applicable) or under the provisions of any other applicable governing law;
- "STU" or "State Transmission Utility" shall mean Bihar Power Transmission Company Limited as specified as such by the State Government under sub-section (1) of Section 39 of the Act;
- "Technology Partner" shall mean any entity from which the Bidder proposes to take technology support. However if Technology Partner has an equity participation in Bidding Consortium than it has to be a Company with equity participation less than 10%;
- "Ultimate Parent Company" shall mean a Company, which owns at least twenty six percent (26%) equity either directly or indirectly in the Parent and Affiliates.

# **SECTION 3**

# **INFORMATION AND INSTRUCTION TO BIDDERS**

#### 3.0 INFORMATION & INSTRUCTIONS TO BIDDERS

# 3.1 Total Capacity to be Procured

Bids are invited for the procurement of 100 MW power at the Delivery Point, from the Grid connected solar PV projects located in Bihar for a period of 25 years from the Scheduled Commercial Operation Date in accordance with the terms of the Power Purchase Agreement (PPA).

## 3.2 Size of each project to be Considered

The bidders shall note that the minimum and maximum size of project which can be considered for evaluation and from which the solar power may be procured are as follows:

Minimum capacity of any individual Project - 5 MW (with a tolerance of +5%)

Maximum capacity of any individual Project - 20 MW (with a tolerance of +5%).

Note: - The Capacity of the Project in MW is the installed Capacity of the Project/Maximum Power Output (AC) from the Solar Power Plant which can be scheduled at the point of injection to the Power sub-station/Grid sub-station during any time block of the day.

# 3.3 Number of Response to RfP by a Company

The total capacity of Solar PV Projects to be allocated to any Bidder including its Parent, Affiliate or Ultimate Parent-or any Group Company shall be limited to 20 MW. A Bidder, including its Parent, Affiliate or Ultimate Parent-or any Group Company may submit application for a maximum of four projects at different locations subject to a maximum aggregate capacity of 20 MW. In such cases, the Bidder shall submit one single application in the prescribed format detailing all projects at multiple locations for which the Bidder is submitting the application.

Statement for the same is to be submitted as per the Format for Disclosure (Format - 6.8).

#### 3.4 Obtaining RfP document & Bid Processing Fees

a) Prospective bidders interested to participate in the bidding process can download the RfP document from our website <a href="www.eproc.bihar.gov.in">www.eproc.bihar.gov.in</a>. Bidders are required to submit their bids online only. While submitting the Response to the RfP document, Bidders are required to submit the non-refundable cost of document of Rs. 15,000/- in the form of Demand Draft/ banker's cheque/ pay order drawn on a Nationalized/ Scheduled bank in favor of "Accounts Officer, Bihar State Power (Holding) Company Limited" payable at Patna.

- b) Prospective bidders interested to participate in the bidding process are required to submit their Response to the RfP document along with a non-refundable processing fee of Rs.2,00,000/- (Rs Two Lakh Only) exclusive of applicable service tax in the form of Demand Draft /Banker's Cheque/ Pay Order , drawn on a Nationalised Bank or any Scheduled Banks, in favour of "Bihar Power Infrastructure Company Private Limited" payable at Patna.
- c) While the Response to the RfP document (to be submitted online by the Bidders) shall be accompanied with the scanned copies of the demand drafts towards the tender document fee and bid processing fee, the original demand drafts shall be submitted in a sealed envelope to the address mentioned below before the due date and time (i.e. 05.07.2014 up to 13:00 Hrs) for submission of online Bid:

Chief Engineer, Transmission (O&M) Bihar State Power (Holding) Company Limited 4<sup>th</sup> Floor, Vidyut Bhawan, Jawahar Lal Nehru Marg, Patna – 800 021 (Bihar)

Tel: 0612 - 2504020/2504371

Fax: 0612 - 2504557

- d) The Bids which are not accompanied with the tender document fee and bid processing fee as mentioned above will be out rightly rejected as Non-responsive.
- e) Bidders are also required to pay Bid Processing Fee of Rs 16,854/- through online to BSEDC, Patna (Bid Processing Fee is mandatory to be paid through online mode i.e. Internet payment gateway Credit/ Debit Card, Net banking, NEFT/ RTGS)

#### 3.5 Qualification Requirements

For determining the eligibility of Bidders for their qualification hereunder, the following shall apply:

#### A. Eligibility Conditions

- i) A bidder may be a single entity (the "Bidding Company") or group of entities (the "Bidding Consortium"), coming together to implement the Project. The term Bidder used herein would apply to both a single entity and a Consortium. No Bidder applying individually or as a member of a Consortium, as the case may be, can be member of another Bidder.
- ii) The Bidding Company/Bidding Consortium can be a private entity, government owned entity or any combination of them with the legal status as a Private / Public Limited Company incorporated as per the relevant/ applicable laws of any country having audited financial statements for at least one (1) complete financial year from the date of its incorporation. With respect to the entities from India, they have to be incorporated as per Company Law 1956/2013 (as applicable) and for the entities from outside India, they have to be incorporated as per the relevant law of their land duly certified by the legal counsel of such foreign entity.

- iii) A foreign entity and a Consortium of bidders shall be eligible for consideration subject to the conditions set out in Sl. No. (v) below.
- iv) A Bidder shall not have a conflict of interest (the "Conflict of Interest") that affects the Bidding Process. Any Bidder found to have a Conflict of Interest shall be disqualified. A Bidder shall be deemed to have a Conflict of Interest that affects the Bidding Process, if:
  - The Bidder, its Member or Associate (or any constituent thereof) and any other Bidder, its Member or Associate (or any constituent thereof) have common controlling shareholders or other ownership interest; provided that this disqualification shall not apply in cases where the direct or indirect shareholding of an Bidder, its Member or Associate (or any shareholder thereof having a shareholding of more than five percent of the paid up and subscribed share capital of such Bidder, Member or Associate, as the case may be) in the other Bidder, its Member or Associate, as the case may be, is less than one per cent of the paid up and subscribed share capital thereof; provided further that this disqualification shall not apply to a bank, insurance company, pension fund or a public financial institution referred in the Companies Act 1956/2013 (as applicable); or
  - A constituent of such Bidder is also a constituent of another Bidder except the technology partner who owns less than 10%; or
  - Such Bidder receives or has received any direct or indirect subsidy from any other Bidder, its Member or Associate or has provided any such subsidy to any other Bidder; or
  - Such Bidder has the same legal representative for purposes of this Bid as any other Bidder; or
  - Such Bidder has a relationship with another Bidder, directly or through common third party/ parties, that puts either or both of them in a position to have access to each others' information about, or to influence the Bid of either or each other; or
  - Such Bidder has participated as a consultant to the BSPHCL in the preparation of any documents, design or technical specifications of the Project.
  - A Bidder shall be liable for disqualification if any legal, financial or technical adviser of BSPHCL in relation to the Project is engaged by the Bidder, its Member or any Associate thereof, as the case may be, in any manner for matters related to or incidental to the Project. For the avoidance of doubt, this disqualification shall not apply where such adviser was engaged by the Bidder, its Member or Associate in the past but its assignment expired or was terminated 6 (six) months prior to the date of issue of this Bid document. Nor will this disqualification apply where such adviser is engaged after a period of 3 (three) years from the date of commercial operation of the Project.
  - If Bidders have any direct or indirect relation with the bid process consultant engaged by BSPHCL

## Explanations:

- 1. In case a Bidder is a Consortium, then the term Bidder as used above, shall include each Member of such Consortium.
- 2. In case of application being made by two or more companies of a Group for the same location, the same shall be deemed to have a Conflict of Interest that affects the Bidding Process.
- 3. In case of application being made by two or more companies of a Group for different locations, the Bidders are required to disclose the same as per Format -6.8 failing which the same shall be deemed to have a Conflict of Interest that affects the Bidding Process.

# v) Additional conditions to be met by Consortium of bidders / foreign entities: :

A consortium of bidders and foreign entities, if emerged as successful bidders, has to incorporate a Company in India under the Company Act, 1956/2013 (as applicable), with the same shareholding mentioned in their bid prior to signing of PPA with the Procurer.

#### **B.** Financial Criteria

#### i) Net Worth

The "Net Worth" of the Company should be equal to or greater than Rs two (2) crore per MW or equivalent US\$ per MW of the project capacity.

Note: For the Qualification Requirements, if data is provided by the Bidder in foreign currency, equivalent rupees of Net Worth will be calculated using the corresponding TT buying rate for USD / INR as specified by the State Bank of India seven days before the last date of submission of Bid as stated in the RfP document.

For currency other than USD, Bidder shall convert such currency into USD as per the exchange rates certified by their banker that is prevailing seven days before the last date of submission of Bid as stated in the RfP document. (If the exchange rate for any of the above dates is not available, the rate for the immediately available previous day shall be taken into account)

#### **Net Worth**

= Subscribed & Paid up Equity

Add: Free Reserves

Subtract: Revaluation Reserves

Subtract : Miscellaneous Expenditures to the extent not written off Subtract : reserves not available for distribution to equity shareholders

ii) For the purposes of meeting financial requirements, only unconsolidated audited annual accounts shall be used. However, audited consolidated annual accounts of the Bidder may be used for the purpose of financial requirements provided the Bidder has at least twenty six percent (26%) equity in each Company whose accounts are merged

in the audited consolidated account and provided further that the financial capability of such companies (of which accounts are being merged in the consolidated accounts) shall not be considered again for purpose of evaluation of any other Bid.

- iii) For the purpose of the computation of Net Worth, the last four financial years shall be considered. The Bidder would thus be required to submit annual audited accounts for the last four financial years (or if the period of existence of the Company is less than four years, then starting from the year of incorporation) 2009-10, 2010-11, 2011-12 and 2012-13 (or calendar year 2009, 2010, 2011 and 2012 or the accounting years as adopted by the Company and acceptable as per the laws of the respective Country) while indicating the year which should be considered for evaluation along with a Net Worth certificate from a Chartered Accountant to demonstrate the fulfillment of the criteria as on last day of the concerned Financial Year.
- iv) If the response to RfP is submitted by a Consortium the financial requirement shall be met individually and collectively by all the Members in the Bidding Consortium in proportion to the equity commitment made by each of them in the Project Company. For computation of Net Worth of members methodology as provided in para (i) above shall be followed. Any Consortium, if selected, shall, for the purpose of supply of power to Procurer, incorporate a Project Company, before signing the PPA with Procurer, with equity participation by the Members in line with consortium agreement (to be submitted along with RfP) i.e. the Project Company incorporated shall have the same Shareholding Pattern as given at the time of RfP. This shall not change till the signing of PPA and the percentage of Controlling Shareholding (held by the Lead Member holding more than 50% of voting rights) shall not change from the RfP up to One Year after the COD of the Project. However, in case of any change in the shareholding of the other shareholders (other than the Controlling Shareholder including Lead Member) after signing of PPA, the arrangement should not change the status of the Controlling Shareholder and the lead member in the Project Company at least up to one year after the COD of the Project. Further, such change in shareholding would be subject to continued fulfillment of the financial criteria, by the project company.

The Bidder may seek qualification on the basis of financial capability of its Parent and/or it's Affiliate(s) for the purpose of meeting the Qualification Requirements.

#### Note:

- a) A single Bidding Company shortlisted in RfP can also execute the project through a Special Purpose Vehicle (SPV). However the SPV has to be formed before signing of PPA keeping the original shareholding unchanged. In case applications for multiple projects have been made, separate project company can be formed for each project.
- b) It is not necessary to have the Technology partner at RfP stage. Further it is also not necessary for the Technology partner to have an equity stake in the Bidding Company/Consortium. However if Technology Partner has an equity participation in Bidding Consortium then it has to be a Company with equity participation less than 10%.

- c) The Bidder may seek qualification on the basis of financial capability of its Parent and / or its Affiliate(s) for the purpose of meeting the Qualification Requirements.
- d) Net Worth of individuals, whether Director or otherwise, shall not be considered.
- e) Where the financially evaluated company is not the Bidding Company or a member of a bidding consortium, as the case may be, the Bidding company or a member shall continue to be an affiliate of the financially evaluated company till execution of PPA.
- f) It is further clarified that a Parent Company can be a foreign company and it can hold 100% equity in the bidding company.
- g) In case of a single Company bidding for the Project without forming a project specific SPV, the financial strength of the parent / ultimate parent/ an affiliate can be taken for calculation of net worth for qualifying at the time of submission of RfP.
- h) In case the strength is drawn from parent / ultimate parent / affiliate, copy of Board resolution authorizing to invest the committed equity for the project company / consortium is to be submitted with RfP along with an unqualified opinion from a legal counsel of such foreign entity stating that the Board resolution are in compliance with applicable laws of the countries' respective jurisdiction of the issuing company and the authorization granted therein are true and valid.
- Only Assets forming part of the balance sheet shall be considered for arriving at the net worth of the company. No intangible assets will be considered for arriving at the net worth.
- j) In case of land / any other asset, only the book value will be considered.

#### C. Technical Criteria

The Bidder shall deploy commercially established technology wherein there is at least one project, successfully operational based on the proposed technology of at least One MW, for at least one year, anywhere in the world. The bidder is required to furnish evidence of meeting the above eligibility criteria as per enclosed Format – 6.7. It is to be clarified that the proof is only on the type of technology and not the technology maker/brand.

Detailed technical parameters for Solar PV Projects are at Annexure -D.

#### D. Freedom to choose Technology

The Bidder is free to choose any Solar PV power generation technology viz Crystalline Silicon Solar Cell Modules / Thin Film Modules / Concentrated PV Modules/any Other Technology manufactured in India or Imported that is approved by the Ministry of New & Renewable Energy (MNRE) prior to Bid due date.

#### E. Blacklisted Company

Any entity which has been barred by the Central/ any State Government, or any entity controlled by them, from participating in any project (BOT or otherwise), and the bar subsists as on the date of Bid, would not be eligible to submit a Bid, either individually or as member of a Consortium.

The Qualified Bidder(s) will be required to continue to maintain compliance with the Qualification Requirements throughout the bidding process and till the execution of the PPA.

#### 3.6 **Power Purchase Agreement**

A copy of Draft Power Purchase Agreement to be executed between Procurer and the Selected Bidder(s) is enclosed at Format - 6.13. The PPA shall be executed within 15 days of the date of issue of Letter of Intent.

#### 3.7 Submission of Response to RfP by the bidder

The response to the RfP shall be submitted by the Bidders online only in the manner as specified in Clause 3.13 of the RfP. The Bid shall comprise of the following:

# Part I

The Part I shall contain the following:

- i) Scanned copy of the Bid cost Receipt/Bid cost DD/Pay order for Rs 15,000/-
- ii) Scanned copy of the DD/Pay order of @ Rs.2,00,000/- exclusive of applicable service tax towards Processing Fee of BPIC;
- iii) Summary Data Sheet (Format 6.9); and
- iv) Scanned copy of the Bank Guarantee towards EMD @ Rs. 10 Lacs/MW as per Format 6.3A
- v) Scanned copy of payment receipt of Bid Processing Fee to be paid through online to BSEDC, Patna of Rs. 16,854/-

#### Part II - Non financial bid

The Part II shall contain the following:

- 1. Covering Letter as per Format 6.1;
- 2. Power of Attorney to be provided by the Bidding Company/Lead Member in favour of its representative as per Format 6.2A.
- 3. In case of a Bidding Consortium, a Power of Attorney in favour of the Lead Member issued by the other Members of the Consortium shall be provided as per format attached hereto as Format 6.2B.

In the event any Member of the Bidding Consortium (other than Lead Member) is a foreign entity, it may submit Board Resolutions in place of Power of Attorney for the purpose of fulfilling the requirements under this Clause. Provided that such Board Resolutions shall be supported by an unqualified opinion issued by the legal counsel of such foreign entity stating that the Board Resolutions are in compliance with the applicable laws of the respective jurisdictions of the issuing Company and the authorizations granted therein are true and valid.

- 4. Draft of Performance Guarantee (to be submitted at the time of signing of PPA) in the form as per Format 6.3B; duly signed as acceptance.
- 5. Board Resolutions, as per prescribed formats enclosed as Format 6.4 duly certified by the Company Secretary or the Director of the relevant Bidder, as applicable to the Bidder and mentioned hereunder:
  - a. Board resolution from the Bidding Company or the Lead Member of the Consortium, as the case may be, in favour of the person signing the response to RfP,
  - b. Board Resolution from the Bidding Company committing one hundred percent (100%) of the equity requirement for the Project / Board Resolution from each of the consortium Member together in aggregate committing to one hundred percent (100%) of equity requirement for the Project (in case of Bidding Consortium); and
  - c. Board Resolutions from Parent and /or Affiliate (whose credentials were used in the response to RfP), of the Bidding Company / any Member of the Bidding Consortium, undertaking to invest the entire amount as committed by Bidding Company / Member of the Bidding Consortium, in event of failure of the same to make such investment.
- 6. In case of a Consortium, the Consortium Agreement between the Members in the Consortium as per Format 6.5 along with Board resolution from each Member of the Consortium for participating in consortium;
- 7. Format for Financial Requirements as per Format 6.6 as applicable;
- 8. Format for Technical Criteria wherein Bidder shall provide the details of the technology proposed to be adopted for the project including the evidence regarding its successful operation in any of the projects for at least one year as per Format 6.7;
- A disclosure statement as per Format 6.8 regarding participation of any related companies in this bidding process;
- 10. Details of the Proposed Technology as per Format 6.10.
- 11. Submission of financial bid (blank) as per Format 6.12

12. Initialed RfP documents including PPA duly signed as acceptance.

## Part III - Financial bid

The Part III shall contain the following:

i) Financial Bid as per Format 6.12;

The Bidders are required to submit their Financial Quotes as the discount in Paisa/ kWh on the generic Levelised Tariff as declared by BERC vide its Order no. SMP-09/2013 dated 14<sup>th</sup> June 2013 under Suo-Motu Proceedings No. 9 of 2013 for FY 2013-14, for delivery of power at the Delivery Point for a period of 25 years. The Net Quoted tariff shall be firm for the entire term of the PPA and should take into account all costs including capital & operating costs, statutory taxes, levies, duties, etc. and no escalations or reimbursements or exclusions shall be allowed in this regard.

The Bidder's can submit more than one Bid for different Projects, provided that no two Projects are located at single location.

#### 3.8 Adherence to the Prescribed Format

Wherever information has been sought in specified formats, the Bidders shall fill in the details as per the prescribed formats and shall refrain from referring to any other document for providing any information required in the prescribed format.

#### 3.9 Miscellaneous

The Bidder should note that:

- a. The bidder may be shortlisted based on the declaration made by them in the relevant Schedules/Annexure/Format(s) of RfP. The documents submitted along with may be verified before signing of PPA.
- b. If the Bidder/Member in a Bidding Consortium conceals any material information or makes a wrong statement or misrepresents facts or makes a misleading statement in its response to RfP, in any manner whatsoever, the BSPHCL reserves the right to reject such response to RfP and/or cancel the Letter of Intent, if issued and the Bank Guarantee provided up to that stage shall be encashed.
- c. If the event specified at (b) is discovered after the Effective Date, consequences specified in PPA shall apply.
- d. Response submitted by the Bidder shall become the property of the BSPHCL and the BSPHCL shall have no obligation to return the same to the Bidder.
- e. All pages of the response to RfP submitted online must be initialed by the person authorized by the board as per Format 6.4, on behalf of the Bidder.

- f. The response to RfP shall be submitted as mentioned in Clause 3.13. No change or supplemental information to a response to RfP will be accepted after the scheduled date and time of submission of response to RfP. BSPHCL reserves the right to seek additional information from the Bidders, if found necessary, during the course of evaluation of the response to RfP.
- g. All the information should be submitted in English language only.
- h. Bidders shall mention the name of the contact person and complete address of the Bidder in the covering letter.
- i. Response to RfP that are incomplete, which do not substantially meet the requirements prescribed in this RfP, will be liable for rejection by BSPHCL.
- j. Bidders delaying in submission of additional information or clarifications sought will be liable for rejection.
- k. Response to RfP not submitted in the specified formats will be liable for rejection by BSPHCL.
- I. Non submission and/or submission of incomplete data/ information required under the provisions of RfP shall not be construed as waiver, on the part of Procurer's obligation. The Bidder to furnish the said data/information unless the waiver is in writing.
- m. Only Patna Courts shall have exclusive jurisdiction in all matters pertaining to RfP, PPA etc.

#### 3.10 Proposal Due Date/ Bid Submission Date and Other Timeline Schedule

i) The Bidders should submit their Bids online and further submit the original demand drafts towards the tender document fee & bid processing fee and original bank guarantee towards EMD in a sealed envelope so as to reach the following address by 01:00 PM (IST) on 05.07.2014

# Chief Engineer, Transmission (O&M) Bihar State Power (Holding) Company Limited

 $\mathbf{4}^{\text{th}}$  Floor, Vidyut Bhawan, Jawahar Lal Nehru Marg,

Patna - 800 021, Bihar

Phone: 0612 2504020 / 2504371

Fax: 0612 2504557

ii) Selection of Solar PV and Project commissioning shall be carried out according to the timeline given below:-

SI. No.	Event	Date
1	Notice for Request for Proposal (RfP)	04.06.2014
2	Response/Clarification on RfP	16.06.2014
3	Pre-bid Meeting	17.06.2014 at 15:00 Hrs.

SI. No.	Event	Date
4	Clarifications to be issued on RfP and issue of revised RfP (if req.)	20.06.2014
5	Submission of Response to RfP with documents	05.07.2014 upto 13:00 Hrs.
6	Technical Evaluation of Bids received in response to RfP	Within 7 days from receipt of response to RfP
7	Approval of Bid Evaluation Committee for opening of Financial Part of RfP	Within 10 days from receipt of response to RfP
8	Opening of Financial Part of RfP	Within 15 days from receipt of response to RfP
9	Issue of letter of Intent (LoI)	Within 15 days from opening of the price part of proposals
10	PPA Signing	Within 15 days from the date of issue of Letter of intent (Lol date + 15 days)
11	Financial closure of the project	Within 180 days from the date of signing of PPA (Lol date + 195 days)
12	Commissioning of Solar PV Plant	15 months from the date of signing of the PPA

iii) BSPHCL may, in exceptional circumstances and at its sole discretion, extend the bid submission date by issuing an Addendum in accordance with Clause 3.21 uniformly for all Bidders.

# 3.11 Late Proposals

Any Proposal received by BSPHCL after the Due Date mentioned at Clause 3.10(i) above will not accepted by BSPHCL.

# 3.12 Modifications / Substitution / Withdrawal of Proposals

- i) A Bidder may modify, substitute, or withdraw its Bid online before or by the Proposal Due Date and Time.
- ii) No Proposal shall be modified, substituted or withdrawn by the Bidder after the Proposal Due Date and Time.

#### 3.13 Method of Submission

i) Bidders are required to submit their bid online only. However, the original Demand Drafts towards the tender document fee & bid processing fee along with original Bank Guarantee towards EMD will be submitted in a sealed cover/ envelope to the address mentioned below before the due date and time (i.e. 05.07.2014 upto 13:00 Hrs):

Chief Engineer, Transmission (O&M) Bihar State Power (Holding) Company Limited

Vidyut Bhawan, Jawahar Lal Nehru Marg, Patna – 800 021, Bihar

- ii) The sealed envelope containing the DD/BG should be super scribed thereon "BID PROPOSAL FOR SETTING UP OF GRID CONNECTED SOLAR PV PROJECT IN THE STATE OF BIHAR" and shall further provide details such as NIT, time & date of submission and Bidder's full correspondence address.
- iii) Bids submitted by hard copy, fax, telex, telegram or e-mail shall not be entertained and shall be rejected.
- iv) The pages and volumes of each part of the Bid submitted online shall be clearly numbered and signed & stamped and the contents of the Bid shall be duly indexed.
- v) The Bid submitted online shall be typed or printed. It shall be signed and each page of the Bid shall be initialled by a person or persons duly authorized to sign on behalf of the Bidder and holding the Power of Attorney as per the format provided in Format 6.2A of this RfP.
- vi) The Bid shall contain no alterations or additions, except those to comply with instructions issued by BSPHCL or as necessary to correct errors made by the Bidder, in which case such corrections shall be initialled by the person or persons signing the Bid.
- vii) BSPHCL reserves the right to reject any Bid which is not sealed and marked as instructed above and BSPHCL will assume no responsibility for the misplacement or premature opening of the Bid.

## 3.14 Validity of the Response to RfP

The Bidder shall submit the response to RfP which shall remain valid up to the One Hundred Eighty 180 days from the last date of submission of response to RfP ("Bid Validity"). BSPHCL reserves the right to reject any response to RfP which does not meet the aforementioned validity requirement.

## 3.15 Extension of Bid Validity period

In exceptional circumstances, prior to expiry of the original Bid Validity Period, BSPHCL may request the Bidders to extend the period of validity of the Bid and the EMD for a specified additional period. The request and the Bidders' responses shall be made in writing. BSPHCL reserves the right to reject the Bid submitted by any

Bidder who fails to extend the period of validity of its Bid in line with the provisions of this clause.

## 3.16 Opening of Bids

- i) The Part I and the Part II Non-Financial Bid received online shall be opened on 08.07.2014 at 03:00 PM (IST) at the venue where the Bids are required to be submitted, as specified in Clause 3.10, in the presence of one representative from each of such Bidders who wish to be present.
  - In the event of any of above dates falling on a day which is not a working day or which is a public holiday, the Bid shall be opened on the next working day at the same venue and time.
- ii) Part III (Financial Proposals) received by BSPHCL online will remain unopened until the Non Financial Proposal has been evaluated for their responsiveness to RfP as per the Clause 4.2 & 4.3 of this RfP.
- iii) Part I & II of Proposal shall be opened in the presence of Bidders' representatives, who choose to attend. Bidders' representatives attending the Proposal Opening shall register to evidence their presence.
- iv) The following information will be announced at the Proposal Opening and recorded:
  - Bidder's names
  - Names of Consortium Members
  - Capacity Proposed
- v) BSPHCL shall prepare minutes of the Bid opening, including the information disclosed to those present in accordance with the Sub-clause above.
- vi) BSPHCL would subsequently examine responsiveness of Proposals in accordance with the criteria set out in Clause 4.2.
- vii) After the Proposal Opening, information relating to the examination, clarification and evaluation of Bids and recommendations concerning the Bid Award shall not be disclosed except as underlined in this RFP.
- viii) The financial bids of only the qualified bidders shall be opened after evaluation of part I & II. The bidders meeting the prequalification criteria shall be informed of the date of opening of Price part of the RfP.

## 3.17 Clarifications

To facilitate evaluation of Proposals, BSPHCL may, at its sole discretion, seek clarifications in writing from any Bidder regarding its Proposal. Notwithstanding anything contained in the RfP, BSPHCL reserves the right not to take into consideration any such clarifications sought by it for evaluation of the Proposal.

## 3.18 Bidders' Responsibilities

- i) The Bidder is expected to examine carefully the contents of all the RfP documents. Failure to comply with the requirements of RfP will be at the Bidders' own risk.
- ii) It would be deemed that prior to the submission of the Proposal, the Bidder has:
  - a) Made a complete and careful examination of requirements and other information set forth in this RfP;
  - b) Received all such relevant information as it has requested from BSPHCL; and
  - c) Made a complete and careful examination of the various aspects of the Project
- iii) BSPHCL shall not be liable for any mistake or error or neglect by the Bidder in respect of the above.

## 3.19 Preparation cost

The Bidder shall be responsible for all the costs associated with the preparation of the response to RfP and participation in discussions and attending pre-bid meeting(s) etc. BSPHCL shall not be responsible in any way for such costs, regardless of the conduct or outcome of the bid process.

## 3.20 Enquiries/Clarifications:

#### (i) Pre Bid Meeting

Clarifications/ Doubts, if any, on RfP document may be submitted to BSPHCL at the address mentioned below on or before 16.06.2014 upto 05:00 PM as per Format 6.11 of RfP. BSPHCL will make all efforts to respond to the same in the Pre Bid Meeting to be held on 17.06.2014 at 03:00 PM at Patna. A compiled list of such questionnaire and BSPHCL's response will be uploaded on the website of BSPHCL for information of all concerned inwww.eproc.bihar.gov.in. All are requested to remain updated with the website. No separate reply/ intimation will be given elsewhere.

(ii) Enquiries/clarifications may be sought by the Bidder from:

Chief Engineer, Transmission (O&M)
Bihar State Power (Holding) Company Limited

4<sup>th</sup> Floor, Vidyut Bhawan, Jawahar Lal Nehru Marg,

Patna - 800 021, Bihar

Phone: 0612 2504020 / 2504371

Fax: 0612 2504557

(iii) For the avoidance of any doubt, it is clarified that there shall be no extension in the Bid deadline on account of clarification sought in accordance with this clause 3.20. Further,

BSPHCL is not under any obligation to entertain/respond to suggestions made or to incorporate modifications sought for.

#### 3.21 Amendment of RfP

- i) BSPHCL may modify the RfP by issuing an Addendum before bid submission date.
- ii) Any Addendum thus issued shall be part of the RfP and shall be hosted on the BSPHCL's website. All are requested to remain updated with the website. No separate intimation will be given elsewhere..
- iii) To give prospective Bidders reasonable time in which to take Addendum into account in preparing their bids, BSPHCL may, at its sole discretion, extend the bid submission date.

## 3.22 Right to reject a Bid

BSPHCL reserves the right to reject all or any of the response to RfP or cancel the RfP without assigning any reasons whatsoever and without any liability.

#### 3.23 Bank Guarantees

- 3.23.1 The Bidder shall provide the following Bank Guarantees from any of the Banks listed at Annexure B to BSPHCL in a phased manner as detailed hereunder:
  - ➤ Earnest Money Deposit (EMD) @ Rs. 10 Lacs / MW for each project in the form of Bank Guarantee along with Bid as per Format 6.3A. (valid for a period of 210 days from the last date of submission of the Bid)
  - ➢ Performance Guarantee @ Rs. 30 Lacs/ MW for each project in the form of 03 Nos. of Bank Guarantee in the ratio of 20%, 40% & 40% at the time of signing of PPA as per Format − 6.3B. (valid for a period of 20 months from the date of signing of PPA) (Example If Performance Guarantee value is Rs.4.00 Cr. then 03 BGs of value Rs.0.80Cr, Rs.1.60 Cr & Rs.1.60 Cr are to be submitted)

The Bank Guarantees have to be executed on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution. The Bank Guarantees have to be in the name of the Bidding Company / Lead Member of Bidding Consortium.

In order to facilitate the bidders to submit the Bank Guarantee as per the prescribed format and in line with the requirements, checklist at Annexure –A has been attached. Bidders are advised to take note of the above checklist while submitting the Bank Guarantees.

- 3.23.2 On receipt and after verification of the Performance Bank Guarantee in acceptable form, the earlier Bank Guarantee towards EMD of the Successful Bidder(s) would be returned to the respective Bidder(s).
- 3.23.3 BSPHCL may invoke the EMD, without any notice, demure, or any other legal process upon occurrence of any of the following:

- i) In case, BSPHCL offers to execute the PPA with the Selected Bidder and if the Selected Bidder refuses to execute the PPA or is unable to execute the PPA within the stipulated time period; or
- ii) Bidder submitting any wrong information or making any misrepresentation in Bid as mentioned in Clause 3.9; or
- iii) In case the Successful Bidder is a Foreign Company and/or a Bidding Consortium, failure to incorporate the Project Company as a legal entity within fifteen(15) days of issue of Letter of Intent.
- 3.23.4 The Bank Guarantees towards EMD of all unsuccessful Bidders will be released within sixty days of the signing of the PPA with the Selected Bidder(s).

#### 3.24 Minimum equity to be held by the Promoter

The Company developing the Project shall provide the information about the Promoters and their shareholding in the Company to BSPHCL indicating the controlling shareholding at the stage of submission of Bid to BSPHCL.

No change in the percentage of controlling shareholding of the Bidding Company or Lead Member in a Bidding Consortium developing the Project shall be permitted from the date of response to RfP till the execution of the PPA. However, in case the Project is being developed by a listed company, this condition will not be applicable.

The controlling shareholding shall mean more than 50% of the voting rights in the Company/Consortium.

After execution of PPA, the controlling shareholding of the Bidding Company or Lead Member (in case of Bidding Consortium) in the Project Company developing the Project shall be maintained for a period of (1) one year after Commercial Operation Date (COD). Thereafter, any change can be undertaken under intimation to BSPHCL.

**Note**: In case Bidding Company or Bidding Consortium is selected for more than one project, then separate project company can be formed of each project; however the equity commitment (in case of Bidding Consortium) as informed at the stage of RfP shall be maintained in all the project companies to be formed before signing of PPA with Procurer(s). Similarly for the Bidding Company, forming a project company with no change in Shareholding shall be permitted from the RfP stage upto PPA, but the controlling shareholding as informed at the stage of RfP shall not change upto one year after COD of the Project.

#### 3.25 Financial Closure or Project Financing Arrangements:

The Project Developer shall report tie-up of Financial Arrangements for the projects within 180 days from the date of signing Power Purchase Agreement (PPA). Further, the

project developer should adhere to the following milestone schedule before the achievement of the Financial Closure for the Project.

Milestone	Time Period from the Signing of the PPA	Documentary Evidence to be produced to BREDA / BSPHCL
Approval from State Transmission Utility/ Discom regarding the feasibility of grid connectivity of the project site.	Four Months	Approval Letter from BSPTCL / NBPDCL/ SBPDCL
Clear Possession of the required land for project development	Five Months	o Ownership or lease hold rights from State agency only (for at least 30 years) in the name of the Project Developer and possession of 100% of the area of land required for the allotted project. Land can be taken on lease from State agency only.  O Certificate by the concerned and competent revenue / registration authority for the acquisition / ownership / vesting of the land in the name of the Project Developer.  O Sworn affidavit from the Authorized person of the developer listing the details of the land and certifying total land required for the project under clear possession of the Project Developer.  In case of Bidding Consortium, the possession of land or lease hold right of land from State agency is in the name of non lead member, the same will be accepted against application and would be

Milestone	Time Period from the Signing of the PPA	Documentary Evidence to be produced to BREDA / BSPHCL	
		required to be transferred to the Project Company before signing of PPA.	
Financial Closure	Six Months	Copy of the Sanction Letter received from the Financial Institutes/ Banks	

In case of delay in achieving above condition, as may be applicable, BSPHCL shall encash performance Bank Guarantees and shall remove the project from the list of the selected projects.

#### 3.26 Commissioning

## **Commissioning Schedule and Penalty for Delay in Commissioning**

The Project shall be commissioned within 15 (Fifteen) months from the date of signing of PPA between Successful Bidder and Procurer. Commissioning period is subject to Force Majeure Conditions detailed in "Definitions", Section-2. In case of failure to achieve this milestone, BSPHCL shall encash the Performance Guarantee in the following manner:

- a. Delay up to one month Procurer will encash 20% of the total Performance bank guarantee proportionate to the Capacity not commissioned.
- b. Delay of more than one month and up to two months Procurer will encash 40% of the total Performance Bank Guarantee proportionate to the Capacity not commissioned in addition to BG in clause-a above.
- c. Delay of more than two months and up to three months Procurer will encash the remaining Performance Bank Guarantees proportionate to the Capacity not commissioned in addition to BG in clause-a and b above

In case the commissioning of project is delayed beyond 3 (three) months, the Project Developer shall pay to Procurer the Liquidated Damages (LD) at the rate of Rs.1,00,000 per MW per day of delay for the delay in such remaining Capacity which is not commissioned. The maximum time period allowed for commissioning of the full Project Capacity with encashment of Performance Bank Guarantee and payment of Liquidated Damages shall be limited to 19 months from the date of signing of PPA. The amount of liquidated damages worked out as above shall be recovered by Procurer from the payments due to the Project Developer on account of sale of solar power to Procurer. In case, the Commissioning of the Project is delayed beyond 19 months from the date of signing of the PPA, the PPA capacity shall stand reduced / amended to the Project Capacity Commissioned and the PPA for the balance Capacity will stand terminated and shall be reduced from the selected Project Capacity.

## **Part Commissioning**

Part commissioning of the Project shall be accepted by Procurer subject to the condition that the minimum capacity for acceptance of part commissioning shall be 1 MW and in multiples thereof. The PPA will remain in force for a period of 25 years from the date of acceptance of respective part commissioning of the project.

#### 3.27 Technical Parameters

The Selected Bidder shall be required to adhere to the technical parameters specified in Annexure-D.

## 3.28 Non-Discriminatory and Transparent Bidding Proceedings

BSPHCL shall ensure that the rules for the bidding proceedings for the Project are applied in a non-discriminatory, transparent and objective manner. BSPHCL shall not provide to any Applicant information with regard to the Project or the bidding proceedings, which may have the effect of restricting competition

## 3.29 Fraud and Corrupt Practices

- the Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Bidding Process and subsequent to the issue of the LOI and during the subsistence of the Power Purchase Agreement. Notwithstanding anything to the contrary contained herein, or in the LOI or the Power Purchase Agreement, BSPHCL shall reject a Bid or withdraw the LOI, as the case may be, without being liable in any manner whatsoever to the Bidder if it determines that the Bidder has directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bidding Process. In such an event, BSPHCL shall forfeit and appropriate the Bid Security as mutually agreed genuine compensation and damages payable to the BSPHCL towards, inter alia, time, cost and effort of the BSPHCL, without prejudice to any other right or remedy that may be available to the BSPHCL hereunder or otherwise.
- ii) Without prejudice to the right of BSPHCL under Clause 3.29 (i) hereinabove and the right and remedies which BSPHCL may have under the LOI, if a Bidder is found by BSPHCL to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Bidding Process, or after the issue of the LOI or the execution of the Power Purchase Agreement, such Bidder or Developer shall not be eligible to participate in any tender or RfP issued by BSPHCL during a period of 2 (two) years from the date such Bidder or Developer, as the case may be, is found by BSPHCL to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practices, as the case may be.
- iii) For the purposes of this Clause 3.29, the following terms shall have the meaning hereinafter respectively assigned to them:

- a. "corrupt practice" means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bidding Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of BSPHCL who is or has been associated in any manner, directly or indirectly with the Bidding Process or the LOI or has dealt with matters concerning the Power Purchase Agreement or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of BSPHCL, shall be deemed to constitute influencing the actions of a person connected with the Bidding Process); or (ii) engaging in any manner whatsoever, whether during the Bidding Process or after the issue of the LOI or after the execution of the Power Purchase Agreement, as the case may be, any person in respect of any matter relating to the Project or the LOI or the Power Purchase Agreement, who at any time has been or is a legal, financial or technical adviser of BSPHCL in relation to any matter concerning the Project;
- b. "fraudulent practice" means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bidding Process;
- c. "coercive practice" means impairing or harming, or threatening to impair or harm, directly
  or
  indirectly, any person or property to influence any person's participation or action in the
  Bidding Process;
- d. "undesirable practice" means (i) establishing contact with any person connected with or employed or engaged by BSPHCL with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bidding Process; or (ii) having a Conflict of Interest; and
- e. "restrictive practice" means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Bidding Process.

# 3.30 Confidentiality

Information relating to the examination, clarification, evaluation, and recommendation for the Bidders shall not be disclosed to any person not officially concerned with the process. BSPHCL will treat all information submitted as part of Proposal in confidence and would require all those who have access to such material to treat the same in confidence. BSPHCL will not divulge any such information unless it is ordered to do so by any authority that has the power under law to require its disclosure.

#### 3.31 Miscellaneous

- i) The Bidding Process shall be governed by, and construed in accordance with, the laws of India and the Courts at Patna shall have exclusive jurisdiction over all disputes arising under, pursuant to and/ or in connection with the Bidding Process.
- ii) BSPHCL, in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, to;
  - suspend and/ or cancel the Bidding Process and/ or amend and/ or supplement the Bidding Process or modify the dates or other terms and conditions relating thereto;
  - b) consult with any Bidder in order to receive clarification or further information;
  - c) retain any information and/ or evidence submitted to BSPHCL by, on behalf of, and/ or in relation to any Bidder; and/ or
  - d) Independently verify, disqualify, reject and/ or accept any and all submissions or other information and/ or evidence submitted by or on behalf of any Bidder.
- iii) It shall be deemed that by submitting the Bid, the Bidder agrees and releases BSPHCL, its employees, agents and advisers, irrevocably, unconditionally, fully and finally from any and all liability for claims, losses, damages, costs, expenses or liabilities in any way related to or arising from the exercise of any right and/ or performance of any obligations hereunder, pursuant hereto and/ or in connection herewith and waives any and all right and/ or claims it may have in this respect, whether actual or contingent, whether present or future.

# SECTION 4 EVALUATION CRITERIA

### 4.0 Evaluation Criteria

# 4.1 The evaluation process comprises of the following two steps

- i) Step I Responsiveness check
- ii) Step II Evaluation of fulfillment of Qualifications Requirements as per Clause 3.5
- iii) Step II Financial Bid evaluation
- iv) Step IV- Selection of Successful bidder(s)

## 4.2 Step I - Responsiveness check

- i) The Bid submitted by the Bidder online shall be scrutinized to establish "Responsiveness". Each Bidder's Bid shall be checked for compliance with the submission requirements set forth in this RfP at Clause 3.7. Any of the following conditions shall cause the Bid to be considered "Non-responsive" at the sole discretion of BSPHCL:
  - a) Response to RfP not received by the due date and time.
  - b) Response to RfP submitted by a Bidding Consortium not including the Consortium Agreement.
  - c) Response to RfP having Conflict of Interest.
  - d) Technology Partner holding more than 10% in a Consortium and participating as a Bidding Company/ Member in another Consortium.
  - e) Bids that are incomplete, i.e. not accompanied by any of the applicable formats inter alia covering letter, power of attorney supported by the board resolution as per Format 6.4, applicable board resolutions, undertakings, disclosures, cost of bid document, bid processing fee, EMD, etc.
  - f) Validity of Bid being less than that required as per Clause 3.14 of this RfP or validity of EMD being less than as required as per Clause 3.23.1 of this RfP.
  - g) Submission of the information not as per the formats as specified in the RfP
  - h) Delay in submission of additional information or clarification sought by BSPHCL as applicable
  - i) Bid being conditional in nature
  - j) Bids not signed by the authorized signatory and/ or not stamped and/ or not numbered by the Bidder in the manner as indicated in this RfP.
- ii) A Proposal that is substantially responsive is one that conforms to the preceding requirements without material deviation or reservation. A material deviation or reservation is one
  - a) Which affects in any substantial way the scope, quality, or performance of the Project, or
  - b) Which limits in any substantial way, inconsistent with the RfP, rights of BSPHCL or the obligations of the Bidder under the PPA or
  - c) Which would affect unfairly the competitive position of other Bidders presenting substantially responsive bids.

iii) BSPHCL reserves the right to reject any Proposal which is non-responsive and no request for alteration, modification, substitution or withdrawal shall be entertained by BSPHCL in respect of such Proposals.

# 4.3 Step II - Evaluation of fulfillment of Qualifications Requirements

Evaluation of fulfillment of Qualifications Requirements will be carried out considering the information furnished by Bidders as prescribed under Section 6 – Formats and related documentary evidence in support of meeting the Qualification Requirements as specified in Clause 3.5. This step would involve evaluation of the Bid of the Bidding Company/ Bidding Consortium as per the provisions specified in Section 3 of this RfP. Non – availability of information and related documentary evidence for the satisfaction of Qualification Requirements may cause the Bid to be non-responsive.

# 4.4 Step III – Financial Bid evaluation

- 4.4.1 Financial bids (Part III) of the qualified Bidders shall be opened in the presence of the representatives of such qualified Bidders, who wish to be present, as per the timelines indicated in Clause 3.16, or such other date as may be intimated by BSPHCL to the Bidders. The financial bid evaluation shall be carried out based on the information furnished in Part III (Financial bid).
- 4.4.2 The Financial Bids submitted by the Bidders shall be scrutinized to ensure conformity with the provisions of Clause 3.7 of this RfP. Any Bid not meeting any of the requirements as per Clause 3.7 of this RfP may cause the Bid to be considered "Non-responsive" at the sole discretion of BSPHCL.
- 4.4.3 The Bidders are required to submit their Financial Quotes as the discount in Paisa/ kWh on the generic Levelised Tariff as declared by BERC vide its Order no. SMP-09/2013 dated 14<sup>th</sup> June 2013 under Suo-Motu Proceedings No. 9 of 2013 for FY 2013-14, for delivery of power at the Delivery Point. Bidders will be required at this stage to exercise the option of availing Normal Rate of Depreciation or Accelerated rate of Depreciation for the purpose of accounting practices to be followed for the Project. The above mentioned Generic Levelised tariffs, either considering normal rate of depreciation or accelerated rate of depreciation (whichever is the case) shall be acting as ceiling price and any financial bid quoting price higher than the respective bench mark tariff shall be summarily rejected.
- 4.4.4 Based on the rate of depreciation considered by Bidder in its financial bid, the net quoted tariff for the delivery of power at the Delivery Point shall be computed by subtracting the discount offered in Paisa/ kWh from either of followings:
  - Generic Levelised Tariff of BERC considering normal rate of depreciation i.e.875
     Paisa/kWh

OR

- Generic Levelised Tariff of BERC considering accelerated rate of depreciation i.e.787 Paisa/ kWh.
- 4.4.5 The Bidder offering the lowest net quoted tariff shall be selected as L1 and so on. The format for submission of Financial Bid is provided at Format 6.12.

# 4.5 Step IV – Selection of Successful bidder(s)

- 4.5.1 The Bids qualifying in Step III shall only be evaluated in this stage.
- 4.5.3 From the ascending order list of the Qualified Bidders prepared as indicated at 4.5.2, list of bidders for 100 MW capacity will be prepared as L1, L2, L3......Ln (Ln is the position of that bidder in ascending order list where cumulative quoted capacity of L1 to Ln bidder becomes 100 MW). L1 tariff will be offered to L2, L3 and L4 and Ln bidders for giving their consent to match their tariff with L1 quoted tariff. In case Ln bidder has offered 10 MW and cumulative capacity upto Ln-1 bidder has reached 95 MW, Ln bidder will be offered 5 MW even though bidder has quoted for 10 MW capacity. In case L2, L3, L4.....LN bidders do not wish to match L1 tariff, they will be allowed to quit the bidding process and their security (Earnest Money Deposit) shall be released. In such circumstances, the capacity so released by these bidders will be offered to LN + 1, LN + 2 and so on at L1 tariff in sequential order till the time entire capacity of 100 MW is allocated to the qualified bidders at L1 quoted tariff.
- 4.5.4 In case some capacity still remains unallocated after exhausting entire ascending order list, the successful bidders (those who have already matched L1 quoted tariff and got allocation as per their quoted capacity) will be offered additional capacity sequentially in order of their position in the ascending order list in such a manner that the total allocated capacity to any bidder does not exceed 20 MW and the bidder fulfills qualifying criterion of net worth for total offered capacity.
- 4.5.5 In the eventuality of a tie in the bidding process, the applicant would be ranked by draw of lots.
- 4.5.6 Based on the Selection Methodology as elaborated in Clause 4.5, Successful Bidder(s) will be selected and the Letter(s) of Intent (LOI) shall be issued to all such Successful Bidder(s).

### 4.6 Acceptance of Letter of Intent (LOI)

- i) Within seven (7) days from the date of issue of the LOI, the Successful Bidders shall accept the LOI and return the same to BSPHCL. The Successful Bidders shall execute the PPA with Procurer and also submit a Performance Bank Guarantee in favour of Procurer (of the amount specified in Clause 3.23.1) within Fifteen (15) days of issuance of LOI.
- ii) In case, the Successful Bidder(s) does not execute the PPA and submit the Performance Bank Guarantee as per Clause 4.6 (i), BSPHCL reserves the right to annul the award of Letter of intent of such Successful Bidder(s) and shall invite any other suitable Bidder for discussions/ negotiations or may also decide to annul the bidding process or may invite fresh bids for the Project. In such a case the entire EMD submitted by such Successful Bidder shall be forfeited. However, BSPHCL on receiving request from the Successful Bidder may at its absolute discretion, permit extension of the aforesaid period of 15 days for execution of the PPA and submission of Performance bank Guarantee.

iii) BSPHCL will notify other Bidders that their Proposals have been unsuccessful. The Bid Security of Unsuccessful Bidders shall be returned as promptly possible, in any case not later than 2 months from the date of announcement of the Successful Bidder.

# 4.7 BSPHCL's Right to accept or reject Proposal

- i) BSPHCL reserves the right to accept or reject any or all of the Proposals without assigning any reason and to take any measure as it may deem fit, including annulment of the bidding process, at any time prior to execution of the PPA, without liability or any obligation for such acceptance, rejection or annulment.
- ii) BSPHCL reserves the right to invite fresh bids with or without amendment of the RFP at any stage without liability or any obligation for such invitation and without assigning any reason.
- iii) BSPHCL reserves the right to reject any Proposal if:
  - At any time, a material misrepresentation is made or uncovered for a bidder or any of its members
  - The Bidder does not respond promptly and thoroughly to requests for supplemental information required for the evaluation of the Proposal

This would lead to disqualification of the Bidder. If the Bidder is a Consortium, then the entire Consortium would be disqualified/ rejected. If such disqualification/ rejection occurs after the Financial Proposals have been opened and the Successful Bidder gets disqualified/rejected, BSPHCL reserves the right to take any such measure as may be deemed fit in the sole discretion of BSPHCL, including annulment of the bidding process, inviting second preferred bidder for negotiation, inviting all qualified bidders for negotiations etc.. Notwithstanding the above, BSPHCL may debar / blacklist any of the Bidder(s) for their misleading or false representations in the forms, statements etc. for the period to be decided by BSPHCL.

# SECTION 5 OTHER PROVISIONS

#### 5.0 OTHER PROVISIONS

### 5.1 Role of State Level Agencies

Bihar Renewable Energy Development Agency (BREDA) has been designated as nodal agency for monitoring and supervision of the said Projects and grant of any clearances required in case of imported equipments.

However, Project Developer will also be required to act in completion of above activities and they shall not be absolved from their responsibility towards timely completion of project.

# 5.2 Land for the Project

- i) The Project Developers are compulsorily required to establish the Solar PV projects in the State of Bihar.
- ii) The Bidders are required to get in touch with the concerned department and identify the site/location for the proposed project within 150 days from the date of signing of the Power Purchase Agreement. The same shall be intimated to BSPHCL by the Bidder at the earliest but not beyond 120 days from the date of singing of PPA for enabling the concerned State Utility in developing the grid connectivity and power evacuation facility of the project as per Clause 5.3.
- iii) Based on the ownership status of the identified land, the project developer shall be required to either acquire the private land or lease the Govt. land atleast for a period of 30 years from the private owners or concerned Govt. Department respectively.
- iv) Change in the location of land from one place to other location shall not be permitted after 120 days of signing of PPA or at financial closure, whichever is earlier.
- v) In case of delay in achieving the above condition, as may be applicable, BSPHCL shall encash performance Bank Guarantees and shall remove the project from the list of the selected projects.

# 5.3 **Grid Connectivity**

i) While identifying the site for the project, the Bidder shall be required to obtain an "in-principle" approval from the State Transmission Utility I,e Bihar State Power Transmission Utility Limited or North Bihar Power Distribution Company or South Bihar Power Distribution Company Limited regarding the feasibility of grid

connectivity of the project site. The same is required to be obtained within 120 days from the date of signing of the Power Purchase Agreement.

- ii) In case of delay in achieving the above condition, as may be applicable, BSPHCL shall encash performance Bank Guarantees and shall remove the project from the list of the selected projects.
- iii) The generation project shall be located in the close proximity of existing /upcoming PSS (33 /11 KV) & Grid S/s (132/33 KV). A list of existing substations of NBPDCL, SBPDCL and BSPTCL is enclosed at Annexure C. In case the distance is larger than 10 km, based on the detailed feasibility studies, Transco / Discom may request Bidder to consider an alternate site for the project.
- iv) The requisite arrangement for the evacuation of the power from the generation plant to the nearest grid/sub-station will be developed at their own cost by BSPTCL / NBPDCL / SBPDCL. However, the installation of equipments for metering at the plant side will be the responsibility of the bidder.
- v) The plant should be designed for interconnection with the distribution/transmission network of Discom or BSPTCL. The project developer shall provide step-up transformers, panels, kiosks, protection & metering equipment or any other equipment as required at the generation facility and fully equipped line bay(s) in its switchyard for termination of interconnecting transmission line(s) at the Generation switchyard. In general, the Developer should procure and set up all such facilities required for facilitating the inter-connection till the point of Inter-connection. The Developer shall also provide proper & reliable communication between the generation facility & Grid substation / Power S/S of BSPTCL/NBPDCL/SBPDCL where the power is to be delivered by the generation facility. The cost of the communication equipments and associated works will be borne by the Developer.
- vi) Delivery of power to the point of interconnection at substation of Discom/BSPTCL where the metering will be done shall be the responsibility of the project developer at its own cost. For this the project developer shall enter into a Transmission Agreement with BSPTCL / NBPDCL / SBPDCL and shall pay the applicable open access charges at the rates to be determined by BERC for transmission of power from its power plant to the sub-station.

# 5.4 **Project Monitoring**

- i) After the signing of the PPA, all the selected project developers shall be required to submit to BREDA/BSPHCL, the quarterly reports incorporating the copies of the permits/clearances/consents received from various departments/authorities, as applicable and documentary evidence for the achievement of the various milestones associated with the project as defined in Clause 3.25. The report shall also include any other relevant information which may affect the date of commissioning for project.
- ii) Further, the project developer should adhere to the following milestone schedule after the achievement of the Financial Closure for the Project.

Milestone	Time Period from the Achievement of Financial Closure	Documentary Evidence to be produced to BREDA / BSPHCL
No-Objection Certificate from State Pollution Control Board (if required)	Two months	Copy of approval letter from SPCB
Placement of Order/Agreement signing for purchase of plant and machinery for the project	Three months	Order/Agreement Copy
Payment of requisite advance or opening of irrevocable letter of credit with suppliers/contractors	Four months	Receipt of payment from the Supplier/Contractor
Receiving of plant and machinery for the project at site	Six Months	MDCC from Supplier/ Actual Site Photographs
Completion of Civil Infrastructure	Eight Months	Actual Site Photographs
Commissioning and commercial operation	Nine Months	Letter from Procurer

# 5.5 Role of Carbon Financing

Project Developers are encouraged to identify the potential role of carbon finance in their investment analysis including:

- i) The expected revenues from emission reductions; and
- ii) The cost of power with and without carbon revenues

The proceeds of carbon credit from approved CDM project shall be shared between generating company and concerned beneficiary (ies) in the manner as specified in Clause 21 (1) (a) (b) of BERC (Terms and Conditions for Tariff determination from Solar Energy Sources) Regulation, 2010 notified in Bihar Gazette on 04.08.2010 or as amended time to time by BERC.

# 5.6 Incentives/Applicability

All relevant provisions /incentives as provided in the "Bihar Policy for promotion of New and Renewable Energy Sources 2011" shall be applicable to projects selected under this RfP.

# SECTION 6 FORMATS FOR BID SUBMISSION

#### 6.0 FORMATS FOR BID SUBMISSION

The following formats are required to be submitted as part of the RfP. These formats are designed to demonstrate the Bidder's compliance with the Qualification Requirements set forth in Clause 3.5 of Section 3 and other submission requirements specified in the RfP.

- i. Format of Covering Letter (Format 6.1)
- ii. Format for Power of Attorney to authorized representative (Format 6.2A)
- iii. Format for Power of Attorney to Lead Member in case of Consortium (Format 6.2B)
- iv. Format for Earnest Money Deposit (EMD) (Format 6.3 A)
- v. Format for Performance Bank Guarantee (Format 6.3 B)
- vi. Check List for Bank Guarantee (Annexure-A)
- vii. List of Banks for issuance of BGs/ Performance Bank Guarantee (Annexure-B)
- viii. Format for Board Resolutions (Format 6.4)
- ix. Format for the Consortium Agreement (Format 6.5)
- x. Format for Financial Requirement (Format 6.6)
- xi. Format for Technical Criteria (Format 6.7)
- xii. List of Power sub-stations/Grid sub-stations of NBPDCL/SBPDCL/BSPTCL (Annexure-C)
- xiii. Format for Disclosure (Format 6.8)
- xiv. Summary Data Sheet (Format 6.9)
- xv. Details of the Proposed Technology (Format 6.10)
- xvi. Technical Parameters of PV Module for use in Grid Connected Solar Power Plants (Annexure-D)
- xvii. Format for Clarification on RfP Document (Format 6.11)
- xviii. Format for Discount on BERC Approved Tariff (Format 6.12)
- xix. Draft of Power Purchase Agreement to be executed between Procurer and the Selected Bidder(s) (Format 6.13)
- xx. Draft of Default Escrow Agreement to be executed between Procurer and the Selected Bidder(s) (Format 6.14)
- xxi. Draft of Agreement to Hypothecate cum Deed of Hypothecation to be executed between Procurer and the Selected Bidder(s) (Format 6.15)

A Bidder may use additional sheets to submit the information for its detailed response.

# Format 6.1 Covering Letter

(The covering letter should be on the Letter Head of the Bidding Company/ Lead Member of

the Bide	ding Conso	ortium)	
Date:			
From :			(Insert name and address of Bidding Company/ Lead
Tel.#: Fax#: E-mail a	ıddress#		Member of the Bidding Consortium)
То			
Bihar St Vidyut E		(Holding) awahar La	irector, ) Company Limited Il Nehru Marg,
	sponse to in the Sta		d for development of Grid Connected Solar PV ar
Dear Si	•,		
understo supply of confirm submitte	ood in deta of solar po that neith od response esaid RfP.	il the RfP wer for 29 er we no e to RfP ot	[insert name of the 'Bidder'] having read, examined and including Qualification Requirements in particular and PPA for 5 years to Procurer, hereby submit our response to RfP. We any of our Parent Company/Affiliate/Group Company has her than this response to RfP, directly or indirectly, in response to ubmitting application for the development of following Solar PV
Project No.	Capacity (MW)	Details of EMD	All formats along with relevant documents for each project are enclosed at following Annexures
<u> </u>			Flag X
<u>                                     </u>			Flag Y
III IV			Flag Z Flag AA
	All formats	as ner S	ection 6 are to be filled separately for each project along with
	EMD for e	•	. , ,

1. We give our unconditional acceptance to the RfP dated \_\_\_\_\_[Insert date in dd/mm/yyyy] and PPA attached thereto, issued by BSPHCL. In token of our acceptance to the RfP &

15 months of the date of signing of PPA.

PPA, the same have been initialed by us and enclosed with the response to RfP. We shall ensure that the PPA is executed as per the provisions of the RfP and provisions of PPA shall be binding on us. Further, we confirm that the Project shall be commissioned within -

- 2. **Earnest Money Deposit (EMD):-** (Strike out whichever is not applicable)
- 3. We have submitted our response to RfP strictly as per Section 6 (Formats) of this RfP, without any deviations, conditions and without mentioning any assumptions or notes in the said Formats.

# 4. Acceptance

We hereby unconditionally and irrevocably agree and accept that the decision made by BSPHCL in respect of any matter regarding or arising out of the RfP shall be binding on us. We hereby expressly waive any and all claims in respect of this process.

# 5. Familiarity with Relevant Indian Laws & Regulations

We confirm that we have studied the provisions of the relevant Indian as well as State laws and regulations as required to enable us to submit this response to RfP and execute the PPA, in the event of our selection as Successful Bidder.

- 6. We are enclosing herewith our Bid with formats duly signed as desired by you in the RfP for your consideration.
- 7. It is confirmed that our Bid is consistent with all the requirements of submission as stated in the RfP and subsequent communications from the BSPHCL.
- 8. The information submitted in our Bid is correct to the best of our knowledge and understanding. We would be solely responsible for any errors or omissions in our Bid.

9.	date in dd/mm/y	all the terms and yyy] for acceptance of submission of l	e (i.e. a						
10.	Contact Person								
	Details of the cor	ntact person are fu	rnished a	s under:					
	Name Designation Company Address Phone Nos. Fax Nos. E-mail address	: :							
11.	best of our knowl declarations and found to be inco	made any stateme ledge is materially representations no prect after our sel l as a Seller's eve	inaccuratinade in cection as	te or misle our Bid are Successf	ading. Fur e true and ful Bidder,	ther, all the accurate we agre	ne cor e. In c e that	nfirmati ase that the	ons, is is ame
Da	ted the	_ day of	_, 20						
Tha	anking you,								
Yo	urs faithfully,								
(Na	ame, Designation	and Signature of F	erson Au	ithorized b	y the board	d as per (	Clause	3.7	

# Format 6.2A Format for Power of Attorney to be provided by the Bidding Company/Lead Member in favor of its representative

# **Power Of Attorney**

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution)

We hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

All the terms used herein but not defined shall have the meaning ascribed to such terms under the RfP.

Signed by the within named	
[Insert the name of the executan	ts]
through the hand of	
Mr	
duly authorized signatory	
Dated this day of 2014	

Accepted
Signature of Attorney
(Name, designation and address of the Attorney)

Attested

(Signature of Executant)
(Name, designation and Address of the Executant)
Signature and stamp of
Notary of the place of execution

Note: The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants(s) and the same should be under common seal of the executants affixed in accordance with the applicable procedure. Further, the person whose signatures are to be provided on the Power of Attorney shall be duly authorized by the executants(s) in this regard.

# Format 6.2B Format for Power of Attorney to be provided by each of the other members of the Consortium in favor of the Lead Member

# **Power Of Attorney**

(To be on non-judicial	stamp paper	of appropriate	value as p	er Stamp A	Act relevant to
place of execution)					

_	
Cons,. regis Mem name 'Cons havin Mem nomi const	W ALL MEN BY THESE PRESENTS THAT M/s
i)	To submit on behalf of Consortium Members, Bid in response to RfP.
ii)	To do any other act or submit any information and document related to the above Bid, if required.
	It is expressly understood that in the event of the Consortium being selected as Successful Bidder, this Power of Attorney shall remain valid, binding and irrevocable until the Bidding Consortium achieves execution of PPA.
what	as the Member of the Consortium agree and undertake to ratify and confirm all soever the said Attorney/Lead Member has done on behalf of the Consortium Members uant to this Power of Attorney and the same shall bind us and deemed to have been done s.
Cons	VITNESS WHEREOF M/s, [Name of the cortium member company], as the Member of the Consortium have executed these ents on this day ofunder the Common Seal of our company.

For and on behalf of Consortium Member

M/s....

# Request for Proposal of Grid Connected Solar PV Projects

(Signature of person authorized by the board)
(Name Designation Place: Date:)
Accepted
(Signature, Name, Designation and Address of the person authorized by the board of the Lead Member) Attested
(Signature of the executants)
(Signature & stamp of Notary of the place of execution)
Place: Date:

**Note: -** Lead Member in the Consortium shall have the controlling shareholding in the company having more than 50% of voting rights in the company.

# Format 6.3 A - Format for Earnest Money Deposit

(Note: Separate EMDs in the form of BG to be submitted for each project)

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)

In consideration of the [Insert name of the Bidder] (hereinafter referred to as 'Bidder') submitting the Bid inter alia for selection of the project of the capacity of MW, at Bihar[ Insert Capacity of Plant and name of the place(if available)] for supply of power there from on long term basis, in response to the RfP dated issued by Bihar State Power (Holding) Company Limited (hereinafter referred to as 'BSPHCL') and BSPHCL considering such response to the RfP of[Insert the name of the Bidder] as per the terms of the RfP, the [Insert name & address of bank] hereby agrees unequivocally, irrevocably
and unconditionally to pay to BSPHCL having registered office at Vidyut Bhawan, Jawahar Lal Nehru Marg at Patna (Bihar) forthwith on demand in writing from BSPHCL or any Officer authorized by it in this behalf, any amount upto and not exceeding Rupees[Insert amount not less than that derived on the basis of Rs. 10 Lacs per MW of capacity proposed] only, on behalf of M/s [Insert name of the Bidder].
This guarantee shall be valid and binding on this Bank up to and including[insert date of validity in accordance with Clause 3.23.1 of this RfP] and shall not be terminable by notice or any change in the constitution of the Bank or the term of contract or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.
Our liability under this Guarantee is restricted to Rs (Rs only). Our Guarantee shall remain in force until
[insert date of validity in accordance with Clause 3.23.1of this RfP]. BSPHCL shall be entitled to invoke this Guarantee till [insert date of validity in accordance with Clause 3.23.1 of this RfP]].
The Guarantor Bank hereby agrees and acknowledges that the BSPHCL shall have a right to

The Guarantor Bank hereby agrees and acknowledges that the BSPHCL shall have a right to invoke this BANK GUARANTEE in part or in full, as it may deem fit.

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand by BSPHCL, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to BSPHCL.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by ------[Insert name of the Bidder] and/or any other person. The Guarantor Bank shall not require BSPHCL to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against BCPHCL in respect of any payment made hereunder

This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at Patna shall have exclusive jurisdiction.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

This BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly BSPHCL shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the Bidder, to make any claim against or any demand on the Bidder or to give any notice to the Bidder or to enforce any security held by BSPHCL or to exercise, levy or enforce any distress, diligence or other process against the Bidder.

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to BSPHCL and may be assigned, in whole or in part, (whether absolutely or by way of security) by BSPHCL to any entity to whom BSPHCL is entitled to assign its rights and obligations under the PPA.

Notwithstanding restricted to Rs. force until are liable to pay the BSPHCL serves to the serve	[ <i>E</i> the guarar	(Rs Date to be inteed amou	nserted on the nt or any part t	basis	s of Clau	only) a use 3.23	nd it : 3.1 of	shall remai <i>thi</i> s RfP] .	n in We
Signature									
Name_ Power of Attorney									
For									
[Insert Na	me of the	Bank]							
Banker's Stamp a	and Full Ac	ddress.							

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_

## Format 6.3 B - Format for Performance Guarantee

Note: 1. Separate BG to be submitted for each project

2. Performance Guarantee @ Rs.30 Lakh/MW is to be submitted in 3 Nos. of Bank Guarantee in the ratio of 20%, 40% & 40% value.

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)

In consideration of the [Insert name of the Bidder] (hereinafter referred to as 'Selected
Solar Power Developer') submitting the Bid inter alia for selection of the project of the capacity of
available)] for supply of power there from on long term basis, in response to the RfP dated issued by Bihar State Power (Holding) Company Limited (hereinafter referred to as
BSPHCL') and BSPHCL considering such response to the RfP of[Insert the name of
the Selected Power Developer] (which expression shall unless repugnant to the context or
meaning thereof include its executers, administrators, successors and assignees) and selecting the Solar Power Project of the developer and issuing Letter of Intent No dated -
to (Insert Name of selected Solar Power Developer) as per terms of RfP and the same
having been accepted by the selected SPD resulting in a Power Purchase Agreement (PPA) to be entered into, for purchase of Power [from selected Solar Power Developer or a Project
Company, M/s {a Special Purpose Vehicle (SPV) formed for this purpose}, if
applicable ]. As per the terms of the RfP, the [insert name & address of
<i>bank</i> ] hereby agrees unequivocally, irrevocably and unconditionally to pay to BSPHCL at Patna forthwith on demand in writing from BSPHCL or any Officer authorized by it in this
behalf, any amount up to and not exceeding Rupees [Total Value] only, on behalf of M/s
[Insert name of the selected Solar Power Developer / Project Company].
This guarantee shall be valid and binding on this Bank up to and including and
shall not be terminable by notice or any change in the constitution of the Bank or the term of contract or by any other reasons whatsoever and our liability hereunder shall not be impaired
or discharged by any extension of time or variations or alternations made, given, or agreed
with or without our knowledge or consent, by or between parties to the respective agreement.
Our liability under this Guarantee is restricted to Rs (Rs.
only). Our Guarantee shall remain in force until [insert date of validity in accordance with Clause 3.23.1 of this RfP].
BSPHCL shall be entitled to invoke this Guarantee till [insert date of validity in
accordance with Clause 3.23.1 of this RfP].

The Guarantor Bank hereby agrees and acknowledges that the BSPHCL shall have a right to invoke this BANK GUARANTEE in part or in full, as it may deem fit.

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand by BSPHCL, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to BSPHCL.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by ------[Insert name of the selected Solar Power Developer] and/or any other person. The Guarantor Bank shall not require BSPHCL to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against BSPHCL in respect of any payment made hereunder

This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at Patna shall have exclusive jurisdiction.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

This BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly BSPHCL shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the selected Solar Power Developer/Project Company, to make any claim against or any demand on the selected Solar Power Developer/Project Company or to give any notice to the selected Solar Power Developer/Project Company or to enforce any security held by BSPHCL or to exercise, levy or enforce any distress, diligence or other process against the selected Solar Power Developer/Project Company.

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to BSPHCL and may be assigned, in whole or in part, (whether absolutely or by way of security) by BSPHCL to any entity to whom BSPHCL is entitled to assign its rights and obligations under the PPA.

restricted to Rs (Rs only) and it shall remain in
force until [Date to be inserted on the basis of Clause 3.23.1 of this RfP] . We
are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if
BSPHCL serves upon us a written claim or demand.
·
Signature
<u> </u>
Name
Power of Attorney No
For
[Insert Name of the Bank]
Banker's Stamp and Full Address.
Dated this day of, 20

# **Annexure-A**

# **Check List for Bank Guarantees**

SI. No.	Details of Checks	Yes/No
a)	Is the BG on non-judicial Stamp paper of appropriate value, as per applicable Stamp Act of the place of execution	
b)	Whether date, purpose of purchase of stamp paper and name of the purchaser are indicated on the back of Stamp paper under the Signature of Stamp vendor? (The date of purchase of stamp paper should be not later than the date of execution of BG and the stamp paper should be purchased either in the name of the executing Bank or the party on whose behalf the BG has been issued. Also the Stamp Paper should not be older than six months from the date of execution of BG).	
c)	In case of BGs from Banks abroad, has the BG been executed on Letter Head of the Bank.	
d)	Has the executing Officer of BG indicated his name, designation and Power of Attorney No./Signing Power no. on the BG?	
e)	Is each page of BG duly signed / initialed by executants and whether stamp of Bank is affixed thereon? Whether the last page is signed with full particulars including two witnesses under seal of Bank as required in the prescribed proforma?	
f)	Does the Bank Guarantees compare verbatim with the Proforma prescribed in the Bid Documents?	
g)	Are the factual details such as Bid Document No. / Specification No./ Amount of BG and Validity of BG correctly mentioned in the BG	
h)	Whether overwriting/cutting if any on the BG have been properly authenticated under signature & seal of executants?	
i)	Whether the BG has been issued by a Bank in line with the provisions of Bidding documents?	
j)	In case BG has been issued by a Bank other than those specified in Bidding Document, is the BG confirmed by a Bank in India acceptable as per Bidding documents?	

# Annexure - B

# List of Banks for issuance of BGs/ EMD/ Performance Bank Guarantee

# **SCHEDULED COMMERCIAL BANKS**

# A SBI AND ASSOCIATES

- 1. State Bank of India
- 2. State Bank of Bikaner & Jaipur
- 3. State Bank of Hyderabad
- 4. State Bank of Indore
- 5. State Bank of Mysore
- 6. State Bank of Patiala
- 7. State Bank of Travancore
- 8. State Bank of Saurashtra

#### **B NATIONALISED BANKS**

- 1. Allahabad Bank
- 2. Andhra Bank
- 3. Bank of India
- 4. Bank of Maharashtra
- 5. Canara Bank
- 6. Central Bank of India'
- 7. Corporation Bank
- 8. Dena Bank
- 9. Indian Bank
- 10. Indian Overseas Bank
- 11. Oriental Bank of Commerce
- 12. Punjab National Bank
- 13. Punjab & Sind Bank
- 14. Syndicate Bank
- 15. Union Bank of India
- 16. United Bank of India
- 17. UCO Bank
- 18. Vijaya Bank
- 19. Bank of Baroda

# **C Scheduled Private Bank List**

- 1. Federal Bank Ltd.
- 2. ING Vysya Bank Ltd.
- 3. Axis Bank Ltd.
- 4. ICICI Bank Ltd.
- 5. HDFC Bank Ltd.
- 6. Yes Bank Ltd.
- 7. Indusland Bank Ltd.
- 8. IDBI Bank Ltd.
- 9. Kotak Mahindra Bank

## Format 6.4 -Format for Board Resolutions

The Board, after discussion, at the duly convened Meeting on ........... (Insert date), with the consent of all the Directors present and in compliance of the provisions of the Companies Act, 1956/2013 (as applicable), passed the following Resolution:

- 1. RESOLVED THAT Mr/Ms................., be and is hereby authorized to do on our behalf, all such acts, deeds and things necessary in connection with or incidental to our Bid for the Project, 'Selection of Grid Connected Solar Photo Voltaic Project in Bihar', including signing and submission of all documents and providing information / response to RfP to BSPHCL, representing us in all matters before BSPHCL, and generally dealing with BSPHCL in all matters in connection with our bid for the said Project. (To be provided by the Bidding Company or the Lead Member of the Consortium)
- 2. FURTHER RESOLVED THAT pursuant to the provisions of the Companies Act, 1956/2013 (as applicable) and compliance thereof and as permitted under the Memorandum and Articles of Association of the company, approval of the Board be and is hereby accorded to invest total equity in the Project. (To be provided by the Bidding Company)

[Note: In the event the Bidder is a Bidding Consortium, in place of the above resolution at Sl. No. 2, the following resolutions are to be provided]

**FURTHER RESOLVED THAT** pursuant to the provisions of the Companies Act, 1956/2013 (as applicable) and compliance thereof and as permitted under the Memorandum and Articles of Association of the company, approval of the Board be and is hereby accorded to invest (----%) equity [Insert the % equity commitment as specified in Consortium Agreement] in the Project. (**To be provided by the each Member of the Bidding Consortium including Lead Member such that total equity commitment is 100%**)

**FURTHER RESOLVED THAT** approval of the Board be and is hereby accorded to participate in consortium with M/s ------[Insert the name of other Members in the Consortium] and Mr/Ms....... be and is hereby authorized to execute the Consortium Agreement. (**To be provided by the each Member of the Bidding Consortium including Lead Member)** 

And

**FURTHER RESOLVED THAT** approval of the Board be and is hereby accorded to contribute such additional amount over and above the percentage limit (specified for the Lead Member in the Consortium Agreement) to the extent becoming necessary towards the total equity share in the Project Company, obligatory on the part of the Consortium pursuant to the terms and conditions contained in the Consortium Agreement dated ...... executed by the Consortium as per the provisions of the RfP. [**To be passed by the Lead Member of the Bidding Consortium**]

3. FURTHER RESOLVED THAT approval of the Board be and is hereby accorded to M/s. ...... (Insert name of Bidding Company/ Consortium Member(s)) to use our financial capability for meeting the Qualification Requirements for the Project 'Selection of Grid Connected Solar Photo Voltaic Project in Bihar' against RfP and confirm that all the equity

investment obligations of M/s......(Insert Name of Bidding Company/ Consortium Member(s)), shall be deemed to be our equity investment obligations and in the event of any default the same shall be met by us. [To be passed by the entity(s) whose financial credentials have been used]

# **Certified true copy**

-----

# (Signature, Name and stamp of Company Secretary)

#### Notes:

- 1) This certified true copy should be submitted on the letterhead of the Company, signed by the Company Secretary. Memorandum and Articles of Association of the Bidder and its parent / affiliate whose credentials have been used should be submitted.
- 2) The contents of the format may be suitably re-worded indicating the identity of the entity passing the resolution.
- 3) This format may be modified only to the limited extent required to comply with the local regulations and laws applicable to a foreign entity submitting this resolution. For example, reference to Companies Act 1956/2013 (as applicable) may be suitably modified to refer to the law applicable to the entity submitting the resolution. However, in such case, the foreign entity shall submit an unqualified opinion issued by the legal counsel of such foreign entity, stating that the Board resolutions are in compliance with the applicable laws of the respective jurisdictions of the issuing company and the authorizations granted therein are true and valid.

# Format 6.5 – Format for Consortium Agreement

	be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of cution)
THI	S Consortium Agreement ("Agreement") executed on this day of between M/s [insert name of Lead
Mei	mberl a Company incorporated
und	mber] a Company incorporated ler the laws of and having its Registered Office at
	(hereinafter called the "Member-1", which expression shall include its
	cessors, executors and permitted assigns) and M/s  a Company incorporated under the laws of  and having its Registered Office at
exp	(hereinafter called the "Member-2", which ression shall include its successors, executors and permitted assigns), M/s  a Company incorporated under the laws of and having its Registered Office at (hereinafter called the "Member-n", which
resp date	ression shall include its successors, executors and permitted assigns), [The Bidding insortium should list the details of all the Consortium Members] for the purpose of submitting conse to RfP, and execution of Power Purchase Agreement(in case of award), against RfP issued by BSPHCL a Company incorporated under the [Company's Act, as applicable), and having its Registered Office at or constituted under
	EREAS, each Member individually shall be referred to as the "Member" and all of the mbers shall be collectively referred to as the "Members" in this Agreement.
WH	EREAS the BSPHCL desires setting up of Grid Connected Solar PV Projects in Bihar;
	EREAS, the BSPHCL had invited response to RfP vide its Request for Proposal (RfP) ed
Cor Cor	EREAS the RfP stipulates that in case response to RfP is being submitted by a Bidding insortium, the Members of the Consortium will have to submit a legally enforceable insortium Agreement in a format specified by BSPHCL wherein the Consortium Members is to commit equity investment of a specific percentage for the Project.
NO	W THEREFORE, THIS AGREEMENT WITNESSTH AS UNDER:
	consideration of the above premises and agreements all the Members in this Bidding asortium do hereby mutually agree as follows:
	We, the Members of the Consortium and Members to the Agreement do hereby unequivocally agree that Member-1 (M/s), shall act as the Lead Member as defined in the RfP for self and agent for and on behalf of Member-2,, Member-n.
	The Lead Member is hereby authorized by the Members of the Consortium and Members to the Agreement to bind the Consortium and receive instructions for and on their behalf.

- 3. Notwithstanding anything contrary contained in this Agreement, the Lead Member shall always be liable for the equity (as well as total financing if committed to be met from internal financing) investment obligations of all the Consortium Members i.e. for both its own liability as well as the liability of other Members.
- 4. The Lead Member shall be liable and responsible for ensuring the individual and collective commitment of each of the Members of the Consortium in discharging all of their respective equity obligations. Each Member further undertakes to be individually liable for the performance of its part of the obligations without in any way limiting the scope of collective liability envisaged in this Agreement.
- 5. Subject to the terms of this Agreement, the share of each Member of the Consortium in the issued equity share capital of the project Company is/shall be in the following proportion:

Name	Percentage
Member 1	
Member 2	
Member n	
Total	100%

We acknowledge that after execution of PPA, the controlling shareholding (more than 50% of the voting rights) in the Project Company developing the Project shall be maintained for a period of (1) one year after the Commercial Operation Date (COD).

- 6. The Lead Member, on behalf of the Consortium, shall inter alia undertake full responsibility for liaising with Lenders or through internal accruals and mobilizing debt resources for the Project, and ensuring that the Seller achieves Financial Closure in terms of the PPA.
- 7. In case of any breach of any equity investment as well as other financing requirements commitment by any of the Consortium Members, the Lead Member shall be liable for the consequences there of.
- 8. Except as specified in the Agreement, it is agreed that sharing of responsibilities as aforesaid and equity investment obligations thereto shall not in any way be a limitation of responsibility of the Lead Member under these presents.
- 9. It is further specifically agreed that the financial liability for equity contribution of the Lead Member shall not be limited in any way so as to restrict or limit its liabilities. The Lead Member shall be liable irrespective of its scope of work or financial commitments.
- 10. This Agreement shall be construed and interpreted in accordance with the Laws of India and courts at Patna alone shall have the exclusive jurisdiction in all matters relating thereto and arising there-under.
- 11. It is hereby further agreed that in case of being selected as the Successful Bidder, the Members do hereby agree that they shall furnish the Performance Guarantee in favour of Procurer in terms of the RfP.
- 12. It is further expressly agreed that the Agreement shall be irrevocable and shall form an integral part of the Power Purchase Agreement (PPA) and shall remain valid until the expiration or early termination of the PPA in terms thereof, unless expressly agreed to the contrary by Procurer.

- 13. The Lead Member is authorized and shall be fully responsible for the accuracy and veracity of the representations and information submitted by the Members respectively from time to time in the response to the RfP Bid.
- 14. It is hereby expressly understood between the Members that no Member at any given point of time, may assign or delegate its rights, duties or obligations under the PPA except with prior written consent of Procurer.
- 15. This Agreement
  - (b) has been duly executed and delivered on behalf of each Member hereto and constitutes the legal, valid, binding and enforceable obligation of each such Member;
  - (c) sets forth the entire understanding of the Members hereto with respect to the subject matter hereof; and
  - (d) may not be amended or modified except in writing signed by each of the Members and with prior written consent of Procurer.
- 16. All the terms used in capitals in this Agreement but not defined herein shall have the meaning as per the RfP & PPA.

IN WITNESS WHEREOF, the Members have, through their authorized representatives, executed these present on the Day, Month and Year first mentioned above.

<u> </u>	
(signature, Name & Designation of the person au	thorized vide Board Resolution Dated [●])
Witnesses:	
1) Signature Name: Address:	2) Signature Name: Address:
For M/s[Member 2]	
(signature, Name & Designation of the person au	thorized vide Board Resolution Dated [●])
Witnesses:	
1) Signature Name: Address:	2) Signature Name: Address:
For M/s[Member n]	

# Request for Proposal of Grid Connected Solar PV Projects

(signature, Name & Designation of	of the person authorized vide Board Resolution Dated [•])
Witnesses:	
1) Signature Name: Address:	2) Signature Name: Address:
Signature and stamp of Notary of	the place of execution

**Note: -**Technology Partner in a Consortium shall be a company with equity participation less than 10%.

# Format 6.6- Format for Financial Requirement - Net Worth

(to be filled separately for individual projects)

# [On the letter head of Bidder]

To,	
Chairman-cum- Managing Director, Bihar State Power (Holding) Company Limited, Vidyut Bhawan, Jawahar Lal Nehru Marg Patna – 800 021, Bihar	
Dear Sir,	
Sub: Response to RfP dated for development of Solar PiBihar	V Projects in the State o
We certify that the Bidding Company/Member Consortium[Name of Bidding Company or Biminimum Net Worth of Rs (Rupees Crore) or equivalent	dding Consortium] has a
Description	Select any one financial year applicable
Audited annual accounts of any of the last four (4) financial years,	

Net Worth has been calculated in accordance with instructions provided in Clause 3.5 B of the RfP.

# Exhibit (i): Applicable in case of Bidding Company

years not applicable

2009-10, 2010-11, 2011-12 and 2012-13 [Strike out the financial

For the above calculations, we have considered the Net Worth by Bidding Company and/ or its Parent / Affiliates as per following details:

Name of Company / Parent/ Affiliate	Name of Company / Parent/ Ultimate Parent/ Affiliate whose Net worth is to be considered	Relationship with Bidding Company*	Financial Year to be considered for Net Worth	Net Worth (in Rs. Crore) of the Member Company
Company 1				

Total	

# Exhibit (ii): Applicable in case of Bidding Consortium

(To be filled by each Member in a Bidding Consortium separately)

Name of Member: [Insert name of the Member]

Net Worth Requirement to be met by Member in Proportion to the Equity Commitment: Rs.-----Crore (Equity Commitment (%) \* Rs. [] Crore)

For the above calculations, we have considered Net Worth by Member in Bidding Consortium and/ or Parent/ Affiliate as per following details:

Name of Company / Parent/ Affiliate	Name of Company / Parent/ Ultimate Parent/ Affiliate whose Net worth is to be considered	Relationship with Bidding Company*	Financial Year to be considered for Net Worth	Net Worth (in Rs. Crore) of the Member Company	Equity Commitment (in %age) in Bidding Consortium	Committed Net Worth (in Rs. Crore)
Company 1						
	Total					

<sup>\* -</sup> The column for "Relationship with Bidding Company" is to be filled only in case the financial capability of Parent/Affiliate has been used for meeting Qualification Requirements. Further, documentary evidence to establish the relationship, duly certified by the company secretary/chartered accountant is required to be attached with the format.

(Signature & Name of the person Authorized By the board)

(Signature and Stamp of Statutory Auditor or Chartered Accountant)

Date:

Note:

(i) Along with the above format, in a separate sheet, provide details of computation of Net Worth duly certified by Statutory Auditor (preferable) or CA.

<sup>\* -</sup> The column for "Relationship with Bidding Company" is to be filled only in case the financial capability of Parent/Affiliate has been used for meeting Qualification Requirements. Further, documentary evidence to establish the relationship, duly certified by the company secretary/chartered accountant is required to be attached with the format.

# Format 6.7- Format For Technical Criteria

(to be filled separately for individual projects)

# [On the letter head of Bidder]

_	_	
	$\sim$	
	v	

Chairman-cum- Managing Director, Bihar State Power (Holding) Company Limited, Vidyut Bhawan, Jawahar Lal Nehru Marg Patna – 800 021, Bihar

technology is successfully operational since \_\_\_\_\_ years:

Dear Sir,	
Sub: Response to RfP dated Bihar	for development of Solar PV Projects in the State of
We hereby certify that theSolar PV project is commercially estal	[Insert Name of the technology] proposed by us for blished technology and following project(s) based on this

SI. No.	Name of the Project	Capacity of the Project	Location	Operational Period	Documentary Evidence
1					
2					

Further, We hereby undertake to certify in line with Clause 3.25 under the title "Financial Closure" that the following milestone schedule shall be adhered by us after signing of PPA: -

Milestone	Time Period from the Signing of the PPA	Documentary Evidence to be produced to BREDA / BSPHCL				
Approval from State Transmission Utility/ Discom regarding the feasibility of grid connectivity of the project site.	Four Months	Approval Letter from BSPTCL / NBPDCL/SBPDCL				
Clear Possession of the required land for project development	Five Months	o Ownership or lease hold rights from State agency only (for at least 30 years) in the name of the Project Developer and possession of 100% of the area of land required for the allotted project. Land can be taken on lease from State agency only.				

Milestone	Time Period from the Signing of the PPA	Documentary Evidence to be produced to BREDA / BSPHCL
		o Certificate by the concerned and competent revenue / registration authority for the acquisition / ownership / vesting of the land in the name of the Project Developer.  o Sworn affidavit from the Authorized person of the developer listing the details of the land and certifying total land required for the project under clear possession of the Project Developer.  o In case of Bidding Consortium, the possession of land or lease hold right of land from State agency is in the name of non lead member, the same will be accepted against application and would be required to be transferred to the Project Company before signing of PPA.
Financial Closure	Six Months	Copy of the Sanction Letter received from the Financial Institutes/ Banks

Failure or delay on our part in achieving the above conditions shall constitute sufficient grounds for encashment of our Performance Bank Guarantee.

(Signature & Name of the person Authorised By the board)

**Annexure-C** 

# **List of Existing Grid sub-stations of BSPTCL**

SI.no	_	Voltage	Capacity	Voltage	Capacity	Voltage	Capacity	District	Block
-	subs.	Level	(in mva)	Level	(in mva)	Level	(in mva)		
		(220/132)kv		(132/33)kv		(132/25)kv			
1.	Forbeshganj			(132/33) KV	2x20			Araria	Forbeshganj
2.	Sonenagar			(132/33) KV	2x50	(132/25)KV	1X20 + 1X21.6	Aurangabad	Barun
3.	Rafiganj			(132/33) KV	2x20			Aurangabad	Rafiganj
4.	Aurangabad			(132/33) KV	2X20			Aurangabad	Aurangabad
5.	Goh			(132/33) KV	2x20			Aurangabad	Goh
6.	Begusarai	(220/132)KV	1x100	(132/33) KV	2x50			Begusarai	Barauni
7.	Buxar			(132/33) KV	2x20			Buxar	Itarhi
8.	Dumraon			(132/33) KV	2x20			Buxar	Dumraon
9.	Sabour			(132/33) KV	2X50			Bhagalpur	Sabour
10.	Sultanganj			(132/33) KV	2X20			Bhagalpur	Sultanganj
11.	Kahalgaon			(132/33) KV	2X20			Bhagalpur	Kahalgaon
12.	Naugachhia			(132/33) KV	2X20			Bhagalpur	Naugachhia

SI.no	Name of grid subs.	Voltage Level (220/132)kv	Capacity (in mva)	Voltage Level (132/33)kv	Capacity (in mva)	Voltage Level (132/25)kv	Capacity (in mva)	District	Block
13.	Ara			(132/33) KV	2X20			Bhojpur	Ara
14.	Banka			(132/33) KV	2X20			Banka	Banka
15.	Darbhanga	(220/132)KV	2X100	(132/33) KV	1X50 + 1X20			Darbhanga	Bahadurpur
16.	Motihari			(132/33) KV	2X20			East Champaran	Motihari
17.	Dhaka			(132/33) KV	2X10			East Champaran	Dhaka
18.	Raxaul			(132/33) KV	2X20			East Champaran	Raxaul
19.	Bodh Gaya	(220/132) KV	3X150	(132/33) KV	2X50			Gaya	Bodh Gaya
20.	Chandauti			(132/33) KV	2X50	(132/25) KV	2X13.35	Gaya	Gaya
21.	Belaganj			(132/33) KV	1x10+1x20			Gaya	Belaganj
22.	Tekari			(132/33) KV	2X20			Gaya	Tekari
23.	Wazirganj			(132/33) KV	2X20			Gaya	Wazirganj
24.	Gopalganj	(220/132) KV	2X100	(132/33) KV	2X20			Gopalganj	Gopalganj
25.	Jamui			(132/33) KV	2X20			Jamui	Jamui

SI.no	_	Voltage	Capacity	Voltage	Capacity	Voltage	Capacity	District	Block
•	subs.	Level	(in mva)	Level	(in mva)	Level	(in mva)		
		(220/132)kv		(132/33)kv		(132/25)kv			
26.	Jehanabad			(132/33) KV	2X20			Jehanabad	Jehanabad
27.	Hulashganj			(132/33) KV	2X20			Jehanabad	Hulashganj
28.	Katihar			(132/33) KV	3X20			Katihar	Katihar
29.	Khagaria			(132/33) KV	2X20			Khagaria	Khagaria
30.	Kishanganj			(132/33) KV	2X20			Kishanganj	Kishanganj
31.	Mohania			(132/33) KV	2X20			Kaimur	Mohania
32.	Karmnasa			(132/33) KV	1x50+1x20	(132/25) KV	1X20 + 1x21.6	Kaimur	Durgawati
33.	Lakhisarai			(132/33) KV	3X20			Lakhisarai	Lakhisarai
34.	Udakishanganj			(132/33) KV	2X20			Madhepura	Udakishanganj
35.	Muzaffarpur			(132/33) KV	2X50			Muzaffarpur	Muzaffarpur
36.	Jamalpur			(132/33) KV	1X50 + 1X20			Munger	Jamalpur
37.	Madhubani			(132/33) KV	2X20			Madhubani	Rahika
38.	Pandaul			(132/33) KV	2X20			Madhubani	Pandaul
39.	Jainagar			(132/33) KV	2X10			Madhubani	Jainagar
40.	Phulparas			(132/33) KV	2X10			Madhubani	Phulparas

SI.no	_	Voltage	Capacity	Voltage	Capacity	Voltage	Capacity	District	Block
•	subs.	Level	(in mva)	Level	(in mva)	Level	(in mva)		
		(220/132)kv		(132/33)kv		(132/25)kv			
41.	Nawadah			(132/33) KV	2X20			Nawadah	Nawadah
42.	Biharsharif	(220/132) KV	3X150	(132/33) KV	1X20			Nalanda	Biharsharif
43.	Bariparahi			(132/33) KV	2X50			Nalanda	Biharsharif
44.	Rajgir			(132/33) KV	2X20			Nalanda	Rajgir
45.	Ekangarsarai			(132/33) KV	2X20			Nalanda	Ekangarsarai
46.	Fatuah	(220/132) KV	3X100	(132/33) KV	3X50			Patna	Fatuah
47.	Khagaul	(220/132) KV	3X100	(132/33) KV	3X50			Patna	Danapur
48.	Jakkanpur			(132/33) KV	3X50 + 1X20			Patna	Patna Sadar
49.	Masaurhi			(132/33) KV	2X20			Patna	Masaurhi
50.	Bihta			(132/33) KV	2X50			Patna	Bihta
51.	Gayghat			(132/33) KV	2X50			Patna	Patna City
52.	Mithapur			(132/33) KV	2X50			Patna	Patna City
53.	Katra			(132/33) KV	2X50			Patna	Patna Sadar
54.	Hathidah			(132/33) KV	3X20			Patna	Mokamah
55.	Barh			(132/33) KV	2X20			Patna	Barh
56.	Purnea			(132/33) KV	2X50 + 1X20			Purnea	Purnea East

SI.no	Name of grid	Voltage	Capacity	Voltage	Capacity	Voltage	Capacity	District	Block
	subs.	Level	(in mva)	Level	(in mva)	Level	(in mva)		
		(220/132)kv		(132/33)kv		(132/25)kv			
57.	Dehri-On-Sone	(220/132) KV	3X100 + 1X50	(132/33) KV	2x50			Rohtas	Dehri
58.	Sasaram			(132/33) KV	2X20			Rohtas	Sasaram
59.	Bikramganj			(132/33) KV	2X20			Rohtas	Surajpur
60.	Banjari			(132/33) KV	2X20			Rohtas	Bangari
61.	Sitamarhi			(132/33) KV	1X20+1x50			Sitamarhi	Dumra
62.	Chapra			(132/33) KV	1X20 + 1X12.5 1X50			Saran	Chapra
63.	Sheetalpur			(132/33) KV	1x20 + 1x10			Saran	Sheetalpur
	Siwan			(132/33) KV	2X20			Siwan	Siwan
65.	Samastipur			(132/33) KV	1X50 + 2X20			Samastipur	Samastipur
66.	Dalsingsarai			(132/33) KV	2x20			Samastipur	Dalsingsarai
67.	Supaul			(132/33) KV	2X10			Supaul	Supaul
68.	Kataiya (Birpur)			(132/33) KV	2X20			Supaul	Basantpur
69.	Shaharsha			(132/33) KV	2X20			Shaharsha	Kahra
70.	Shekhpura			(132/33) KV	2X20			Shekhpura	Shekhpura
71.	Hajipur			(132/33) KV	2X20 1X50			Vaishali	Hajipur
72.	Vaishali			(132/33) KV	2X20			Vaishali	Vaishali
	Bettiah			(132/33) KV	2X20			West Champaran	Bettiah
74.	Ramnagar			(132/33) KV	2X20			West Champaran	Ramnagar
75.	Karpi (Ataula)			(132/33) KV	2X20			Arwal	Karpi
	Musrakh			(132/33) KV	2X20			Siwan	Musrakh
	Harnaut			(132/33) KV	2X20			Nalanda	Harnaut
78.	Digha			(132/33) KV	2X50			Patna	Digha

## Request for Proposal of Grid Connected Solar PV Projects

Sl.no	Name of grid	Voltage	Capacity	Voltage	Capacity	Voltage	Capacity	District	Block
	subs.	Level	(in mva)	Level	(in mva)	Level	(in mva)		
		(220/132)kv		(132/33)kv		(132/25)kv			
79.	Sherghati			(132/33) KV	2X20			Gaya	Sherghati
80.	SKMCH			(132/33) KV	2X50			Muzaffarpur	SKMCH
81.	Jagdishpur			(132/33) KV	2X20			Bhojpur	Jagdishpur
82.	Runni Saidpur			(132/33) KV	2X20			Sitamarhi	Runni Saidpur
83.	Nalanda			(132/33) KV	2X20			Nalanda	Nalanda

220/132 KV GRIDS: 08 NOS.

132/33 KV GRIDS : 83 NOS.

132/25 KV GRIDS : 03 NOS.

## List of Existing Power sub-stations of NBPDCL & SBPDCL

SI No.	Grid	Name of 33 KV Feeder & its Load in MW	Name of 33/11 KV P/S/S with its capaicty	11 KV Feeder	Max. Load in Amps.	Max. Load in MW.
			Diaha Old	Bata	150	2.50
			Digha Old ( 3 x 5 MVA)	Canal	200	3.33
		Digha -I, 300 Amp.	(3×3 WVA)	TOTAL:-	350	8.83
		Max. Load=12.41 MW	D.D.I	Industrial	T Load in Amps.  150 200 350 115 100 215 119 193 312 316 200 20 536 175 115 115 21 311 50 54 90 20 214 240 160	1.92
			R.B.I ( 1x5 MVA)	R.B.I.		1.66
			( IXS WIVA)	TOTAL:-		3.58
		<b>D</b> ' 1 "	Digha New Central	Digha		1.98
		Digha-II Max. Load=5.20 MW	Store	Rajeev Nagar	193	3.22
	Digha Grid 2X 50 MVA	IVIAX. LOAG=5.20 IVIVV	(2x5 MVA)	TOTAL:-	312	5.2
		Digha-III	Excise Colony	Raja Bazaar	316	5.26
				Ashiyana Nagar	200	3.33
			( 1x5 + 1x10 MVA)	Excise Colony	20	0.33
1	132/33 KV			TOTAL:-	536	8.91
	Transformer		Part of I.G.I.M.S	A.G.Colony	175	2.92
	Max. Load=48.82 MW			Shashtri Nagar	115	1.92
		Max. Load=17.66 MW	(5x5 MVA)	I.G.I.M.S ( Hospital)	21	0.35
				TOTAL:-	311	5.19
				Airport	50	0.83
				HMRI	54	0.90
			Veterinary ( 2x5 MVA)	B.V. College	90	1.50
			(ZXO IVIVA)	U.G. Cable	20	0.33
				TOTAL:-	193 312 316 200 20 536 175 115 21 311 50 54 90 20 214 240	3.56
		Digha-IV	D .!!	I.T.I		4.00
		Patliputra .	Patliputra ( 2x5 + 2 x10 MVA )	Industrial -II	160	2.66
		Max. Load=13.55 MW	( ZAJ T Z X I U IVI V A )	TOTAL:-	400	6.66

		1		Mandiri	404	2.00
			D : D	B.C. Road	184	3.06
			Raja Pur (2x5 MVA)	Rajapur	230	3.83
			(2/3 1/1///)	Nehru Nagar	230	3.03
				TOTAL:-	414	6.89
	Grand Total:-	48.82		Grand Total:-		48.82
				Raibagh	150	2.50
		SabbalpurMaximum Load = 2.8 MW	Sabalpur2x3.15 MVA	Kothiya	100	1.67
		2.0 10100		TOTAL:-	250	4.17
				Setu	215	3.58
				Pahari	180	3.00
			Pahari(4x5 MVA)	Bariya	140	2.33
	Katra (2x50 MVA)Max. Load=25.10 MW		,	Paijawa	210	3.50
2		Pahari Feeder 300 Amp Max. Load=18 MW		TOTAL:-	745	12.42
		IVIAX. LUAU=10 IVIVV		Sohgi	100	1.67
			Sampatchak	Sona Gopalpur	90	1.50
			1x5+2x3.15 MVA	Gaurichak	105	1.75
				TOTAL:-	295	4.92
		Karmalichak Max. Load = 4.3 MW	Karmalichak 2X10 MVA	TOTAL:-		4.30
	Grand Total:-	25.10		Grand Total:-		25.80
				Town-1	40	0.67
				Town-2	140	2.33
	Kishanganj2 x20	PaschimpalliMaximum Load = 6 MW	Pachim Pali3x5 MVA	Town-3	108	1.80
2	MVA132/33 KV	Loau = 0 IVIVV		Feeder No 4	45	0.75
3	TransformerMax.			TOTAL:-	333	5.55
	Load = 24.10 MW	Dahad	Dahad	Bahadurganj	63	1.05
		Bahadurganj Maximum Load = 4.7 MW	Bahadurganj 2x3.15 MVA	Gangi	13	0.22
		Maximum Load = 4.7 WW	2.0.10 WWA	Lohagara	48	0.80

				Locha	81	1.35
				TOTAL:-	205	2.07
				Dighal Bank	30	0.50
				Singhmari	20	0.33
			Dighal Bank 2x3.15 MVA	Тарри	30	0.50
			ZX3. 13 IVIVA	Padampur	25	0.42
				TOTAL:-	105	1.75
				Town-1	32	0.53
		Purabpallipalli	Purab pali	Town-2	96	1.60
		Maximum Load = 2.6 MW	3x5 MVA	Railway	21	0.35
				TOTAL:-	149	2.48
				Kaniya Bari	90	1.50
		Kochadhaman Maximum Load = 4.8 MW		Mahadev Deghi	95	1.58
			Kochadhaman (Sarai) 2x3.15 MVA	Sontha	75	1.25
				Kala Nagin	65	1.08
				TOTAL:-	325	5.42
				Raipur	50	0.83
			<b>0</b> 1 <b>0</b>	Suhagi	25	0.42
			Chattar Gach 2x3.15 MVA	Sarogora	70	1.17
			ZX3. 13 IVIVA	Pothia	50	0.83
		Thakurganj		TOTAL:-	195	3.25
		Maximum Load = 6 MW		Thakurganj	64	1.07
				Galgaliya	84	1.40
			Thakurganj 1x1.5+2x3.15 MVA	Tayabpur	78	1.30
			1X1.0+2X3.13 IVIVA	Powakhali	52	0.87
				TOTAL:-	278	4.63
	Grand Total:-	24.10		Grand Total:-		25.15
4	Udakisanganj2 x 20	UdakishanganjMaximum	Udakishanganj2x3+1	Bihariganj		3.25
7	MVA132/33 KV	Load= 7 MW	x5 MVA	Baratani		1.50

	TransformerMax.			Gwalpara		1.79
	Load=7 MW			Chausa		2.76
	Grand Total:-  Banka GridMax. Load= 21MW			TOTAL:-		9.30
			Alamnagar	Alamanagar		2.51
			1x5+1x3 MVA	TOTAL:-		2.51
	Grand Total:-	7.00		Grand Total:-		11.81
				Banka (Town)	196	3.27
				Banka (Rural)	130	2.17
			33/11 KV PSS Banka 2X5 MVA	Amarpur	10	0.17
		BankaMaximum Load=	ZAS IVIVA	Barahat	10	0.17
		9.50 MW		TOTAL:-	346	5.77
			33/11 KV PSS Amarpur 2x3.15 mva	Amprpur	45	0.75
				Sahkuna	55	0.92
			2x3.15 111va	TOTAL:-	100	1.67
				Barahat	10	0.2
			33/11 KV PSS Barahat 2X3.15 MVA	Kharhara	90	1.5
_	Banka GridMax.			Bishahar	60	1.0
5	Load= 21MW	Barahat		Birangarh	32	0.5
		Maximum Load= 5 MW		TOTAL:-	192	3.20
				Baunsi	128	2.13
			33 KV PSS Baunsi	Barahat	63	1.05
			1X3.15 + 1X1.6 MVA	TOTAL:-	191	3.18
		Abhijit Group Maximum Load = 0.5 MW		TOTAL:-		0.50
				Rajaun	30	0.5
		Rajaun	33/11 KV PSS	PHED Rajaun	15	0.25
		Maximum Load= 2 MW	Rajaun 2X3.15 MVA	Dharmaichak	25	0.42
			27.0.10 101071	TOTAL:-	70	1.17

				Katoria Town	90	1.50
				Jaipur	45	0.75
		Katoria Maximum Load= 4 MW  21.00  Bihari BighaMaximum Load= 9 MW		Suia	65	1.08
			Su	Bhebhiya	20	0.33
		Katoria		TOTAL:-	220	3.67
		Maximum Load= 4 MW		Chandan	22	0.37
				Goriyari	22	0.37
				Turki	38	0.63
			2/3.13 IVIVA	Bank	20	0.33
				TOTAL:-	102	1.70
	Grand Total:-	21.00		Grand Total:-		20.85
				Rice	30	0.50
	Barh2 X 20			Manikpur	25	0.42
				Chaturbhujpur	25	0.42
		Load 9 WW	IVIVA	Pokharpur	70	1.17
				TOTAL:-	150	2.50
			=-	PHED	150	2.50
	MVA132/33 KV			Pandarak	160	2.67
6	TransformerMax.			Malahi	180	3.00
	Load=24 MW			TOTAL:-	490	8.17
				Bakhtiyarpur	210	3.50
		Waximum Load= 13 WW	<b>5</b> 11 4	Rural	120	2.00
				Telmar	190	3.17
			1 X 3 + 3 X 1.3 WVA	Duplicate	120	2.00
				TOTAL:-	640	10.67
	Grand Total:-	24.00		Grand Total:-	25 25 70 150 150 160 180 490 210 120 190 120	21.33
	Hulasganj	Hulasganj	Hulasganj	Feeder-1	120 190 120	1.30
7	2 x20 MVA	Maximum Load = 2.23 MW	2 x 3.15 MVA	Feeder-2		1.00
	132/33 KV			TOTAL:-		2.30

	Transformer			Town	90	1.50
	Max. Load = 8.47 MW		171 11	Back	40	0.67
		Khijarsarai Maximum Load = 3.26 MW	Khijarsarai 1 x3.15 MVA	Teusa Bela	40	0.67
		Waxiiiiuiii Loau = 3.26 WW	I X3. IS IVIVA	Kurwa	50	0.83
	Grand Total:-  Wazirganj 2 x 20 MVA 132/33 KV Transformer Max. Load=6.80 MW			TOTAL:-		3.67
				Ghosi Town		1.16
		Ghosi	Ghosi	Bandhuganj		1.22
		Maximum Load = 2.98 MW	1 x3.15+1x1.6 MVA	Hulasganj		1.22
				TOTAL:-		3.60
	Grand Total:-	8.47		Grand Total:-		9.57
				Town	100	1.67
			Wazirganj	Kajur	70	1.17
	2 x 20 MVA Wazirganj 132/33 KV Maximum Load = 6.8		2 x 3.15 MVA	Sebtar	50	0.83
		Wazirgani	2 X 0.10 W V X	Terma	50	0.83
8		Maximum Load = 6.8 MW		TOTAL:-	270	4.5
		Maximum 2000 = 0.0 MVV		Town	130	2.17
	IVIAX. LUAU=0.00 IVIVV		Fatehpur 1 x3.15 MVA	Tankupa		0.67
				Terma		1.33
				TOTAL:-	70 50 50 270	4.17
	Grand Total:-	6.80		Grand Total:-		8.67
				Town		1
				Upnaga		0.4
		Goh Maximum Load = 1.15 MW	Goh 1 x3 MVA	Deohara		0.5
	Goh	IVIAXIIIIUIII LOAU = 1.13 IVIVV	I X3 IVIVA	Kudaul		1.1
9	2 x20 MVA 132/33 KV			TOTAL:-		3.00
	Transformer			Feeder-1		1
	Max. Load=3.15 MW	Hanspura Maximum Load = 1 MW	Hanspura 2 x3.15 MVA	Feeder-2		1.1
		Waxiiiaiii Edad — 1 WW	2 AO. 10 WWA	TOTAL:-		2.10
		Konch	Konch	Town	40	0.67

		Maximum Load = 1 MW	1 x3.15 MVA	Sinduari	15	0.25
				Anti	35	0.58
				TOTAL:-		1.50
	Grand Total:-	3.15		Grand Total:-		6.60
				Nagra	190	3.17
			Baniyapur	Janta Bazar	50	0.83
			2x3 MVA	Baniapur	90	1.50
				TOTAL:-	35 190 50	5.5
				Mashrakh Rural	125	2.08
	Mashrakh	Mashrakh (Baniyapur)	Mashrakh	Mashrakh Urban	30	0.50
10	2x20 MVA Max. Load= 4 MW	Maximum Load = 4 MW	2x3.15 MVA	Hanumanganj	120	2.00
	Wax. Load 4 WW			TOTAL:-	190 50 90 330 125 30 120 275 35 35 30 100 120 110 215 40 485 24 50 74 60 80	4.58
				Grand Total:-         Nagra       190         Janta Bazar       50         Baniapur       90         TOTAL:-       330         Mashrakh Rural       125         Mashrakh Urban       30         Hanumanganj       120         TOTAL:-       275         Totaha       35         Dubauli       35         Panapur       30         TOTAL:-       100         Grand Total:-       100         Maner (U)       110         Naubatpur (U)       215         Jeenpura (M)       215         CPWD (M)       40         TOTAL:-       485         Pareo (R)       24         Lai (R)       50         TOTAL:-       74         Kanpa (R)       60	0.58	
			Panapur	Dubauli	190 r 50 90 330 Rural 125 Urban 30 anj 120 275 35 35 30 100 I:- 120 110 (U) 215 M) 40 485 24 50 74 60	0.58
			2x3.15 MVA	Panapur		0.50
				TOTAL:-	100	1.67
	Grand Total:-	4.00		Grand Total:-		11.75
				Bihta (U)	120	2.00
				Maner (U)	110	1.83
			Bihta Old2x5 MVA	Naubatpur (U)	215	3.58
			Dirita Oluzzo IVIVA	Jeenpura (M)		0.00
	Bihta2 X 50			CPWD (M)	100 120 110 215	0.67
11	MVA132/33 KV	Bihta -2Maximum Load=18		TOTAL:-	485	8.08
	TransformerMax.	MVV	Pareo	Pareo (R)	24	0.40
	Load=57 MW		2x3 MVA		50 90 330 125 30 120 275 35 35 30 100 120 110 215 40 485 24 50 74 60 80	0.83
						1.23
			Kanpa	• ` ` ′		1.00
			2x3.15+ 1X1.6 MVA			1.33
				Barah (R)	65	1.08

				TOTAL:-	205	3.42
				Bikram (M)	70	1.17
			Lalabhadsara Lala	Masaurhi (M)	25	0.42
				Lalabhadsara (R)	15	0.25
			2X3.13 WWA	Dulhin Bazar (M)	60	1.00
				TOTAL:-	170	2.83
				Shigori (M)	85	1.42
			D !: .	Banauli (R )	80	1.33
			Paliganj 1x5+2x3.15 MVA	Mahabalipur (R)	70	1.17
			1XJ+2XJ. 13 WVA	Paliganj (M)	110	1.83
				TOTAL:-	345	5.75
				Chandi (R)	170	2.83
			Koilwar 2 x 5 +1x 3.15 MVA	Dhandiha (R)		0.00
				Koilwar Rural (R)	175	2.92
				Koilwar Urban (U)	110	1.83
				Industrial Gidha (R)	75	1.25
				TOTAL:-	360	8.83
			A info no o	VCL (M)	140	2.33
			Airforce 1x5 +1x1.6 MVA	Rural (R)	180	3.00
		Dikto 5	TXG T TXTTG III TX	TOTAL:-	320	5.33
		Bihta -5 Maximum Load=2 MW		Town (U)	190	3.17
		Maximum Load-2 MW	Maner	Rural (R)	93	1.55
			2 x5 MVA	Simri (R)	127	2.12
				TOTAL:-	410	6.83
	Grand Total:-	57.00		Grand Total:-		42.32
				Gaighat	230	3.83
40	Gaighat	Gaighat,360 Amp.	Gaighat 2x5 MVA	Tripoliya	230	3.83
12	(2 x50 MVA) Max. Load=68.50 MW	Max. load = 16 MW	ZAJ IVIVA	TOTAL:-	460	7.67
			NMCH	Biscoman	240	4.00

			(1x5 + 1x10 MVA)	Sultanganj	360	6.00
				TOTAL:-	600	10.00
				Chowk	240	4.00
				Pachim Darwaja	200	3.33
		Meena Bazar,325 Amp.	Meena Bazar	Maharajganj	225	3.75
		Max. Load = 13 MW	( 4x5+1 x10 MVA)	West	150	2.50
				City	225     3.75       150     2.50       350     5.83       1165     19.42       210     3.50       200     3.33       190     3.17       230     3.83       830     13.83       200     3.33       90     1.50       290     4.83       108     1.80       200     3.33       145     2.42       51     0.85       504     8.40	
				TOTAL:-	1165	19.42
				Kali Asthan	210	3.50
				Station Road	200	3.33
			Mangal Talab (5x5 MVA)	Jhouganj	190	3.17
		Patna City,400 Amp.	(SXS IVIVA)	Khajkella	230	3.83
		Max. Load = 20.50 MW		TOTAL:-	830	13.83
				Marufganj	200	3.33
			Malsalami	Malsalami	90	1.50
			( 1x5+ 1x3.15 MVA)	TOTAL:-	290	4.83
				University	108	1.80
				Saidpur	200	3.33
			Saidpur ( 3x5 + 1x10 MVA)	Gulzarbagh	145	2.42
		Saidpur Feeder,400Amp.	( 3x3 + 1x10 WIVA)	Exchange Feeder	51	0.85
		Max. Load = 19 MW		TOTAL:-	504	8.40
				Inner	181	3.02
			Machhuatoli 2x5 MVA	Outer	163	2.72
			ZXU IVIVA	TOTAL:-	344	5.73
	Grand Total:-	68.50		Grand Total:-		69.88
	Forbesganj2 x20			Sadar Road	172	2.87
13	MVA132/33 KV	ForbesganjMaximum Load	Forbesganj3x5+1x3.15	Hospital Road	90	1.50
13	TransformerMax.	= 12 MW	MVA	Jogbani	185	3.08
	Load = 32 MW			Narpatganj	108	1.80

		Dholbazza	115	1.92
		TOTAL:-	670	11.17
		Town-1	201	3.35
		Kursakata	129	11.17
		Chandrauel	15	0.25
	Araria 1x5+2x3.15 MVA	Navodaiya	5	0.08
	1X5+2X3.15 IVIVA	Ars	29	0.48
		Marketing	670 1.7 201 3 129 2 15 0 5 0 29 0 25 0 404 6 70 1 35 0 10 0 50 0 150 2 40 0 355 5 170 2 145 2 135 2 114 1 564 9 56 0 106 1 114 1 75 1 351 5	0.42
Araria		TOTAL:-	404	6.73
Maximum Load = 6 MW		Mirzapur	70	1.17
		Bhargama	35	0.58
		Jokihat	10	0.17
	Jokihat 2x3.15 MVA	Chakai	50	0.83
	2X3. 13 IVIVA	Bairghachi	150	2.50
		Jahanpur	40	0.67
		TOTAL:-	355	5.92
		Ramghat	170	2.83
		Mudoll	145	2.42
Narpatganj Maximum Load = 4 MW	Narpatganj	Achra	135	2.25
Maximum Load = 4 MW	2x3.15 MVA	Town	114	1.90
		TOTAL:-	564	9.40
		Raniganj Town	56	0.93
		Bistoria	106	1.77
Raniganj Maximum Load = 4 MW	Raniganj 2x3.15 MVA	Gidwas	114	1.90
IVIAXIIIIUIII LOAU = 4 IVIVV	ZXS. 13 IVIVA	Bhergama	75	1.25
		TOTAL:-	351	5.85
I a l a l u a ala	la la la cale	Kasba	160	2.67
Jalalgarh Maximum Load = 6 MW	Jalalgarh 2X5 MVA	Jalalgarh	120	2.00
IVIAAIITIAITI LOAU – O IVIVV	ZAO WWA	Garbaneli	110	1.83

				Sirnagar	125	2.08
				TOTAL:-	515	8.58
	Grand Total:-	32.00		Grand Total:-		47.65
				Town-1	200	3.33
				Town-2	40	8.58 47.65
			Supaul3x5 MVA	Basbiti	60	1.00
				Veena	170	2.83
				Navoday	25	0.42
				Barauri	45	0.75
		SupaulMaximum Load= 10 MW		TOTAL:-	540	9.00
	Supplied v 10	IVIVV	Pipra 1x5+1x3 MVA	Maheshpur	110	1.83
	Supaul2 x 10 MVA132/33 KV			Pipra	160	2.67
14	TransformerMax.		TXS+TXS IVIVA	TOTAL:-	270	4.50
	Load = 14 MW			Railway	25	0.42
			Kishanpur 2X1.6 MVA	Kishanpur	70	1.17
			2X1.0 WVA	TOTAL:-	95	1.58
				Bairo	100	1.67
				Sunderpur	50	0.83
		Parisarma Maximum Load= 4.0 MW	Parisarma 2x5 MVA	Sarai	55	0.92
		IVIAXIIIIUIII LOAU= 4.0 IVIVV	ZX3 IVIVA	Karanpur	30	0.50
				TOTAL:-	235	3.92
	Grand Total:-	14.00		Grand Total:-		19.00
				Tarapur	120	2.00
	Sultanganj2 x 20			Asarganj	190	3.17
15	MVA132/33 KV	TarapurMaximum Load= 8	Tarapur2x5 MVA	Sangrampur	0	0.00
15	TransformerMax.	MW	-	Launa	60	1.00
	Load = 23 MW			TOTAL:-	370	6.17
			Belhar	Belhar	16	0.27

			1x3.15+1x1.6 MVA	Dhauri	11	0.18
				Khesar	25	0.42 0.13 0.100 0.83 3.1.05 3.2.88 0.1.33 0.1.00 0.2.33 2.1.87 0.3.3 0.2.2 0.83 0.3.10 1.90 0.50 0
				Sahebganj	8	0.13
				TOTAL:-	60	1.00
				Kharagpur North	60	1.00
			Kharagpur	Kharagpur South	50	0.83
			2x3.15 MVA	Kharagpur Town	63	1.05
				TOTAL:-	173	2.88
		01.11.1	0	Shahkund	80	1.33
		Shahkund Maximum Load= 3 MW	Shahkund 2x3.15 MVA	Phulwariya	60	1.00
		Waxiiiaiii Load- 3 WW	2x3.13 WVA	TOTAL:-	140	2.33
				Asarganj	112	2.33 1.87 3.22 0.83 3.10 9.02
			Culton con:	Sultanganj	193	3.22
		Sultanganj Maximum Load= 10 MW	Sultanganj 1x3.15+2x5 MVA	Gangania	50	
		Waximum Load= 10 WW	INO. TO IZNO WIVI	Akbarnagar	186	3.10
				TOTAL:-	541	9.02
		Shambhuganj	Shambhuganj	Shabhuganj	30	0.50
		Maximum Load= 2 MW	(Patwara) 1x3.15 MVA	TOTAL:-	30	0.5
	Grand Total:-	23.00		Grand Total:-		21.90
				Town (U)		3.33
			JolomaurOv2 15 MV/A	Mubarakpur (R)		0.50
			Islampur2x3.15 MVA	Ratanpura (R)	11 KV	2.33
	Ekangarsarai2 X20	lala nam umMaurina una la a d		TOTAL:-	control &	6.17
16	MVÅ132/33 KV TransformerMax.	IslampurMaximum Load = 5.1 MW		Bardaha (R)	Realy panel	0.33
	Load = 17.40 MW		IZh vede nen!	Serthua(R)	not	0.67
			Khudaganj 2x3.15 MVA	Panhar (R)	working	
		ZXS. 13 IVIVA	Khudaganj (M)		0.33	
				TOTAL:-		2.08

				Karari ( R)		1.00
				Hilsa Town (U)		2.80
				Nagarnausa (R)		0.67
		Hilsa	Hilsa 2x5 +1x3.15 MVA	Chiksaura (R)		0.83
		Maximum Load = 5.2 MW	2X3 + 1X3. 13 IVIVA	Kajichak (R)		0.67
				Indaut (R)		0.30
				TOTAL:-		6.27
				Bazar (U)		1.17
				Telhara (U)		1.33
		Ekangasarai	Ekangarsarai	Ekangardih (R)		1.67
		Maximum Load = 2.7 MW	2x5 MVA	Islampur (R)		1.17
				Hilsa (R)		0.67
				TOTAL:-		6.00
				Bazar (U)		0.50
			Demusia	Khaira (R)		1.17
		Parwalpur Maximum Load = 4.4 MW	Parwalpur 1x5+1x3.15 MVA	Nischalganj(R)		2.50
		Waxiiiaii Edad = 4.4 WW		Bangpur (R)		0.50
				TOTAL:-		4.17
	Grand Total:-	17.40		Grand Total:-		24.68
				Katra	195	3.25
				Girihinda	120	2.00
		ShekhpuraMaximum Load=	Shekpura2x5 +1x 3.15	Kalari	36	0.60
	Shekhpura2 x 20	6.75 MW	MVA	Barbigha	65	1.08
17	MVA132/33 KV TransformerMax.			Pachna	48	0.80
	Load=18 MW			TOTAL:-	464	7.73
		A' '	Ariari 1x 1.6 MVA	Ariari		1.3
		Ariari Maximum Load= 2.75 MW		TOTAL:-		1.30
			Bhalua	Bhalua		1.2

			1x3.15+ 1x 1.6 MVA	Asardih		1.8
				TOTAL:-		3.00
				Kaithma		4.5
			Barma 1x 1.6 MVA	Sultanpur		1.5
			IX 1.0 WVA	TOTAL:-	0	1.50
				Barbigha Town	450	0.0
			Mirjapur 2x 3.15 MVA	Barbigha Rural	156	2.6
			2x 3. 13 WVA	TOTAL:-	156	2.60
		Onama	Sermera	Sermera		1.9
		Maximum Load= 7.25 MW	1x 3.15 MVA	TOTAL:-		1.90
				Onama	404	0.07
			Onama 1x 1.6 MVA		124	2.07
			IX I.O WIVA	TOTAL:-	124	2.07
				Mehus		1
		Katari Maximum Load= 0.5 MW	Katari 1x3.15+ 1x 1.6 MVA	Kamta		I
		Waxiiiidiii Load= 0.3 WW	1X3.13+ 1X 1.0 WIVA	TOTAL:-		1.00
		11.41.	11.42	Mehus		1
		Hathiyama Maximum Load= 1.25 MW	Hathiyama 1x 1.6 MVA	Kamta		'
		Maximum 2000— 1.20 WW	7X 1.0 W 7Y	TOTAL:-		1.00
	Grand Total:-	18.50		Grand Total:-		16.80
				Feeder-1	300	5.00
			Nawada Old3 x 5 MVA	Feeder-2	240	4.00
	Nawada2 x 20	Nawada2 y 20	Nawada Oldo X 5 IVIVA	Kadirganj	70	1.17
18	MVA132/33 KV	NawadaMaximum Load = 8		TOTAL:-	610	10.17
10	TransformerMax.	MW		Akauna	30	0.50
	Load=27 MW		Orhanpur Badhokhara	Gopalpur	30	0.50
			1x3.15 MVA	Orhanpur	60	1.00
				TOTAL:-	120	2.00

			Dariyapur		0.5			
			Katri Sarai		0.7			
		Warsaliganj	Makhdumpur		1			
		3 x 3.15 MVA	Shambe		0.5			
			Town		0.5 2 4.70 1 0.85 0.75 2.60 0.6 0.9 1.50 1 1.00 30 1.33 0 0.67 30 0.50			
			TOTAL:-		4.70			
			Roh		0.7 1 0.5 2 4.70 1 0.85 0.75 2.60 0.6 0.9 1.50 1 1.00 1.33 0.67 0.50			
	Warsaliganj Maximum Load = 4 MW	Roh	Bhatta		0.85			
Maximu	m Load = 4 IVIVV	1x1.65 +1x3.15 MVA	Rupau Kosi		0.75			
			TOTAL:-		2.60			
			Bhagi Bagdiha					
		Pakri Barawa 1x3.15 MVA	Pakri					
		IX3. IS IVIVA	TOTAL:-		1.50			
		Kauva Kol	Kauva Kol		1			
		1x1.6 MVA	TOTAL:-		1.00			
			Hisua	80	1.33			
		Liana	Narhat	40	0.67			
		Hisua 2 x 5+1x3.15 MVA	Nadriganj	30	0.50			
		2 X 31 1X3.13 WWY	Kaithi	30	0.50			
Maximu	Hisua m Load = 4 MW		TOTAL:-	180	3.00			
IVIAXIIIIU	III LUau = 4 IVIVV		Town	60	1.00			
		Nardiganj	Masora	30	0.50			
		2 x 3.15 MVA	Hariya	30	0.50			
			TOTAL:-	120	2.00			
			ITI	70	0.68			
Na	wada New	Nawada New	Farha	160	1.67			
	Load = 5 MW	2 x 3.15 MVA	Sadbhawna	230	2.80			
				460	5.15			
Akbarpur	Maximum Load =	Akbarpur1x3.15 MVA	Oria	55	0.92			

		6 MW		Akbarpur	70	0.89
				TOTAL:-	125	1.81
				Rajauli	160	2.67
			Rajauli 2x5+1x3 MVA	Sirdala	40	0.67
			2X3+1X3 WVA	TOTAL:-	200	3.33
				Karigiddhi	40	0.67
			Sirdala 2x3.15 MVA	Laund	40	0.67
			2x3.13 WVA	TOTAL:-	80	1.33
				Rural-1	Th - (1 -	( 00 14) /
			Govindpur	Rural-2	Theft of Cond	
			2x3.15 MVA	Govindpur Bazar	00110	
				TOTAL:-	0	4.00
	Grand Total:-	27.00		Grand Total:-		42.59
				Mou	Meterino	Metering system
		33 KV Tekari FeederMax.	Tekari2X5 MVA	Panchanpur	not in w	
	Tekari2 x 10	Load = 3.4 MW	TORAITE/RO WIVY	Rice Mill		
	MVA132/33 KV			TOTAL:-	0	3.40
19	TransformerMax. Load=4.85 MW			Sindvari	Metering	n evetom
	L0au=4.03 WW	33 KV Konch Feeder	Konch	Dadreji	— not in w	
		Max. Load = 1.45 MW	1 X3 MVA	Gramin		
				TOTAL:-	0	1.45
	Grand Total:-	4.85		Grand Total:-		4.85
				Rajpur	32	0.53
	Buxar			Buxar Town	165	2.75
20	2 x 20 MVA 132/33 KV	Buxar	Charitravan	Buxar Rural	0	0.00
	Transformer	Maximum Load = 13.4 MW	2 x 5 MVA	Station	192	3.20
	Max. Load=18.40 MW			IOC	89	1.48
				TOTAL:-	478	7.97

				Chausa pump	49	0.82
			Chausa	Chausa (U)	400	0.00
			2 x1.6 + 1x 3.15 MVA	Gola (R)	132	2.20
				TOTAL:-	181	3.02
				Rural (R)	121.5	2.03
			Industrial 1 x 3.15 + 1 x 5 MVA	Industrial (U)	165	2.75
			1 X 3.13 + 1 X 3 WVA	TOTAL:-	286.5	4.78
				Sokha (R)		
			Itarhi	Dhansoi (R)	176	2.93
			1 x 5 MVA	Itarhi (M)		
		Itarhi		TOTAL:-	176	2.93
		Maximum Load = 5 MW		Rajpur (R)	22	0.37
			Purosotampur	Unmat	49	0.82
			2 x 3.15 MVA	Dhansoi (R)	46	0.77
			2 X 0.10 WWX	Indore (R)	19	0.32
				TOTAL:-	136	2.27
	Grand Total:-	18.40		Grand Total:-		20.96
				6.6 KV Sipara Rural	230	3.83
				Bus Stand	90	1.50
			Karbigahiya(3x5 +1x3.15 MVA)	R.Path	220	3.67
			+1x3.13 WWA)	West	240	4.00
		PESU I 275 Amp + PESU II 275 Amp Max. Load =22		TOTAL:-	780	13.00
21	Mithapur2x50 MVAMax. Load= 69	MW		Rajendra Nagar	210	3.50
21	MW			Over bridge(Dog)	180	3.00
			Rajendra Nagar (4x5 MVA)	Nala Road (Dog)	100	1.67
			(4XO IVIVA)	South (Dog)	140	2.33
				TOTAL:-	630	10.50
		PESU IV	Ashok Nagar	Co-operative	210	3.50
		Max. Load = 20 MW	(1x10 MVA+2x5 MVA)	Chandmari	220	3.67

				Lohiya Nagar	260	4.33
				TOTAL:-	690	11.50
				R.K. Nagar	370	6.17
				Harish Chandra Nagar	140	2.33
			R.K. Nagar	Bihari Path	15	0.25
			(2 x 10 MVA)	P.G Feeder	220	3.67
				TOTAL:-	745	12.42
				Kankarbagh	240	4.00
				Sump House	250	4.17
		PESU V	Kankarbagh	Hanuman Nagar	280	4.67
		Max. Load = 14 MW	( 2x5+3x10 MVA)	J.P.Nagar	220	3.67
				Patrakar Nagar	180	3.00
				TOTAL:-	1170	19.50
				Housing	210	3.50
			<b>D</b>	H.Nagar	170	2.83
		Bahadurpur feeder, Max. Load = 13 MW	Bhadurpur ( 4x5 MVA)	T.V.Tower	210	3.50
		Max. Load = 13 MV	( 4X3 WVA)	M.G.Nagar	230	3.83
				TOTAL:-	820	13.67
	Grand Total:-	69.00		Grand Total:-		80.58
				Neora-1 (R)	120	2.00
			NI 0 - 0 - 4 5 NN / A	Neora-2 (R)	95	1.58
			Neora2x3.15 MVA	Co- Operative (R)	120	2.00
	Khagaul3 X 50	Neura &		TOTAL:-	335	5.58
22	MVA132/33 KV TransformerMax.	NaubatpurMaximum Load=		Jaitipur (R)	200	3.33
	Load = 102 MW	8 MW	Naubatpur 2x5 MVA	Naubatpur (M)	210	3.50
			AVIVI CX2	TOTAL:-	8 120 2 95 1 120 2 335 5 200 3 210 3	6.83
			Sherpur	Sherpur (U)	90	1.50
			2x3.15 MVA	Biyaspur (M)	60	1.00

		TOTAL:-	150	2.50
		Janipur (R)	140	2.33
	Bhusaula	Babhanpura (R)	120	2.00
	1x5+1x3.15 MVA	Hinduani (R)	170	2.83
		TOTAL:-	430	7.17
Khagaul-I Maximum Load= 20 MW		S.K. Puri	160	2.67
IVIAXIITIUITI EOAU- 20 IVIVV		Boring Road	200	3.33
	S.K. Puri 3 x 5+1x10 MVA	B.C. Road	240	4.00
	3 X 3+ 1X 10 WVA	Anandpuri	270	4.50
		TOTAL:-	870	14.50
		Hydrolic	170	2.83
	Walmi 1x3.15 + 1x5 MVA	Walmi	10	0.17
	TAS. 13 + TAS IVIVA	TOTAL:-	180	3.00
		Dairy Old	215	3.58
	Phulwari 2 x 5 MVA	Dairy New	35	0.58
	2 X S IVIVA	TOTAL:-	250	4.17
Khagaul-II Maximum Load= 19 MW		Rajabazar	240	4.00
Waximum Load= 19 WW	I.G.I.M.S. 5x5 MVA	Samanpura	140	2.33
	SXS IVIVA	TOTAL:-	380	6.33
		Lohiyapath	140	2.33
	Cattlefeed	Jail	85	1.42
	1x5 MVA	Vijay Nagar		0.00
		TOTAL:-	225	3.75
		Rural	160	2.67
100		Town	90	1.50
Khagaul-III & IVMaximum Load= 28 MW	Garikhana3x5+1x10 MVA	M.E.S.	330	5.50
LOAU- ZO IVIVV	IVIVA	Railway	220	3.67
		TOTAL:-	800	13.33

				Town	220	3.67
				PHED (R)	200	3.33
		Danapur I & II	Danapur	M.E.S.	60	1.00
		Maximum Load= 27 MW	4x5 MVA	Rural	260	4.33
				Dedicated	60	1.00
				TOTAL:-	800	13.33
	Grand Total:-	102.00		Grand Total:-		80.50
				B.M.P.	150	2.50
				Hasanganj	60	1.00
				Jutemill	15	0.25
			MinahahahaniOvE NAVA	RBHM	30	0.50
			Mirchabari3x5 MVA	Manihari	240	4.00
				T.V. Center	84	1.40
				Town-2	157	2.62
		Katihar-1Maximum Load =		TOTAL:-	736	12.27
		12.4 MW		Falka	40	0.67
	Katihar3 x20		Falka 1x1.6 MVA	Bhangaha	30	0.50
	MVA132/33 KV			Bharsia	30	0.50
23	TransformerMax.			TOTAL:-	100	1.67
	Load=23.93 MW			Bazar	25	0.42
			Koraha	Semapur	80	1.33
			2x1.6 MVA	Dedicated	20	0.33
				TOTAL:-	125	2.08
				Town-1	204	3.40
		Katihar-2 (Industrial)	Industrial	Town-2	110	1.83
		Maximum Load = 4.4 MW	1x5+1x3.15 MVA	Industrial	10	0.17
				TOTAL:-	324	5.40
		Binodpur	Binodpur	Daheriya	66	1.10
		Maximum Load = 5 MW	2x5 MVA	Town-1	104	1.73

				Town-2	112	1.87
				PHED	11	0.18
				TOTAL:-	293	4.88
		Railway Maximum Load = 2.13 MW	Dedicated	TOTAL:-		2.13
	Grand Total:-	23.93		Grand Total:-		28.43
				Bata (M)	30	0.50
		HathidahMaximum Load = 9 MW		Hathidah (M)	160	2.67
			Hathidah3 x 5+ 1 x 3.15	Maranchi (M)	150	2.50
			MVA	CRPF (M)	10	0.17
				TOTAL:-	350	5.83
				Town-1 (U)	190	3.17
				Town-2 (U)	65	1.08
	Hathidah3 X 20	Mokama	Mokama	Road side PHED (M)	90	1.50
	MVA132/33 KV TransformerMax. Load = 20.50 MW	Maximum Load= 6 MW	2 x5 MVA	Britania (M)	10	0.17
24				NTPC (U)	10	0.17
				TOTAL:-	165	5.92
			Badhiya 1x3.15+1x5 MVA	Taal	25	0.42
				Badhiya Bazar	206	3.43
		Badhiya	TAS. ISTIAS WIVA	TOTAL:-	231	3.85
		Maximum Load= 5.5 MW	_	Pratappur		1.5
			Pratappur 1x3.15 MVA	Pipariya		1
			IXS. 13 IVIVA	TOTAL:-		2.50
	Grand Total:-	20.50		Grand Total:-		14.25
				Mirjanhat	256	4.27
	Sabour1x 20+1x50	Discoulous AMaria	Aliganj3x5 MVA	Patalbabu	92	1.53
25	MVA132/33 KV TransformerMax.	Bhagalpur-1Maximum Load= 15 MW		Vikramshila	140	2.33
	Load=61.50 MW	Load 13 WW		Akashwani	4	0.07
	LOGG-01.30 IVIVV			Kajraili	160	2.67

			Habibpur	208	3.47
			TOTAL:-	860	14.34
			Tekani	80	1.33
		Jagdishpur 2x3.15 MVA	Jagdishpur	162	2.70
		2X3.13 WVA	TOTAL:-	242	4.03
			Tatarpur	70	1.17
			University	100	1.67
		Nathnagar 2x5+1x3.15 MVA	Champanagar		-
	Bhagalpur-2	∠x5+1x3.15 IVIVA	Narhnagar	240	4.00
1	Maximum Load= 14 MW		TOTAL:-	240	6.83
		Power	Railway	20	0.33
		House(Mojahidpur)	Hospital	216	1.33 2.70 4.03 1.17 1.67 - 4.00 6.83
		1x5 MVA	TOTAL:-	236	3.93
			Ghantaghar	80	1.33
		C.S. Compound 2x5 MVA	Bhikhanpur	220	3.67
		A A IAI CXZ	TOTAL:-	300 5.00	5.00
	Civil Surgeon Maximum Load= 12 MW	T.T.C. 2x5 MVA	Khalifabagh	260	4.33
'	IVIAXIIIIUIII LUAU= 12 IVIVV		Nayabazar	110	1.83
			Masakchak	45	0.75
			TOTAL:-	415	6.92
			Sabour Town	120	2.00
			Lodipur	80	1.33
	Sabaour Maximum Load= 5 MW	Sabour 2x3.15 MVA	Sabour Rural	50	0.83
	IVIAXIIIIUIII LOAU= 5 IVIVV	2X3.13 WVA	Ghogha	40	0.67
			TOTAL:-	290	4.83
	Davari	Danani	Barari	100	1.67
l p	Barari Maximum Load= 13 MW	Barari 2x5 MVA	Industrial	65	1.08
'	Maximum Lodg— To MIVV	2//0 1/11/7 (	Dedicated	130	2.17

				TOTAL:-	295	4.92
				Jail	17	0.28
				Zero Mile	120	2.00
			Central Jail2x5 MVA	Tilkamanjhi	95	1.58
				Water Supply	67	1.12
				TOTAL:-	299	4.98
				Adampur	230	3.83
			Mayaganj 2x5 MVA	Hospital	40	0.67
				Mayaganj	228	3.80
				TOTAL:-	498	8.30
				Gauradih	55	0.92
		Gauradih	Gauradih	Machipur	40	0.67
		Maximum Load= 2.5 MW	2x3.15 MVA	Chakdharia	60	1.00
				TOTAL:-	155	2.58
	Grand Total:-	61.50		Grand Total:-		66.67
			Konharaghat3 x 5 MVA	Kelabagan	150	2.50
				Mahnar	65	1.08
				Hajzipur Town	235	3.92
				Lalganj	235	3.92
		Konharaghat		Tubewell	130	2.17
	Hazipur1 x50 +2 x 20	(Hazipur)Maximum Load = 15 MW		TOTAL:-	815	13.58
26	MVA132/33 KV	10 11111		Ragistry	220	3.67
20	TransformerMax.		Sonpur	Nayagaon	80	1.33
	Load=39 MW		2 x 5 + 2 x 3 MVA	Kharikh	80	1.33
				TOTAL:-	380	6.33
				Feeder-1	80	1.33
		EPIP + Paswan Chowk	Industrial Area 3 x 5 MVA	Feeder-2	200	3.33
		Maximum Load = 20 MW		Feeder-3	70	1.17
				Feeder-4	230	3.83

				Feeder-5	20	0.33
				Feeder-6	180	3.00
				TOTAL:-	780	13.00
				Industrial-1	150	2.50
			EPIP 2 x 5 MVA	Industrial-2	180	3.00
			ZXJWWA	TOTAL:-	330	5.50
				Bidupurbazar	130	2.17
		5.1	5.1	Nalkup	25	0.42
		Bidupur Maximum Load = 2 MW	Bidupur 2 x 5 MVA	Chaksikandar	110	1.83
		IVIAXIITIUITI LOAU – 2 IVIVV	ZXJWVA	Mahnar	115	1.92
				TOTAL:-	380	6.33
		Hazipur Railways Max. Load = 2. MW		TOTAL:-		2.00
	Grand Total:-	39.00		Grand Total:-		44.75
		SheetalpurMaximum Load = 7.5 MW	Sheetalpur1x5+1x3.15 MVA	Sheetalpur	350	5.83
				Dighwara	500	8.33
				Sheitalpur Kothi	150	2.50
	Sheetalpur1 X 10			TOTAL:-	1000	16.67
27	MVA132/33 KV TransformerMax.			Sunderpur	70	1.17
27	Load=12.50 MW	Davis	Davissassa	Derni	70	1.17
		Dariyapur Maximum Load = 5 MW	Dariyapur 2x3.15 MVA	Darihara	50	0.83
		Waximum Load = 5 WW	2X3.13 WVA	Deoti	70	1.17
				TOTAL:-	260	4.33
	Grand Total:-	12.50		Grand Total:-		21.00
	Pandaul2 X 20			Tarasarai (R)	88	1.47
28	MVA132/33 KV	PandaulMaximum Load =	Pandaul1x5 MVA	Pandaul (R)	76	1.27
20	TransformerMax.	x. 2.75 MW		Industrial (R)	12	0.20
	Load=28.89 MW			Lohat (R)		

			TOTAL:-	176	2.93
			Shivpuri ( U)	70	1.17
			Naraur (R)	60	1.00
		Jhanjarpur 2x3.15 MVA	Jhanjarpur Bazar (R)	125	2.08
	Jhanjarpur	2X3. 13 WVA	Jhanjarpur R.S. (R)	95	1.58
	Maximum Load = 4.58 MW		TOTAL:-	350	5.83
			Madhepur ( M)	150	1.17 1.00 2.08 1.58
		Madhepur 2x3.15 + 1x1.6 MVA	Parsadh (R)	20	
		2X3.13 + 1X1.0 WVA	TOTAL:-	170	2.83
			Mahinam (R)	45	0.75
			General(R)	80	1.33
		Benipur	Benipur Local (M)	80	1.33
		2x3.15	Baheri (R)	30	0.50
			Dedicated (R)	12	0.20
			TOTAL:-	202	3.37
			Town (M)	120	2.00
	Benipur		Biraul (R)	10	0.17
	Maximum Load= 4.6 MW	Biraul	Uchati (R)	20	0.33
		2x3.15 MVA	Balia (R)	100	1.00 2.08 1.58 5.83 2.50 0.33 2.83 0.75 1.33 1.33 0.50 0.20 3.37 2.00 0.17 0.33 1.67 4.17 0.45 0.15 0.60 0.27 0.27 1.67
			TOTAL:-	250	4.17
			Kiratpur (R)	27	0.45
		Ghanshyampur 1x3.15 MVA	Ghanshyampur (R)	9	0.15
		IXS. IS IVIVA	TOTAL:-	36	0.60
		Kusheshwar sthan	Kusheshwar sthan	16	0.27
		1x3.15 MVA	TOTAL:-	16	0.27
			Bajitpur (R)	100	1.67
	Manigachi	Manigachi 2x3.15 MVA	Manigachi (M)	85	1.42
	Maximum Load = 4.48 MW	ZX3. I D IVIVA	TOTAL:-	185	3.08
		Tardih	Block (U)	57	0.95

			1x3.15 MVA	Kaithwar (R)	10	0.17
				Ujan (R)	55	0.92
				TOTAL:-	122	2.03
				Rajnagar (U)	60	1.00
				Rampatti (R)	130	2.17
			Rajnagar 2x3.15 MVA	Pariharpur (R)	65	1.08
			2X3. 13 WVA	Shyamsidhar (R)	80	1.33
		Babubarhi Maximum Load = 4.86 MW		TOTAL:-	335	5.58
		IVIAXIITIUITI LOAU = 4.80 IVIVV		Khutauna (R)	80	1.33
			Babubarhi	Babubarhi Bazar (U)	30	0.50
			2x3.15 +1x1.6 MVA	Bhatchaura (R)	60	1.00
				TOTAL:-	170	2.83
				Raiyam (M)	27	0.45
		Raiyam	Raiyam (Keoti) 1x5+1x3.15 MVA	Keoti (R)	176	2.93
	Maximum Load = 3.84 M	Maximum Load = 5.04 MW	AVIVI CI.CXI+CXI	TOTAL:-	203	3.38
				Nehra	92	1.53
		<b>2</b>		Baliya	49	0.82
		Sakri Maximum Load = 3.78 MW	Sakri 1x3.15 MVA	Bhalpatti	41	0.68
		IVIAXIITIUITI LOAU = 3.76 IVIVV	IXS. IS IVIVA	Sakri Bazar ( U)	73	1.22
				TOTAL:-	255	4.25
	Grand Total:-	28.89		Grand Total:-		40.90
				Pagra	30	0.50
			Dalsinghsarai	Town	70	1.17
	Dalsinghsarai		2x5 MVA	Vidyapati Nagar	30	0.50
29	2x20 MVA 132/33 KV	Dalsinghsarai		TOTAL:-	130	2.17
29	Transformer	Maximum Load = 2.76 MW		Kancha	10	0.17
	Max. Load=11.34 MW		Mohiuddinnagar	Mohiuddinnagar	30	0.50
			2x3.15 MVA	Tada	4	0.07
				TOTAL:-	44	0.73

		Ujiyarpur Max. Load = 8.58 MW	Ujiyarpur 2X3.15 MVA	TOTAL:-		8.58
	Grand Total:-	11.34		Grand Total:-		11.48
				Town	90	1.50
				North	40	0.67
		HarnautMaximum Load =	Harnaut3X1.6 MVA	South	40	0.67
	I I a wa a cut Mass	1.84 MW		East	40	0.67
	HarnautMax. Load=1.96MW			TOTAL:-	210	3.50
30	Load=1.90MV		Kalyanbigha	Kalyanbigha	60	1.00
			2X5 MVA	TOTAL:-	60	1.00
		Cheral	Cheral	Cheral	70	1.17
		Maximum Load= 0.12 MW	2X5 MVA	TOTAL:-		1.17
	Grand Total:-	1.96		Grand Total:-		5.67
		Katra 12 MM	Katra 5 x5 MVA	Katra	220	3.67
				Malsalami	200	3.33
				Didarganj	200	3.33
		Maximum Load= 12 MW		Jalla	200	3.33
				TOTAL:-	820	11.48 1.50 0.67 0.67 0.67 3.50 1.00 1.17 1.17 5.67 3.67 3.33 3.33
	Fatuha			Town Radio (U)	220	3.67
31	3X 50 MVA 132/33 KV			Rural (R)	130	2.17
31	Transformer			Khusrupur (M)	220	3.67
	Max. Load=57 MW		Fatuha 3 x5+ 1 x 3.15 MVA	Budhuchak (R)	60	1.00
		Fatuha Maximum Load= 18 MW	3 X3+ 1 X 3.13 IVIVA	Industrial (M)	120	2.00
		IVIAXIITIUITI LUAU= 16 IVIVV		Town Station (M)	140	2.33
				TOTAL:-	890	14.83
			Daniyawa	Daniyawa (M)	90	1.50
			1 x5 + 1x 3.15 MVA	Machariyawa (R)	120	2.00

				TOTAL:-	210	3.50
		Khusrupur	Khusrupur	Kushrupur (M)	30	0.50
		Maximum Load= 1 MW	2x3.15 MVA	TOTAL:-	30	0.50
				West		
				Maharajganj		
		Meena Bazar	Meena Bazar	City		
		Max. Load = 13 MW	5X5 MVA	Paschim Darwaza		
				Chowk		
				TOTAL:-		13.00
		Dina Iron Max. Load = 10 MW				10.00
	Grand Total:-	54.00		Grand Total:-		55.50
				Nadaul (R)	80	1.33
				Dhanama (R)	50	0.83
			Masaurhi Old 2 x5 MVA	Madaul (R)	60	1.00
			Z XO IVIVA	Nadwa (R)	70	1.17
		Masaurhi-1 Maximum Load=8.4 MW	Dhanarua 2 x 3.15 MVA	TOTAL:-	260	4.33
	   Masaurhi			Town (M)	60	1.00
	2X 20 MVA			Deokuli (R)	90	1.50
	132/33 KV			Kolhachak (R)	120	2.00
32	Transformer		2 X 3.13 WVA	Bans Bigha (R)	80	1.33
	Max. Load=13.40 MW			TOTAL:-	350	5.83
				Town (U)	220	3.67
				Pitmas (M)	160	2.67
		Masaurhi-2	Masaurhi New	Dedicated (M)	20	0.33
		Maximum Load= 5 MW	2 x5 + 1x 3 MVA	Peowaria (M)	150	2.50
				TOTAL:-	550	9.17
	Grand Total:-	13.40		Grand Total:-		16.33
33	Siwan2X 20	SiwanMaximum Load =	Siwan3x5 MVA	Siwan-1	120	2.00

MVA132/33 KV	10.5 MW		Siwn-2	80	1.33
TransformerMax.			Railway	50	0.83
Load=27.50 MW			Barhariya	120	2.00
			Panchrukhi	80	1.33
			TOTAL:-	450	7.50
			Tari	80	1.33
			Parari	70	1.17
		Chainpur 2x3.15 MVA	Hasanpura	40	0.67
		2X3. 13 IVIVA	Siswan Town	90	1.50
			TOTAL:-	280	4.67
		Dankath	Raghunathpur	20	0.33
		Raghunathpur 1x1.6 MVA	Aander	160	2.67
		TXT.O WVA	TOTAL:-	180	3.00
			Mairwa	110	1.83
			Pipra	150	2.50
		Mairwa 1x3.15+1x5 MVA	Guthani	170	2.83
		170.10+170 WWA	Darauli	180	3.00
	Mairwa		TOTAL:-	610	10.17
	Maximum Load = 6 MW		Jeeradei	250	4.17
		Srinagar	Srinagar	65	1.08
		1x5+1x3 MVA	Dhanauti	275	4.58
			TOTAL:-	590	9.83
			Dharaundha	100	1.67
		Maharatarat	Maharajganj	140	2.33
		Maharajganj 1x5+1x3.15 MVA	Basantapur	120	2.00
	Maharajganj	INOT INOTIO WIVA	Tarwara	60	1.00
	Maximum Load = 5 MW		TOTAL:-	420	7.00
		Ekma	Ekma	200	3.33
		1x1.6+1x3 MVA	Daudpur	100	1.67
			TOTAL:-	300	5.00

				Tarwara	150	2.50
				Panchrukhi	110	1.83
		Panchrukhi Max. Load = 6 MW	Panchrukhi 2x3.15 MVA	Hasanpura	160	2.67
		Max. Load = 6 MW	2X3.15 IVIVA	Talkathu	40	0.67
				TOTAL:-	460	7.67
	Grand Total:-	27.50		Grand Total:-		54.83
				Sonebarsa	115	1.92
		Sitamarhi Maximum Load= 14 MW		Rega	161	2.68
			Dumra	Sitamarhi	260	4.33
			4 x5 MVA	Rajopatti	255	4.25
				Dumra	255	
				TOTAL:-	1046	
				Pupri	100	1.67
				Bhadiyan	120	2.00
			Pupri 2 x3.15 MVA	Bajpatti	110	1.83
	Sitamarhi 2 x 20 MVA	Pupri Maximum Load = 5MW	2 X3. 13 IVIVA	Chorouth	70	1.17
				TOTAL:-	400	6.67
34	132/33 KV		Bajpatti	Bajpatti	60	1.00
	Transformer	Waxiiiiaiii Edad — diww		Pachra Newahi	75	1.25
	Max. Load=28.25 MW			Gangti	80	1.33
			2 x5 MVA	Balhamanorath	45	0.75
				Balharasulpur	45	0.75
				TOTAL:-	305	5.08
				Runisaidpur Town	45	0.75
				Belsand	60	1.00
		Runisaidpur	Runisaidpur	Manikchouk	140	2.33
		Maximum Load = 5 MW	1 x 5 +1 x3.15 MVA	Toahi	5	0.08
				Aurai	60	1.00
				TOTAL:-	310	5.17

			Shivhar Urban	90	1.50
		Shivhar	Dumri	80	1.33
		2 x3.15 MVA	TOTAL:-	170	2.83
	Shivhar Maximum Load = 4 MW		Aura	28	0.47
	Maximum Loau = 4 MW	Tariyani	Baidyanathpur	26	0.43
		1 x3.15 MVA	Chatauni	32	0.53
			TOTAL:-	86	1.43
			Sursan Town	70	1.17
	Sursand	Sursand	Sursand Rural	120	2.00
	Maximum Load = 12 MW	2 x3.15 MVA	Madhwapur	130	2.17
			TOTAL:-	320	5.33
Grand Total:-	40.00		Grand Total:-		43.95
			Baida	25	0.42
			Tajpur Jail	10	0.17
	NA-b	Mahammon 5 : 4: 0 45	Mohanpur	10	0.17
	MohanpurMaximum Load = 9 MW	Mohanpur3x5+1x3.15 MVA	Town-1	25	0.42
	3 10100	, .	Town-2	50	0.83
			Town-3	80	1.33
			TOTAL:-	200	3.33
Samastipur1X502 x			PUSA Road	80	1.33
20 MVA132/33 KV			PUSA Farm	10	0.17
TransformerMax.	PUSA	PUSA	PUSA Rural	15	0.25
Load=41.50 MW	Maximum Load = 8 MW	2x5 MVA	PUSA Bazar	10	0.17
			Navoday Vidyalaya	2	0.03
			TOTAL:-	117	1.95
			Deodha	2	0.03
	Docare	Docara	Katghari	30	0.5
	Rosera Max. Load = 9.5 MW	Rosera 1X3.15+ 1X5 MVA	Narhan	50	0.83
	IVIAA. LOAG – 9.5 IVIVV	INO. TOT IND WIVA	Nalkup	2	0.03
			Town	70	1.17

				TOTAL:-	154	2.57
				Narhan	50	0.83
			Vibhutipur 1X3.15+1X5 MVA	Patelia	20	0.33
			179.10+179 MAY	TOTAL:-	70	1.17
				Rajghat	20	0.33
			Hasanpur	Hasanpur	4	0.07
			1X3.15+1X5 MVA	Bithan	20	0.33
				TOTAL:-	44	0.73
				Kalyanpur Urban	4	0.07
				Kalyanpur Rural	40	0.67
			Kalyanpur	Fulwariya	3	0.05
			2x5 MVA	Warisnagar	20	0.33
		Kalyanpur		Gopalpur	30	0.50
		Maximum Load = 6 MW		TOTAL:-	97	1.62
				Sadipur	25	0.42
			Warisnagar	Warisnagar	20	0.33
			1x5+1x3.15 MVA	Mashina	30	0.50
				TOTAL:-	75	1.25
		Rameshwar Jute Mill Maximum Load= 1.5 MW		Dedicated		1.5
		Railway Maximum Load= 2.7 MW		Dedicated		2.7
	Grand Total:-	41.50		Grand Total:-		16.82
				Railway (U)	5	0.08
	Darbhanga		D 1 14 5 5 7 1	Emergency (U)	45	0.75
	(Ramnagar)1 X 20+1	amnagar)1 X 20+1 0 MVA132/33 KV PandasaraiMaximum Load	Pandasarai1 x 5 MVA	General (U)	80	1.33
36	66 x 50 MVA132/33 KV TransformerMax.			TOTAL:-	130	2.17
	Load=42 MW		DMCH	Emergency-1 (U)	15	0.25
			2 x5 MVA	Feeder-2 (U)	120	2.00

		General (U)	70	1.1
		Feeder-4 (U)	130	2.1
		Emergency-5 (U)	45	0.7
		TOTAL:-	380	6.3
		Donar (U)	180	3.0
	Urban	Emergency (U)	26	0.4
	2 x 5 MVA	Guluara (U)	220	3.6
		TOTAL:-	426	7.1
		Rural (R)	90	1.5
	Jail (Lahariasarai) 1x5 MVA	Ekmi (M)	50	0.8
	A A IAI CX I	TOTAL:-	140	2.3
		R. S. Tank (M)	160	2.6
		Industrial (M)	45	0.7
Donar Mayimum Load 12 M	Donar 1 V5 · 1 V2 · 1 F M) (A	Laxmisagar (U)	130	2.1
Maximum Load = 12 M	IW 1x5+1x3.15 MVA	Radio Station (U)	5	0.0
		TOTAL:-	340	5.6
		Kapchahi (R)	50	0.8
		Chandanpatti (M)	90	1.5
	Anar	Bahedi (R )	20	0.3
	2x3.15 MVA	Anar (R)	2	0.0
		Hayaghat (M)	60	1.0
Anar Poria		TOTAL:-	222	3.7
Maximum Load = 5 M		Bishanpur (R)	70	1.1
	Poria 1x1.6 MVA	Dilahi (R)	25	0.4
	IXI.O IVIVA	TOTAL:-	95	1.5
		Baheri (R)	80	1.3
	Baheri 1x3.15 MVA	Khangraitha(R)	30	0.5
	AVIVI C1.6x1	TOTAL:-	110	1.8
Lahariasarai	Gangwara	Garharia(R)	30	0.50

		Maximum Load = 15 MW	2x3.15+1x5 MVA	Shovan (M)	120	2.00
				Mithila (M)	40	0.67
				Loam (R)	120	2.00
				Aerodram (M)	50	0.83
				Kamtaul (R)	110	1.83
				Ramnagar (M)	100	1.67
				TOTAL:-	570	9.50
				Industrial (U)	20	0.33
			Б	Emergency	8	0.13
			Bela 2x 5 MVA	Kathalbari (U)	160	2.67
			2X 3 W X	Shivdhara (U)	200	3.33
				TOTAL:-	388	6.47
				Jalley (R)	80	1.33
			Sanahpurdih	Singhwara (M)	90	1.50
			1x5+1x1.6 MVA	Bharwara (M)	30	0.50
				TOTAL:-	200	3.33
	Grand Total:-	42.00		Grand Total:-		50.02
				Gangia-II	200	3.33
				Gangia-II	190	3.17
				Town-I	160	2.67
				Town-II	80	1.33
	Saharsa2 x 20	SaharsaMaximum Load= 12 MW	Saharsa5x5 MVA	Collectoriate	80	1.33
37	MVA132/33 KV	12 10100		Railway	30	0.50
31	TransformerMax.			Baidhnathpur	150	2.50
	Load=32.50 MW			Panchgachha	60	1.00
			TOTAL:-	950	15.83	
		Neve Dezer	Mayahazar	Nayabazar	150	2.50
		Naya Bazar Maximum Load= 6 MW	Nayabazar 2x5 MVA	Sonbarsa	70	1.17
		Maximum Loda - 6 WW	ZAO IVIVA	Bariyahi	190	3.17

				Navoday	10	0.17
				TOTAL:-	420	7.00
				Saridiha	200	3.33
				Sonbarsa	210	3.50
		Simri Bakhtiyarpur	Simri Bakhtiyarpur	Laxmina	120	2.00
		Maximum Load= 8 MW	3x5 MVA	Town	190	3.17
				TOTAL:-	720	12.00
				Town-1	230	3.83
			NA II	Town_2	180	3.00
		Madhepura Maximum Load= 10 MW	Madhepura 2x5 MVA	Murho	190	3.17
		Maximum Load TO MIVV	ZAO IVI VA	Sukhasan	120	2.00
				TOTAL:-	720	12.00
			Sigheshwar	Singheshwar	180	3.00
		Singheshwar Maximum Load= 5 MW		Ghelar	60	1.00
			2x5 MVA	Shankarpur	120	2.00
			_/,0	Gamharia	80	1.33
				TOTAL:-	440	7.33
		Gamharia	Gamharia	Gamharia	50	0.83
		Maximum Load= 1 MW	1x3.15+1 x1.5 MVA	TOTAL:-	50	0.83
				Murliganj	120	2.00
		Murliganj	Murliganj	Kumarkhand	180	3.00
		Maximum Load= 4MW	1x5+1 x3 MVA	Jeetapur	100	1.67
				Babhangama	120	2.00
				TOTAL:-	520	8.67
	Grand Total:-	32.50		Grand Total:-		63.67
	Rafiganj2 x 20	Definer:Marries uns la sal		Town		1.70
	MVA132/33 KV	RafiganjMaximum Load = 3.6 MW	Rafiganj2 x 5 MVA	Gramin		2.00
38	TransformerMax.	J.U IVIVV		TOTAL:-		3.70
	Load=10.72 MW	Guraru	Guraru (Paraiya)	Town	20	0.33

		Maximum Load = 2.25 MW	1 x 3.15 MVA	Paraiya	70	1.17
				Konchi	65	1.08
				TOTAL:-		2.58
				Bar		1.00
			Uchouli 1 x 3.15 MVA	Uchouli		1.00
			I X 3. 13 IVIVA	TOTAL:-		2.00
				Town		0.60
			Madanpur	Shivganj		0.56
		Uchouli	2 x 3 MVA	Madanpur		0.45
		Maximum Load = 4.87 MW		TOTAL:-		1.61
				Unthu		1.00
			_	Fessor Town		0.60
			Fessor 2 x 3.15 MVA	Jhikatiya		0.40
				Bagaiya		0.55
				TOTAL:-		2.55
	Grand Total:-	10.72		Grand Total:-		12.44
			PSS Jamui	Jamui Town 1	159	2.65
				Jamui Town 2	185	3.08
				Ratanpur	107	1.78
		Jamui- 13 MW	3x 5+ 1x 3.15 MVA	Lakhisari	106	1.77
				Mahadeo Simaria	126	2.10
	JamuiMax. Load=24			Malaypur	132	2.20
39	MW			TOTAL:-	815	13.58
				Khaira Town	65	1.08
			PSS Khaira -	Bela	58	0.97
		Jamui- Khaira - 4.3 MW	2x 3.15 MVA	mango Bandar	77	1.28
			2/(3/10/11/7)	Garhi	77	1.28
				TOTAL:-	277	4.62
		Laxmipur- 3.75 MW	Laxmipur PSS -	Laxmipur Town	65	1.08

			2 x 3.15 MVA	Laxmipur Rural	77	1.28
				Barhat	63	1.05
				Telaria	36	0.60
				TOTAL:-	241	4.02
		II 'I C' II 4 5 1 1 1 1 1	Gidhour PSS - 1x3.15	Gidhour	100	1.67
		Jhajha- Gidhore- 1.5 MW	MVA	TOTAL:-	100	1.67
				Town + Rural	169	2.81
			Jhajha PSS-	Sohjana+ Railway	128	2.13
			1x 5 MVA + 1x 3.15	Borwa	60	1.00
			MVA	Sohjana	43	0.71
		Jamui- Sono- 6 MW		TOTAL:-	399	6.65
			0 500	Batiya	95	1.58
			Sono PSS 1x 5 MVA + 1x 3.15 MVA+ 1x 1.6 MVA	Keshopur	95	1.58
				Sabakhan	70	1.17
				TOTAL:-		4.33
				Sikandra	47	0.78
		Jamui- sikandra- 2.85 MW	Sikandra PSS-	Halsi	13	0.22
		damar sikanara 2.00 mm	1x 3.15 MVA	Tarhari	13	0.22
				TOTAL:-	73	1.22
				Aliganj	32	0.53
			Aliganj PSS	Mirjaganj	40	0.67
		Sikandra- Aliganj- 2.5 MW	2x 3.15 MVA	Arah	40	0.67
				Bhaluana	11	0.18
				TOTAL:-	123	2.05
	Grand Total:-	24.00		Grand Total:-		38.13
				Raxaul Town	240	4.00
		<b>D</b> 1	, (D )	Industrial	110	1 02
40	Raxaul Max. Load=23.76 MW	Raxaul Max. Load = 23.76 MW	Laxmipur(Raxaul) 3x5 +1x3.15 MVA	Railway	110	1.83
	IVIAX. LUAU=23.70 IVIVV	IVIAX. LUAU = 23.70 IVIVV	OXO TIXO. 10 IVIVA	Ramgarhwa	235	3.92
				Shitalpur	135	2.25

				TOTAL:-	720	12.00
				Adapur	20	0.33
				Harpur	60	1.00
			Adapur	Chhauradano	60	1.00
			1x3.15	TOTAL:-	140	2.33
	Grand Total:-	23.76		Grand Total:-		14.33
				Rural		
				Pai Bigha		
	Belaganj	Belaganj Maximum Load =3 MW	Belaganj 1 x5 +1x 3.15 MVA	Barabar		
	2 x 10 MVA	132/33 KV Transformer Max. Load=7 MW	Town			
41			TOTAL:-	0	3.00	
				Bara	114	1.90
		Chakand Maximum Load = 4 MW	Chakand	Chakand	110	1.83
		Waximum Load = 1 WW	2 x3.15 MVA	TOTAL:-	224	3.73
	Grand Total:-	7.00		Grand Total:-		3.73
		ARWAL Max. Load = 1.26 MW	ARWAL 1x3.15 MVA	ARWAL URBAN		0.5
				ARWAL RURAL		1.3
		IVIAX. LOAU = 1.20 IVIVV	IXS. 15 IVIVA	TOTAL:-		1.8
			ATTAULA	KINJER		1
				KAURI		0.4
	ATTAULAH		1x3.15 MVA	ARWAL(IMAMGANJ)		0.6
42	2x20 MVA	ATTAULAH		TOTAL:-		2.00
	Max. Load=3.54MW	Max. Load = 1.6 MW		KURTHA		0.40
			KURTHA	BANSI		0.35
			1x3.15 MVA	SAKURABAD		1
				TOTAL:-		1.75
		KARPI	KARPI	KARPI		0.68
		Max. Load = .68 MW	1x1.6 MVA	TOTAL:-		0.68

	Grand Total:-	3.54		Grand Total:-		4.48
		A.D. Colony Mayimy and		Feeder-1	180	3.00
		A.P. ColonyMaximum Load = 15 MW	A.P. Colony2 x 5 MVA	Feeder-2	185	3.08
		= 13 10100		TOTAL:-	365	6.08
				Dandibagh-1	210	3.50
				Dandibagh-2	190	3.17
		Dandibagh	Dandibagh	PHED	27	0.45
		Maximum Load = 10 MW	3 x 5 MVA	Khiriyawa	80	1.33
				Narali	60	1.00
	Chandauti2 x 50			TOTAL:-	567	9.45
			Gandhi Maidan	Dighi	160	2.67
			2 x 5 MVA	Godam	200	3.33
			ZXSIVIVA	TOTAL:-	360	6.00
		Gandhi Maidan	Panchayati Akhara	Bitho	160	2.67
		Maximum Load = 13 MW		River Side	210	3.50
			2 x5 MVA	Cotton Mill	120	2.00
43	MVA132/33 KV TransformerMax.		ZXOWYY	G.B. Road	210	3.50
	Load=49 MW			TOTAL:-	700	11.67
	Load—45 IVIVV		Cherki 2 x 3.15 MVA	Cherki Bazar		1.10
				Wireless		1.00
		Oh and i		Kurmawa		1.20
		Cherki Maximum Load = 4 MW		Bishanpur		1.00
		Waxiiidiii Load = 4 WW		TOTAL:-		4.30
			Medical College	Medical	25	0.42
			2 x 5 MVA	TOTAL:-	25	0.42
			Control Otage	Feeder-2	210	3.50
			Central Store 2 x 3.15 MVA	Feeder-4	190	3.17
		O a militar li Ot	2 X 3. 13 IVIVA	TOTAL:-	400	6.67
		Central Store Maximum Load = 5 MW		Feeder-3	210	3.50
		IVIAXIIIIUIII LUAU = 3 IVIVV	Chandauti	Feeder-5	160	2.67
			3x5 MVA	Pani Tanki	3	0.05
				Feeder-6	160	2.67

				Feeder-7	210	3.50
				Feeder-1	110	1.83
				TOTAL:-	853	14.22
				Railway	75	1.25
				Station Road	210	3.50
			Raiway Maidan	Swarajpuri	160	2.67
				Karimganj	160	2.67
				Area Board	3	0.05
				TOTAL:-	608	10.13
	Grand Total:-	49.00		Grand Total:-		68.93
				Garhani (U)	171	2.85
			Garhani1 X 3.15 MVA	Agiaon (U)	F0	0.07
				Kasap (R)	52	0.87
				TOTAL:-	223	3.72
		GarhaniMaximum Load- 4 MW48 Km		Agiaon (U)	12	0.20
		IVIVV 40 IXIII		Khair (R)	12	0.20
			Sahar 2x3.15 MVA	Amghari (R)	125	2.08
			2X3.13 WVA	Sahar (R)	123	2.00
	Ara2 x 20 MVA132/33			TOTAL:-	360	2.28
44	KV TransformerMax. Load=40 MW	Bihari Mill Dedicated 33 KV consumer Maximum Load = 10 MW		TOTAL:-		10.00
		Ara- 1(Jagdishpur)		Town (M)	121	2.02
		Maximum Load = 3 MW	Jagdispur 2 x 3.15 MVA	Rural (R)	165	2.75
		30 Km	∠ X 3.15 IVIVA	TOTAL:-	286	4.77
		A 0/1 11		Feeder- 3 (U)	220	3.67
		Ara-3 (Japani farm)	Japani Farm	Feeder- 4 (U)	220	3.67
		Maximum Load = 12 MW 20 Km	3 x5 MVA	Feeder- 5 (U)	230	3.83
				Dedicated (R)		

				TOTAL:-	670	11.17
				Dhobaha (R)	165	2.75
			Saraiya	Saraiya (R)	165	2.75
			2 x 3.15 MVA	Dedicated (M)	165	2.75
				TOTAL:-	330	5.50
				Town-1 (R)	220	3.67
				Town-2 (R)	200	3.33
			Powerganj	PGCIL (R)		
			3x5 MVA	Anighat (R)	200	3.33
				Koilwar (U)		
				TOTAL:-	620	10.33
		Powerganj		Sandesh (M)	105	0.75
		Maximum Load =4 MW 63 Km	Sandesh 1x3.15	Kari (R)	165	2.75
		1X3.15	183.15	TOTAL:-	785	13.08
			Jalpura (R)	405	0.75	
			Salimpur (R)	165	2.75	
			Akhgaon2 x 5 MVA	Fatehpur (R)	168	2.80
			-	Parsurampur (R)	100	2.00
				TOTAL:-	333	5.55
				Karisath (R)	220	3.66
				Anauta (U)	220	3.00
		Zero mile Max. Load =7 MW	Zero mile 2 x 5 MVA	Udawantnagar (M)	220	3.66
		Max. Load =7 MW	ZXSIVIVA	Asni (R)	220	3.00
				TOTAL:-	440	7.32
	Grand Total:-	40.00		Grand Total:-		63.72
	Rajgir			Silao (R)	55	0.92
45	2 X 20 MVA	Rajgir	Rajgir	Kund (U)	80	1.33
75	132/33 KV	Maximum Load = 11 MW	3 x 5 MVA	Katari (R)	175	2.92
	Transformer			PHED (R)	80	1.33

	Max. Load=28 MW			Town (U)	140	2.33
				TOTAL:-	530	8.83
				Mahuri (R)	88	1.47
				Nalanda (M)	100	1.67
		Nalanda	Nalanda	Maniyawa (R)	90	1.50
		Maximum Load = 9 MW	2 x5 +2 x 3.15 MVA	Nanand	80	1.33
				Museum (R)	20	0.33
				TOTAL:-	378	6.30
				Giriyak (R)	150	2.50
		Atari Maximum Load = 3 MW	Raitar 2 x 5 MVA	Pawapuri (R)	200	3.33
		Maximum Load - 5 MW	ZXSIVIVA	TOTAL:-	350	5.83
				Sima (R)	70	1.17
			011	Nepura (R)	70	1.17
		Silao Maximum Load = 5 MW	Silao 2 x 3.15 MVA	PHED (R)	80	1.33
		Maximum Load = 5 MW	2 X 3. 13 WVA	Town (M)	60	1.00
				TOTAL:-	280	4.67
	Grand Total:-	28.00		Grand Total:-		25.63
				Town	205	3.42
				Hospital	105	1.75
		KaranchouraMax. Load =	Karanchoura 3 x 5 MVA	Laldarwaja	165	2.75
		10.05 MW	Karanchoura 3 x 5 WVA	Railway	40	0.67
				Kasturba	140	2.33
46	Jamalpur1x20+1x50			TOTAL:-	655	10.92
40	MVAMax. Load=42.32 MW	B: 1	Bindwara	Puraniganj	175	2.92
		Bindwara Max. load = 4.36 MW	1 x 5 MVA + 1x	Khoja Bazar	135	2.25
		IVIAX. 10au - 4.30 IVIVV	3.15MVA	TOTAL:-	310	5.17
			00/44 I/V/ NI= = = II= I= = =	Nandlalpur Town	120	2.00
		Nandlalpur Max. Load = 5.76 MW	33/11 KV Nandlalpur 2 x 5 MVA	T.V Tower	125	2.08
		IVIAX. LOAD = 5.76 MVV	ZXSIVIVA	Sitakund	110	1.83

				TOTAL:-	355	5.92
				Dharhara	90	1.50
				Dasharathpur	60	1.00
			Dharhara 2x 3.15 MVA	Bangalwa	35	0.58
		Dharhara +Ramchandrapur	2X 3. 13 WVA	Basavnd	140	2.33
		Max. Load = 4 MW		TOTAL:-	325	5.42
			Ramchandrapur	Ranmchandrapur	110	1.83
			1 x 3.15 MVA	TOTAL:-	110	1.25
		Dakranala	Delgranale 1 v F MV/A	Dakranala	75	1.25
		Max. Load = 1.47 MW	Dakranala 1 x 5 MVA	TOTAL:-	75	1.25
				Safiabad	110	1.83
			Safiabad	Jamalpur	260	4.33
		Safiabad Max. Load = 7.61 MW	2x5 MVA +1x 3.15	Nayaganw	140	2.33
			MVA	patam	230	3.83
				TOTAL:-	740	12.33
		<b>5</b> .	Bariarpur 1 x 5 MVA	Bariarpur Bazar	130	2.17
		Bariarpur Max. Load = 3.1 MW		Kalpsthan	45	0.75
		IVIAX. LOAU = 3.1 IVIVV	1 X 3 WVA	TOTAL:-	175	2.92
		I.T.C. Max .load = 1.67 MW				1.67
		Railways Max. Load = 4.3 MW				4.30
	Grand Total:-	42.32		Grand Total:-		45.17
				33 KV Kahalgaon		13
				Kahalgaon		2.5
47	KahalgaonMax.	KahalgaonMax. load = 13	PSS Kahalgaon 2x	Ekchari		1.5
41	Load=16 MW MW	MW	5 MVA	Nandlalpur		1
				Shiv Narayan		1.5
				33 KV Sanhaulla		3

				TOTAL:-		22.50
				33 KV Pirpainti		2.00
			PSS Pirpainti	Pirpainti		1.00
			1x3+1X3.15 MVA	Shermari		2.00
				TOTAL:-		5.00
				Ghogha	40	0.67
		Sanhaula MAX. Load = 3 MW	PSS Sanhaulla 1x3.15+1x5 MVA	Sanhaula	35	0.58
		IVIAX. LOAU = 5 IVIV	1X3.13+1X3 WIVA	TOTAL:-	75.00	1.25
	Grand Total:-	16.00		Grand Total:-		28.75
				Town-1	160	2.67
				Town-2	200	3.33
				Town-3	180	3.00
			Dadad v 5 MV/A	Shivsagar	80	1.33
			Beda4 x 5 MVA	Mini	80	1.33
				Karpurva	40	0.67
				TV	70	1.17
				TOTAL:-	810	13.50
	Sasaram2 X 20			Takiya	200	3.33
40	MVA132/33 KV	SasaramMaximum Load =		Kargahar	150	2.50
48	TransformerMax.	21 MW	Takiya 3x5 MVA	Gaurakshini	240	4.00
	Load =32 MW		SXS IVIVA	Rural	60	1.00
				TOTAL:-	650	10.83
				Nokha	120	2.00
			Nokha	Hydel	70	1.17
			1x5 +1x3.15 MVA	Jabra	100	1.67
			TOTAL:-	290	4.83	
			Naugai 1x3.15 MVA	Karup	120	2.00
				Tarachandi	100	1.67
				Darigaon	150	2.50

				TOTAL:-	370	6.17
				Shivsagar	150	2.50
		Shivsagar	Shivsagar	Khurmabag	140	2.33
		Maximum Load =6 MW	2x5 MVA	Chamaraha	200	3.33
				TOTAL:-	490	8.17
				Chenari	100	1.67
				Telari	50	0.83
		Chenari	Chenari	Badalgarh	40	0.67
		Maximum Load =5 MW	2x3.15 MVA	Malhipur	60	1.00
				Sabar	50	0.83
				TOTAL:-	300	5.00
	Grand Total:-	32.00		Grand Total:-		48.50
				Kapleshwar (R)	37	0.62
				Birsar (R)	50	0.83
				Saurath (M)	42	0.70
			Dahilia 200 45 NAVA	Rahika (U)	48	0.80
			Rahika3x3.15 MVA	Seema (R)	4	0.07
		Madhubani-		Dedicated (R)	6	0.10
		RahikaMaximum Load = 15 MW		Benipatti (R)	40	0.67
	Madhubani2 X 20	IVIVV		TOTAL:-	227	3.78
49	MVA132/33 KV TransformerMax.			Old (U)	180	3.00
	Load=25 MW		Madhubani	Emergency (U)	20	0.33
	20dd-20 WW		2x5 MVA	Koshi (U)	210	3.50
				TOTAL:-	410	6.83
				Arer (R)	95	1.58
				Basaitha (R)	75	1.25
		Benipatti Maximum Load – 10 MW	Benipatti 1x1.6+1x5 MVA	Madhwapur (R)	55	0.92
		Maximum Load = 10 MW	A VIVI CXI TO. I XI	Benipatti (R)	60	1.00
				TOTAL:-	285	4.75

				Tektar	121	2.02
			Ahilyasthan 2x5 MVA	Kamtaul (R)	165	2.75
			ZXS IVIVA	TOTAL:-	286	4.77
	Grand Total:-	25.00		Grand Total:-		20.13
				Town-1	100	1.67
				Town-2	60	1.00
				Town-3	100	1.67
				Nautan	Dead	
		BetiyaMaximum Load = 12	Mansatola4 x 5 MVA	Chanpatia	10	0.17
		MW	Walisaloia4 X 5 WVA	Barbath	40	0.67
				Industrial-1	20	0.33
				Industrial-2	30	0.50
				D.M.	10	0.17
				TOTAL:-	120	4.50
	Betiya2 x 20			Chihuri	20	0.33
50	MVA132/33 KV			Lohiyaria	28	0.47
50	TransformerMax.	Kumarbag	Kumarbag (Chanpatia)	Chanpatia	20	0.33
	Load=19MW	Maximum Load = 3 MW	1 x 5 MVA	Jawahar Navodaya Vidyalaya	3	0.05
				TOTAL:-	71	1.18
				Tumkariya	10	0.17
			Bariya	Bhitaha	8	0.13
			1 x 5 MVA	Bagahi	2	0.03
		Bariya		TOTAL:-	20	0.33
		Maximum Load = 4MW		Navalpur	12	0.20
			Gojapatti	Bahuarba	20	0.33
			1 x 5 MVA	Chaminiya	18	0.30
				Khairitia	15	0.25

				TOTAL:-	65	1.08
				Nautan	20	0.33
			Nautan	Maruha	12	0.20
			1 x 5 MVA	Mangalpur	15	0.25
				TOTAL:-	47	0.78
	Grand Total:-	19.00		Grand Total:-		7.88
				Sonebaraj	40	0.67
				Badiha	90	1.50
				Indrapuri	50 0.83 140 2.33 120 2.00 15 0.25 150 2.50 285 10.08 0.70	0.83
		IndrapuriMaximum Load =	=   Indrapuri2x5+1x3+1x1. 5 MVA	Mirasarai	140	2.33
		14 MW		Tilauthu	120	2.00
				Sentorium	15	0.25
				Hurka	150	2.50
				TOTAL:-	285	10.08
				Local		0.70
	Sonenagar1 X			Tendwa		1.00
	50+1x20+1x12.5		Navinagar 1 x 5 +1x3.15 MVA	Navinagar		4.00
51	MVA132/33 KV TransformerMax.		1 X 3 + 1X3.13 WVA	Punpun		1.00
	Load=37 MW	Navinagar Maximum Load =13 MW		TOTAL:-		6.70
		IVIAXIITIUITI LOAU = 13 IVIVV		Rishikalp		3.5
			Amba	Maharjganj		2.1
			2 x 5 MVA	Nirda Janpur		1.00
				TOTAL:-		6.60
				Local		0.5
		Danage	D	Parao		0.8
		Barem Maximum Load = 10MW	Barun 2 x 5 +1x3.15 MVA	Bhopatpur		0.2
		IVIANIIIUIII LUAU = IUIVIVV	2 X 3 T 1X3. 13 IVIVA	Nawrail		2
				Railway		3.5

				TOTAL:-		5.70
				Barem		1
				Madhe		1
			Barem	Salaiya		1
			2 x3.15 MVA	Tetaria		0.8
				TOTAL:-		3.80
				Jogiya		0.8
			Pritampur (Tengra)	Barkagaon		0.9
			2 x3.15 MVĂ ´	Jamhaur		1
				TOTAL:-		2.70
	Grand Total:-	37.00		Grand Total:-		35.58
				Feeder-1	160	2.67
				Feeder-2	150	2.50
				Feeder-3	50	0.83
			Ramgarh3x5 MVA	Feeder-4	150	2.50
				Feeder-5	20	0.33
				Feeder-6	60	1.00
				TOTAL:-	590	9.83
	Karamnasa2x20+1x5			Cheharia	45	0.75
<b>F</b> 0	0 MVA132/33 KV	Danasah	Kalyanpur 1x3.15 MVA	Kalyanpur	90	1.50
52	TransformerMax.	Ramgarh	IXS. IS WVA	TOTAL:-	135	2.25
	Load=32.70 MW			Feeder-1	100	1.67
				Feeder-2	60	1.00
			Nuaon	Feeder-3	20	0.33
		2x3.15 MVA	Feeder-4	70	1.17	
				Feeder-5	50	0.83
				TOTAL:-	300	5.00
			Chaurasia	Chaurasia	30	0.50
			1x3.15 MVA	Jamorana	60	1.00

				Bamhaur	60	1.00
				TOTAL:-	150	2.50
				Chand Urban	50	0.83
			Chand	Chand Rural	180	3.00
			2x5 MVA	Hatta	200	3.33
				TOTAL:-	430	7.17
				Rural	220	3.67
		Chand	Durgawati 1x 3.15 MVA	Urban	20	0.33
			1X 3.15 IVIVA	TOTAL:-	240	4.00
				Rural	100	1.67
			Karamnasa	Town	50	0.83
			1x 3.15 MVA	TOTAL:-	150	2.50
				Pump Canal	75	1.25
		Larma	Larma 1x3.15 MVA	Rural	75	1.25
			1X3.15 IVIVA	TOTAL:-	150	2.50
		Kakrait	Kakrait	Pump Canal	180	3.00
		Kakiait	1x 5 MVA	TOTAL:-	180	3.00
	Grand Total:-	32.70		Grand Total:-		38.75
				Banjari	150	2.50
		SamhautaMaximum Load =		Chutia	200	3.33
		4 MW	Samhauta3x5 MVA	Samhauta	10	0.17
				Rohtas	210	3.50
	Banjari1x20			TOTAL:-	570	9.50
53	MVA132/33 KV			Tiura	100	1.67
33	TransformerMax.	Nauhatta	Nauhatta	Nauhatt	50	0.83
	Load=16 MW	Maximum Load = 10 MW	1x3.15+1x5 MVA	Chutia	200	3.33
				TOTAL:-	350	5.83
		Kerpabag	Kerpabag	STW	120	2.00
		Maximum Load = 2 MW	1x3.15+2x5 MVA	Chandanpura	200	3.33
				Maharajganj	200	3.33

				TOTAL:-	520	8.67
	Grand Total:-	16.00		Grand Total:-		24.00
				Bheldi	300	5.00
				Railway	300	5.00
			<b>.</b>	Chapra Town-1	5	0.08
		Chapra Maximum Load = 20 MW	Telpa 5x5 MVA	Bazar Samiti	200	3.33
	IVIAXIITIUITI LOAU = 20 IVIVV	ONO IVIVA	Rauja	280	4.67	
				Dighwara	200	3.33
				TOTAL:-	1285	21.42
				Amnaur	130	2.17
			Maulaarus	Shivganj 150 2.  Marhaura Town 80 1.	1.50	
	Chapra		Marhaura 1x3.15+ 1x5 MVA	Shivganj	150 2.5 80 1.3 450 7.5 80 1.3	2.50
	1x50+1x20+1x12.5	Marhaura	TAG. 131 TAG WIVA	Marhaura Town	80	1.33
	MVA	Maximum Load = 5 MW		TOTAL:-	450	7.50
54	132/33 KV Transformer			Taraiya Rural-1 Taraiya Rural-2	80	1.33
	Max. Load=41.50 MW		Taraiya Taraiya Rural-2 40 1x5 MVA Taraiya Rural-3 40	40	0.67	
	Wax. Loud-11.00 WW			0.67		
				TOTAL:-	160	2.67
				Brahmpur	600	10.00
			Prabhunath Nagar	Khaira	290	4.83
			1x5+1x10 MVA	Naini	40	0.67
		Prabhunath Nagar		BSNL	5	0.08
		Maximum Load = 12 MW		TOTAL:-	935	15.58
			Manjhi	Tajpur	90	1.50
			1x5 MVA	Iliaspur	50	0.83
	0 17 (1	44.50		TOTAL:-	140	2.33
	Grand Total:-	41.50		Grand Total:-	00	
				Purani Bazar	88	49.50 1.47 1.13
55	Lakhisarai GridMax. Load=23.50 MW	Lakhisarai ( LKR II)	Karyanand Nagar 3x5.00 MVA	Naya Bazar	68	
	LUau=23.50 IVIVV		AVIVI UU.CXC	Surajgarha	48	0.80
				Balgudar	80	1.33

				TOTAL:-	284	4.73
				Town	100	1.67
			Lakhisarai Corut (N) 1x5 + 3.15 MVA	Rural	143	2.38
			1X5 + 3.15 MVA	TOTAL:-	243	4.05
				Medni Chowki	Meter	0.67
			Haibatganj 2 x 3.15 MVA	Abgill	Not working	0.33
				TOTAL:-		1.00
		Surajgarha ( LKR- I)		Surajgarha	CT burnt	1.33
			Salempur	Kajra	Ci buint	0.83
			1x 5 MVA + 1x 3.15 MVA	Manikpur		0.50
			IVIVA	TOTAL:-		2.66
				Halsi		0.33
				Aure	33 KV	0.17
		Ore	Ore 2x3.15 MVA	Ramgarh	line theft	0.50
			2X3. 13 WVA	Lakhisarai		0.50
				TOTAL:-		1.50
	Grand Total:-	23.30		Grand Total:-		13.94
				Barauni	264	4.40
				DM	8.5	0.14
				Panhas	224	3.73
			Begusarai1x10+4x5	Feeder-1	160	2.67
	Begusarai2x50		MVA	Feeder-2	260	4.33
56	MVA132/33 KV	BegusaraiMaximum Load =		Feeder-3	340	5.67
	TransformerMax.	40 MW		Feeder-4	286	4.77
	Load=60 MW			Feeder-5	210	3.50
				TOTAL:-	1752.5	29.21
			Mahnjhaul	Manjhaul	40	0.67
			2x3.15 MVA	Nalkup	30	0.50
				Khubandpur	60	1.00

				Nakhauti	50	0.83
				TOTAL:-	180	3.00
				Industrial	35	0.58
			Deona	Keshawe	70	1.17
			2x5 MVA	Papraur	66	1.10
				TOTAL:-	171	2.85
				Deona	142	2.37
				Teghra	30	0.50
				Amba	150	2.50
				Makhansala	60	1.00
			Dan sonah dila	Town	165	2.75
			Bangrahdih 1x10+3x3.15 MVA	Urban	45	0.75
			1X10+3X3.13 WVA	Railway	120	2.00
		Bangrahdih		Banbaipur	25	25.00
		Maximum Load = 16 MW		Baro	170	2.83
				Gas	60	1.00
				TOTAL:-	967	40.70
				Feeder-1	60	1.00
			Bachwara	Feeder-2	160	2.67
			1x3.15+1x5 MVA	Feeder-3	20	0.33
			TAGE TO THAT WITH	Feeder-4	40	0.67
				TOTAL:-	280	4.67
				Sahebpur Kamal	60	1.00
		Balia	Balia	Dandari	50	0.83
		Maximum Load = 4 MW	1x5+1x3.15 MVA	Balia	60	1.00
				TOTAL:-	170	2.83
	Grand Total:-	60.00		Grand Total:-		83.26
	Kataiya2 x 20			Basantpur	65	1.08
	MVA132/33 KV	BirpurMaximum Load= 8	Dim4. 5 M / 4	Birpur	120	2.00
57	TransformerMax.	MW	Birpur1x3+1 x5 MVA	Sankarpur	60	1.00
	Load= 20 MW			TOTAL:-	245	4.08

				Simrahi	50	0.83
				Pratapganj	100	1.67
		Raghopur Maximum Load= 10 MW	Raghopur 1x3+1 x5 MVA	Karjain	130	2.17
		Waxiiiiuiii Load= 10 WW	IXO+I XO IVIVA	Bhaptayahi	50	0.83
				TOTAL:-	330	5.50
		Kosi Baraj	Kataiya	Kosi Baraj	50	0.83
		Maximum Load= 1.0 MW	1x1.6 MVA	TOTAL:-	50	0.83
				Matiyari	30	0.50
		Balua	Balua	Balua	25	0.42
		Maximum Load= 1.0 MW	1x3.15 MVA	Parsa	25	0.42
				TOTAL:-	80	1.33
	Grand Total:-	20.00		Grand Total:-		11.75
				Chiraiya	118	1.97
		Dhala	Dhala	Bairganiya	197	3.28
		Dhaka Maximum Load = 6 MW	Dhaka 2 x 5 MVA	Patahi	98	1.63
		Maximum Edda = 6 MVV	Z X O WVX	Ghorasahan	45	0.75
	5			TOTAL:-	458	7.63
	Dhaka 2 x 10 MVA			Patahi Bazar	Meter	0.33
58	132/33 KV	Patahi	Patahi	Dewapur	defectiv	0.50
36	Transformer Max. Load= 13 MW	Maximum Load = 2 MW	1 x 3.15 MVA	Mojianawada	е	0.33
				TOTAL:-		1.16
			Ghorasahan	82	1.37	
		Ghorasahan	Ghorasahan	Kadamwa	18	0.30
		Maximum Load = 3 MW	(Samanpur) 1 x 5 MVA	Laukhan	22	0.37
				TOTAL:-	122	2.03
	Grand Total:-	13.00		Grand Total:-		10.83
59	Phulparas2 X 10	PhulparasMaximum Load =	Phulparas2x3.15 MVA	Arnama	50	0.83

	MVA132/33 KV	8 MW		Laukahi (M)	56	0.93
	TransformerMax.			Phulparas Local (M)	20	0.33
	Load=14 MW			Ghoghardiha (U)	58	0.97
				Dhanauja (R)	15	0.25
				TOTAL:-	149	3.32
				Nirmali (M)	40	0.67
			Nirmali	Belhi R)	10	0.17
				TOTAL:-	50	0.83
				Sudai ( R)	200	3.33
			<b>-</b>	Kharaua (R)	50	0.83
			Tulapatganj 2x5 MVA	Local (R)	30	0.50
			ZAJ IVIVA	Andharathadi (R)	200	3.33
				TOTAL:-	400	8.00
			141	Khutauna (R)	160	2.67
		Khutauna Maximum Load = 6 MW	Khutauna 1x5 MVA	Laukaha (M)	60	1.00
		Maximum Load = 0 MW	A VIVI CX I	TOTAL:-	220	3.67
	Grand Total:-	14.00		Grand Total:-		15.82
				Town	150	2.50
				Rural	100	1.67
			D'I '0 5 4 0 45	Piro	100	1.67
			Bikramganj2x5+1x3.15 MVA	Nasariganj	70	1.17
	Bikramganj2 X 20		IVIVA	Natwar	130	2.17
-	MVA132/33 KV	BikramganjMaximum Load		Nokha	100	1.67
60	TransformerMax.	= 10 MW		TOTAL:-	650	10.83
	Load=24 MW			Sakla	60	10.83
				Itarahi	50	0.83
			Karakat	Nasariganj	80	1.33
			2x3 15 M//A	Godari	60	1.00
				TOTAL:-	250	0.83 1.33

				Town	80	1.33
			Dinara	Rajpur	70	1.17
		Dinara Maximum Load = 8 MW  Dawath Maximum Load = 3 MW  Sanjhauli Maximum Load = 3 MW  Tarari  24.00	2x3.15 MVA	Indore	160	2.67
				TOTAL:-	310	5.17
				Kochas	70	1.17
			Doroothuo	Bastlwar	70	1.17
		Dinara	Parsathua 2x3.15 MVA	Mahavirganj	60	1.00
		Maximum Load = 8 MW	200.10 10177	Parsatua	70	1.17
				TOTAL:-	270	4.50
				Kochas	70	1.17
				Dinara	60	1.00
			Kochas 2x3.15 MVA	Kargahar	100	1.67
			ZX3. 13 IVIVA	Rajpur	40	0.67
				TOTAL:-	270	4.50
				Dawath	100	1.67
			Dawath 2x3.15 MVA	Mirzapur	80	1.33
		Waxiiiidiii Load = 3 WW	2A3. 13 WWA	TOTAL:-	180	3.00
				Amethi	80	1.33
		Maximum Load = 3 MW  Sanjhauli	Sanjhauli	Vikramganj	70	1.17
		Maximum Load = 3 MW	2x3.15 MVA	Sanjhauli	90	1.50
				TOTAL:-	240	4.00
			Tarari	Tarari	120	2.00
		Tarari	2x3.15 MVA	Khauni	120	2.00
			2.0.10	TOTAL:-	240	4.00
	Grand Total:-	24.00		Grand Total:-		40.17
				Jakkanpur	160	2.67
	Jakkanpur(3x50	lokkoppur (Direct from Crid		Mithapur	200	3.33
61	+1x20 MVA)Max.	Jakkanpur (Direct from Grid	Jakkanpur( 4x5 MVA)	Punpun East	180	3.00
	Load=108 MW	,		Punpun West	192	3.20
				TOTAL:-	732	12.20

		Harding Rd. West	55	0.
		Harding Rd. East	65	1.
	Sinchai Bhawan	Dedicated	30	0.
	( 2x3.15 MVA)	Old Secret	40	0.
		N.C Pannel	15	0.
O'r ah a' Dh ann a		TOTAL:-	205	3.
Sinchai Bhawan 200 Amp		B.C Rd.	100	1.
200 Amp	Vikash Bhawan	Danapur	24	0.
	( 1x3.15 +1x5 MVA) 6.6 KV 11 KV	Secretaeriat	84	1.
	0.0	TOTAL:-	208	3.
	Haz Phawas D/C/C	Polo Rd.	100	1.
	Haz Bhawan P/S/S 2x5 MVA	Strand Rd.	60	1.
	ZAO IVIVA	TOTAL:-	160	2.
		Gardiner Road	155	2.
	Vidyut Bhawan	B.S.E.B./I	15	0
	( 2x5 MVA)	High Court	60	1.
BSEB UG Cable 210 Amp		TOTAL:-	230	3.
		S.K.Nagar	180	3.
	High Court ( 2x5 MVA)	Nageshwar Colony	150	2.
	( 2,5 1/1 / /)	TOTAL:-	330	5
		Anishabad	232	3.
	Anishabad( 2x5 MVA)	Phulwari	188	3.
DECLI III 220 Amm		TOTAL:-	420	7.
PESU III 230 Amp	0 1 11 1	Gardanibagh East	195	3.
	Gardanibagh (3x5 MVA)	GardanibaghWest	200	3.
	(SXS IVIVA)	TOTAL:-	395	6.
		By Pass	240	4.
DE0113/1.400 A	Beur	Jail	32	0.
PESU VI 400 Amp	( 2x5 MVA)	Beur	228	3.
		TOTAL:-	500	8.

				Patel Nagar	170	2.83
			Board Colony( 3x5 MVA)	Board Colony	170	2.83
		PESU VIII	IVIVA)	TOTAL:-	340	5.67
		PESU VIII		Punaichak	105	1.75
			Proposed (2x10+1x5 MVA)	Shiv Puri	90	1.50
			(2010+105 1010/4)	TOTAL:-	535	14.58
				Doordarshan	280	4.67
			Dan dan Danisha	Railway	150	2.50
		PESU IX 325 Amp	Bandar Bagicha ( 4x5 + 1x10 MVA)	R. Path	150	2.50
			( 400 1 101010171)	Jamal Road	250	4.17
				TOTAL:-	830	13.83
			Cabitus Commolos	Kadamkuan Kuan	166	2.77
			Sahitya Sammelan (2x5 MVA)	Shaitya Sammelan	75	1.25
			(2//0 1/17/1)	TOTAL:-	241	4.02
		PESU VII 380 Amp		P.G I	170	2.83
			Maurya Lok	P.G. II	160	2.67
			( 3x5+1x10 MVA)	Maurya	220	3.67
			( ONO : TATO INITY!)	Dakbunglow	170	2.83
				TOTAL:-	720	12.00
	Grand Total:-	108.00		Grand Total:-		97.43
62	Purnea2 x 50+1x20		Zeromile1 x5 +1 x 3.15	Dagarua	160	2.67
	MVA132/33 KV TransformerMax.		MVA	Zeromile	90	1.50
	Load=54 MW	ZeromileMaximum Load =	141 47 7	TOTAL:-	250	4.17
		8 MW		Khuski Bag	90	1.50
		J	City Purnea	City	62	1.03
			1 x5 MVA	Railway	5	0.08
				TOTAL:-	157	2.62
		Maranga	Maranga	Sonali	200	3.33
		Maximum Load = 10 MW	2 x5 MVA	Champanagar	130	2.17

		Industrial	75	1.25
		Harda	120	2.00
		TOTAL:-	525	8.75
		Dhamdaha	200	3.33
		Mirgani	9	0.15
	Mirganj	Chandwa	40	0.67
	1 x5+ 1x 3.15 MVA	Champawati	32	0.53
		Baheliya Asthan	20	0.33
		TOTAL:-	301	5.02
	Danach	Rupoli	110	1.83
	Dargah 2 x 1.6 MVA	Jhalari	30	0.50
	2 X 1.0 WVA	TOTAL:-	140	2.33
		Bhawaipur	80	1.33
	Bhawaipur	Zabey	25	0.42
	2 x 3.15 MVA	Sondeep	35	0.58
		TOTAL:-	140	2.33
	Madhubani 2 x 5 MVA	Town-1	240	4.00
		Town-3	120	2.00
		TOTAL:-	360	6.00
Madhubani (Banmankhi)		Janki Nagar	100	1.67
Maximum Load = 11 MW		Banmankhi	120	2.00
	Banmankhi 2 x 3.15 MVA	Khajuri	30	0.50
	2 X 3. 13 WVA	Rasar	95	1.58
		TOTAL:-	345	5.75
		Belgachi	42	0.70
		Bakbeli	48	0.80
Dalkola +SonoliMaximum	Belgachi1 x 5 MVA	Baisi	60	1.00
Load = 5 MW		TOTAL:-	150	2.50
	Dalkola	Malopara	8	0.13
	1 x 3.15 MVA	Barsota	45	0.75

				Malikpur	20	0.33
				TOTAL:-	73	1.22
				Sonoli	65	1.08
			Sonoli 1 x 3.15 MVA	Bhogaon	60	1.00
				Kumhri	60	1.00
				TOTAL:-	185	3.08
				Railway		
				Barsoi Bazar	115	
			Barsoi 2 x 5 MVA	Sudhani\Abadpur	113	
			2 X 3 W V A	Salmari		
				TOTAL:-	115	1.92
				Pranpur		
			_	Roshna	130	2.17
			Pranpur 1 x 1.6 MVA	Bastol		2.17
				PHED		
				TOTAL:-	130	2.17
		33 KV Group control				10.00
				Amour	30	0.50
				Routa	36	0.60
			Amour 2x3.15 MVA	Rohra	48	0.80
			2X3.13 WVA	Gerwa	30	0.50
		Tanhauli Maximum Load =5 MW		TOTAL:-	144	2.40
		IVIANITIUTI LOAU -5 IVIVV		Kanjiya	5	0.08
			Baisa	Mahsal	5	0.08
			2x3.15 MVA	Dharambar	5	0.08
				TOTAL:-	15	0.25
	Grand Total:-	54.00		Grand Total:-		50.50
63	JEHANABAD2x20	JEHANABAD	JEHANABAD, 3*5	TOWN 1		3.5

MVAMax.		MVA	TOWN 2	1.6
Load=50.80MW			TOWN 3	3
			TOWN 4	0.5
			KAKO	0.33
			SIKARIYA	0.5
			TOTAL:-	9.43
			RAJABAJAR	1.85
		EDIZI	COURT FEEDER	1.8
	ERKI	ERKI, 2*5 MVA	BAVHNA	1.5
		2 0 10177	MANDIL	0.5
			TOTAL:-	5.65
			SAKURABAD TOWN	1.5
	SAKURABAD	SAKURABAD,	RATNI	1
	O, II.O.I.O.I.D	2*5 MVA	NEWARI	2
			TOTAL:-	4.5
		KAKO, 1*1.6 + 1*3.15 MVA	KAKO TOWN	1
			KAKO RURAL	0
	KAKO		TOTAL:-	1
	10		BANHDHUGANJ	0.5
		CHARUI, 1*3.15 MVA	OKRI	0.25
		1 3.13 WVA	TOTAL:-	2.75
			MAKHDUMPUR TOWN	3.5
			TEHTA	1
		MAKHDUMPUR,	SAGARPUR	0.8
	MAKHDUMPUR	1*5+1*3.15	LARUA	0.5
			COLD STORAGE	0
			TOTAL:-	5.8
		TEHTA	DHODHA	0
		2*3.15 MVA	SUGAON	0.2

				MAKARPUR	0.2
				TEHTA BAJAR	0.5
				TOTAL:-	0.9
				BAGDWAR	0
			MAKPA	MAKPA	0.3
			1*3.15	MAKARPUR	0.2
				TOTAL:-	0.5
				TOWN 1	3.5
				TOWN 2	1.6
				TOWN 3	3
		JEHANABAD	JEHANABAD, 3*5	TOWN 4	0.5
			MVA	KAKO	0.33
				SIKARIYA	0.5
	_			TOTAL:-	9.43
		ERKI		RAJABAJAR	1.85
				COURT FEEDER	1.8
			ERKI, 2*5 MVA	BAVHNA	1.5
				MANDIL	0.5
				TOTAL:-	5.65
				SAKURABAD TOWN	1.5
		0.1.(1.1.0.4.0.4.0.	SAKURABAD,	RATNI	1
		SAKURABAD	2*5 MVA	NEWARI	2
				TOTAL:-	4.5
				KAKO TOWN	1
			KAKO,	KAKO RURAL	0
		1/41/0	1*1.6 + 1*3.15 MVA	TOTAL:-	1
		KAKO		BANHDHUGANJ	0.5
			CHARUI, 1*3.15 MVA	OKRI	0.25
			I S. IS IVIVA	TOTAL:-	2.75

				MAKHDUMPUR TOWN		3.5
			MAKHDUMPUR,	TEHTA		1
				SAGARPUR		0.8
			1*5+1*3.15	LARUA		0.5
				COLD STORAGE		0
				TOTAL:-		5.8
				DHODHA		0
		MAKHDUMPUR	TELLT A	SUGAON		0.2
			TEHTA 2*3.15 MVA	MAKARPUR		0.2
			2 3.13 WVA	TEHTA BAJAR		0.5
				TOTAL:-		0.9
			MAKPA 1*3.15	BAGDWAR		0
				MAKPA		0.3
				MAKARPUR		0.2
				TOTAL:-		0.5
	Grand Total:-	50.80		Grand Total:-		61.06
				Town		1.00
				Dobhi		1.10
			Sherghati2 x 3.15 MVA	Back		1.00
				Gurua		1.20
	Sherghati2 x 20			TOTAL:-	0	4.30
64	MVA132/33 KV	SherghatiMaximum Load =		Pananiya		1.00
	TransformerMax. Load=25 MW	15 MW	Davida Dava	Banke Bazar Town		1.00
	LOGG-20 IVIVV		Banke Bazar 2 x3.15 MVA	Bihargai		1.00
				Goitha		1.00
				TOTAL:-	0	10.50
			Imamganj	Kothi		1.00

			2 x 3.15 MVA	Goriya		1.00
				Raniganj		1.00
				Dumaria		1.00
				TOTAL:-	0	4.00
				Narayani		1.00
			Gurua	Makhdumpur		1.30
			1 x 3.15 +1x1.6 MVA	Gurua Bazar		1.00
				TOTAL:-	0	3.30
	Grand Total:-	25.00		Grand Total:-		30.13
				Kateya		2.69
	Gopalganj		Panchdevri	Girdhar Ruiya		1.33
			2x3.15 MVA	Bhagwanpur		0.48
			270.10 10177	Panchdevri		0.86
				TOTAL:-		5.36
		2 X 20 MVA 132/33 KV Transformer  Panchdevri Maximum Load =34 MW		Pagra Vijaypur		0.57
			Viiovour	Jagdishpur		0.95
65			Vijaypur 2x3.15 MVA	Majhwaliya		1.30
	Max. Load=34 MW		2.0.10 10177	Bangra Mushahri		1.30
				TOTAL:-		4.12
				Bhore		3.80
			Bhore	Kalyanpur		0.42
			1x3.15+1x5 MVA	Mishir Batraha		0.57
				TOTAL:-		4.79
	Grand Total:-	34.00		Grand Total:-		14.27
	Darbhanga			Railway (U)	5	0.08
	(Ramnagar)1 X 20+1		Denderous:4 C M//	Emergency (U)	45	0.75
66	x 50 MVA132/33 KV	PandasaraiMaximum Load = 10 MW	Pandasarai1 x 5 MVA	General (U)	80	1.33
	TransformerMax. Load=36 MW	= IO IVIVV		TOTAL:-	130	2.17
	LUAU-30 IVIVV		DMCH	Emergency-1 (U)	15	0.25

		2 x5 MVA	Feeder-2 (U)	120	2.00
			General (U)	70	1.17
			Feeder-4 (U)	130	2.17
			Emergency-5 (U)	45	0.75
			TOTAL:-	380	6.33
			Donar (U)	180	3.00
		Urban	Emergency (U)	26	0.43
		2 x 5 MVA	Guluara (U)	220	3.67
			TOTAL:-	426	7.10
			Rural (R)	90	1.50
		Jail (Lahariasarai) 1x5 MVA	Ekmi (M)	50	0.83
		TX3 IVIVA	TOTAL:-	140	2.33
		Donar 1x5+1x3.15 MVA	R. S. Tank (M)	160	2.67
			Industrial (M)	45	0.75
	Donar Maximum Load = 3 MW		Laxmisagar (U)	130	2.17
	Waxiiiidiii Load — 3 WW		Radio Station (U)	5	0.08
			TOTAL:-	340	5.67
			Kapchahi (R)	50	0.83
			Chandanpatti (M)	90	1.50
		Anar	Bahedi (R )	20	0.33
		2x3.15 MVA	Anar (R)	2	0.03
			Hayaghat (M)	60	1.00
	Anar Poria		TOTAL:-	222	3.70
	Maximum Load = 5 MW		Bishanpur (R)	70	1.17
		Poria 1x1.6 MVA	Dilahi (R)	25	0.42
		IXI.O IVIVA	TOTAL:-	95	1.58
			Baheri (R)	80	1.33
		Baheri 1x3.15 MVA	Khangraitha(R)	30	0.50
		IX3. IS IVIVA	TOTAL:-	110	1.83

				Garharia(R)	30	0.50
				Shovan (M)	120	2.00
				Mithila (M)	40	0.67
			Gangwara2x3.15+1x5	Loam (R)	120	2.00
			MVA	Aerodram (M)	50	0.83
				Kamtaul (R)	110	1.83
				Ramnagar (M)	100	1.67
				TOTAL:-	570	9.50
		LahariasaraiMaximum Load = 18 MW		Industrial (U)	20	0.33
		= 10 10100	5.	Emergency	8	0.13
			Bela 2x 5 MVA	Kathalbari (U)	160	2.67
			ZX J IVIVA	Shivdhara (U)	200	3.33
				TOTAL:-	388	6.47
				Jalley (R)	80	1.33
			Sanahpurdih	Singhwara (M)	90	1.50
			1x5+1x1.6 MVA	Bharwara (M)	30	0.50
				TOTAL:-	200	3.33
	Grand Total:-	36.00		Grand Total:-		50.02
				Chandmari	240	4.00
				Shantipuri	240	4.00
				Bariyarpur	130	2.17
		Motihari-1Maximum Load =	Maniuraha 4 vF MV/A	Turkolia	120	2.00
	Motihari2 x 20	13 MW	Manjuraha4 x5 MVA	Lakhaura	85	1.42
67	MVA132/33 KV TransformerMax.			Pipra	40	0.67
	Load=32 MW			Sugauli	B/D	
				TOTAL:-	125	14.25
		A ====:	A ******	Areraj	50	0.83
		Areraj Maximum Load = 6 MW	Areraj 2 x3.15 MVA	Sangrampur	20	0.33
		IVIAXIMUM LOAG = 6 IVIVV	2 AO. 10 WW	Malahi	30	0.50

				TOTAL:-	100	1.67
				Siswa	15	0.25
			Nawadih (Paharpur)	Mankarariya	10	0.17
			1 x3.15 MVA	Manjhariya	15	0.25
				TOTAL:-	40	0.67
				Chakiya	40	0.67
			Chakiya	Mehasi	40	0.67
			1 x3.15+ 1 x 3 MVA	Pipra	30	0.50
		Chakia Maximum Load = 6 MW		TOTAL:-	110	1.83
		IVIAXIIIIUIII LOAU = 0 IVIVV		Madhuban	35	0.58
			Madhuban 2x1.6 MVA	Pakri Dayal	15	0.25
			ZXI.O WIVA	TOTAL:-	50	3.83
				Sonbarsa	10	0.17
		Harsidhi 1x3.15 MVA	Harsidhi	25	0.42	
			TX3.13 WVA	TOTAL:-	35	0.58
				Majhaulia	20	0.33
				Dedicated	10	0.17
		Madhopur	Madhopur 1x3.15 MVA	Harsidhi	10	0.17
		Maximum Load = 7 MW	IX3.13 WIVA	Sugauli		0.00
				TOTAL:-	40	0.67
				Chhatauni	105	1.75
			Chhatauni	Meena Bazar	200	3.33
			2X5 MVA	Janpul	100	1.67
				TOTAL:-	405	6.75
	Grand Total:-	32.00		Grand Total:-		28.42
	Vaishali2 x 20			Dharampur	169	2.82
68	MVA132/33 KV	VaishaliMaximum Load =	Vaishali2 x 5 MVA	Khajwatta	197	3.28
00	TransformerMax.	11 MW	Valstializ X J WIVA	Daudnagar	150	2.50
	Load =39 MW			Bouth	139	2.32

			TOTAL:-	655	10.92
			Lalganjj Town	200	3.33
		1 -1 '	Jaytipur	70	1.17
		Lalganj 2 x 5 MVA	Vaishali	140	2.33
		ZXJWWA	Chandralaya	140	2.33
			TOTAL:-	550	9.17
			Sarai Town	110	1.83
		Sarai	Lalganj	139	2.32
		2 x 3.15 MVA	Rajapakar	69	1.15
	Lalganj		TOTAL:-	318	5.30
			Prataptand	45	0.75
	Maximum Load = 15 MW	Prataptand	Barahrup	29	0.48
		2 x 3.15 MVA	Bhagawanpur	24	0.40
			TOTAL:-	98	1.63
		Goroul 2 x 3.15 MVA	Goroul Town	160	2.67
			TOTAL:-	160	2.67
		Mahua 2 x 5 MVA	Mahua Town	38	0.63
			Patepur	98	1.63
			Singhara	129	2.15
		ZXJWWA	Chandsarai	69	1.15
			TOTAL:-	334	5.57
			Mahnar	128	2.13
		Malaraar	Lodhipur	119	1.98
		Mahnar 1 x5 +1X3.15 MVA	Jamdaha	118	1.97
	Bhakda Maximum Load = 13 MW	1 70 +170.10 1010 14	Nayatoa	7	0.12
			TOTAL:-	372	6.20
			Gariba	60	1.00
		Paru	Matihaniya	124	2.07
		2 x 3.15 MVA	Thainpur	61	1.02
			Bada Daud	147	2.45

				TOTAL:-	392	6.53
				Patepur	109	1.82
			Patepur2X3.15 MVA	Dabhaich	59	0.98
			PateputZA3.13 WVA	Bajipur	48	0.80
				TOTAL:-	216	3.60
	Grand Total:-	39.00		Grand Total:-		40.67
				Town-1	150	2.50
				Town-2	80	1.33
				Pusauli	160	2.67
			Mohania 3x 5 MVA	Usri	200	3.33
			JX J IVI V A	Darba Urban	40	0.67
				Darba Rural	140	2.33
				TOTAL:-	770	12.83
		2X2U MVA		Town-1	240	4.00
				Town-2	80	1.33
			Bhabhua Old	Chainpur	60	1.00
			2x 5+1x 3.15 MVA	Bhagwanpur	200	3.33
69	132/33 KV			Saranpur	30	0.50
	Transformer			TOTAL:-	610	10.17
	Max. Load=34 MW			Patpar	80	1.33
			Adhaura	Adhaura	60	1.00
			1x 3.15 MVA	TOTAL:-	140	2.33
				Lalapur	220	3.67
			Kudra	Pusauli	200	3.33
			3x 5 MVA	Kudra Rural	220	3.67
		Kudra Maximum Load = 12 MW		TOTAL:-	640	10.67
		WIGAIITIGITI LOGU — 12 WW	Disable Al	Yadavpur	80	1.33
			Bhabhua New 2x 5 MVA	Sonhanpur	70	1.17
			2A 3 IVI V A	Akhilaspur	200	3.33

				Town-3	20	0.33
				TOTAL:-	370	6.17
			Karamchat	Karamchat	50	0.83
			1x 1.6 MVA	TOTAL:-	50	0.83
		Chainnus	Chainaur	Chainpur	130	2.17
		Chainpur Maximum Load = 6. MW	Chainpur 2x 3.15 MVA	Beur	120	2.00
		Waxiinam Load = 0. WW	2X 0.10 WWY	TOTAL:-	250	4.17
	Grand Total:-	34.00		Grand Total:-		47.17
	Jainagar2 X 10 MVA132/33 KV			Narar (R)	70	1.17
				Debadha (R)	65	1.08
			Jainagar2x3.15 MVA	Kamlabari (M)	30	0.50
				Jainagar Town (U)	100	1.67
				TOTAL:-	265	4.42
		JainagarMaximum Load = 6		Ladania (M)	5	0.08
		MW	Ladania	Lakshminia (M)	5	0.08
			1x3.15 MVA	Tenuahi (R)	60	1.00
70	TransformerMax. Load=9MW			TOTAL:-	70	1.17
	2000 01111			Khajauli-Narar(M)	30	0.50
			Khajauli 2x5 MVA	Khajauli Bazar (M)	60	1.00
			A VIVI CXZ	TOTAL:-	90	1.50
		_		Manmohan (M)	20	0.33
		Baopatti Maximum Load = 3 MW	Basopatti 2x5 MVA	Basopatti Bazar (M)	60	1.00
		IVIAXIIIIUIII LOAU = 3 IVIVV	ZXO IVIVA	TOTAL:-	80	1.33
	Grand Total:-	9.00		Grand Total:-		8.42
	Bodhgaya2 x 50			Feeder-1	200	3.33
71	MVA132/33 KV	ManpurMaximum Load =	Manpur3 x 5 +1 x 3.15	Feeder-2	210	3.50
' '	TransformerMax.	15 MW	MVA	Feeder-4	225	3.75
	Load=63 MW			Gere	130	2.17

		Janibigha	100	1.67
		Wajirganj	90	1.50
		TOTAL:-	955	15.92
		Bariya	90	1.50
	Paimar	Kharhari	70	1.17
	1x 3 MVA	Industrial	40	0.67
		TOTAL:-	200	3.33
	_	Gere Lodipur	210	3.50
	Gere 1x 3.15+ 1x 5 MVA	Gere Town	90	1.50
	1X 3.13+ 1X 3 WVA	TOTAL:-	300	5.00
	Tankupa	Theft of conductor		
	2x 3.15 MVA	TOTAL:-	300	5.00
		Reliance		1.30
	Dobhi 2 x 3.15 MVA	Garwaiya		1.00
		Munjauliya		1.20
		Chatra Dobhi		0.90
		TOTAL:-	0	2.10
		Shobh		1.10
Shobh	Shobh	Barachatti		0.80
Maximum Load = 15 MW	2x3 MVA	Bhadiya		0.90
		TOTAL:-	0	2.80
		Dongra		1.00
		Mohanpur		1.00
	Mohanpur	Tillaiya		0.50
	2 x3.15 MVA	Amhara		1.20
		TOTAL:-	0	3.70
Bodh Gaya	Bodh Gaya	Feeder-1		3.50
Maximum Load = 12 MW	2 x 5 MVA	Feeder-3		4.00

				TOTAL:-	0	7.50
				Feeder-2	40	0.67
		IndustrialMaximum Load = 5 MW	Industrial2 x 3.15 MVA	Feeder-4	16	0.27
		O IVIVV		TOTAL:-	56	0.93
		Airport Maximum Load = 1 MW				1.17
				KKI	160	2.67
				Batraul	160	2.67
				Mocharim	60	1.00
			University 3 x5 +1 x 3.15 MVA	Magadh University	20	0.33
			A VIVI CI . X 3. 13 IVIVA	Old Industrial	100	1.67
		University		Sahdeo Khap	60	1.00
		Maximum Load = 15 MW		TOTAL:-	560	9.33
				PHED	115	1.92
			Budhisth Centre	Bodh Gaya Town	230	3.83
			2x 5 MVA	Bhagalpur	85	1.42
				TOTAL:-	315	7.17
	Grand Total:-	63.00		Grand Total:-		62.78
				Town-1	303	5.05
				Town-2	82	1.37
		BhikhanpuraMaximum	Bhikhanpura1x10 + 2x	Town-3	211	3.52
		Load = 11 MW	5+ 1X3.15 MVA	Turki	129	2.15
	Muzaffarpur2 x 50		Kanti	129	2.15	
72	MVA132/33 KV TransformerMax.			TOTAL:-	854	14.23
	Load=104 MW			Bhagwanpur	249	4.15
	LOUGH TOT IVIVV		Khabra	Zero mile	222	3.70
			2 x 5 MVA + 1X3.15 MVA	Khabra	49	0.82
			17.0.10 WVA	TOTAL:-	520	8.67
		Nayatola	Nayatola	Nayatola	162	2.70

	Maximum Load = 11 MW	3 x 5 MVA	Moti Jheel	214	3.57
			Hospital	216	3.60
			TOTAL:-	592	9.87
	IDPL Maximum Load = 22 MW				22.00
			Reba	129	2.15
			Emergency	64	1.07
	Maripur Maximum Load = 10 MW	Maripur 2 x 10 MVA	University	152	2.53
	Maximum Load = 10 MW	ZX IO IVIVA	Buttler	75	1.25
			TOTAL:-	420	7.00
			Kanti	123	2.05
		Kanti	Narsanda	74	1.23
		1 x 5 + 1X3 MVA	Kanti Rural	160	2.67
			Khoti	10	0.17
			TOTAL:-	367	6.12
		Motipur	Motipur Bazar	49	0.82
			Hardi	168	2.80
			Kanti	61	1.02
		1x5 +1 x 3.15 MVA	North west	60	1.00
	Motipur Maximum Load = 10 MW		TOTAL:-	338	5.63
	Waximam Load = 10 WW		Dostpur	67	1.12
			Kesharia	49	0.82
		Sahebganj	Dewaria	99	1.65
		2 x 3.15 MVA	Town	60	1.00
			TOTAL:-	275	4.58
			Rajpur		0.5
		Kesaria1x3.15 MVA	Rampur		0.4
		Nesalia IXS. 13 IVIVA	Khajuria		1
			Kesharia Bazar		0.6

			TOTAL:-		2.50
			Kurhani	124	2.07
	Kurhani Maximum Load = 6 MW	Kurhani 2 x 3.15 MVA	Railway	67	1.12
	Maximum Load = 6 MW	2 X 3. 15 IVIVA	TOTAL:-	191	3.18
			Sakra	106	1.77
	Dholi	Dholi	Muraul	92	1.53
	Maximum Load = 7 MW	2 x 5 MVA	Dholi	65	1.08
			TOTAL:-	263	4.38
			Baria	301	
		M.I.T.	M.I.T. (Campus)	24	0.40
		1 x 10 +1 x 5 MVA	Brahampura	238	3.97
			M.I.T.	96	1.60
			TOTAL:-	291	4.85
		Miscut 1X10+1X5 MVA	Zila School	285	4.75
			Aghoria	212	3.53
			TOTAL:-	497	8.28
	MIT		Jail Road	216	3.60
	Max. Load = 15 MW	Chantwara 2X5 MVA	Vanaras Bank	208	3.47
		ZAS IVIVA	TOTAL:-	424	7.07
			T.V. Station	10	0.17
		Sikenerapur	Kali Mandir	69	1.15
		1X10 +1X5 MVA	Sikendra	269	4.48
			TOTAL:-	348	5.80
			Shankarpur	121	2.02
		Markan	Sista	208	3.47
		2X3.15 MVA	Markan	9	0.15
			TOTAL:-	338	5.63

				Narayanpur	89	1.48
				Mushari	158	2.63
			Bela 2×5 M/A	Bela	99	1.65
			3X5 MVA	Baiga	80	1.33
				TOTAL:-	426	7.10
				Karja	119	1.98
			Marwan	Raksha	80	1.33
			2X3.15 MVA	Nawada	119	1.98
				TOTAL:-	318	5.30
	Grand Total:-	104.00		Grand Total:-		96.93
				Zero mile	269	4.48
			01/11/01/14	Medical	29	0.48
			SKMCH1 x 5+ 1 x 10 MVA	Meenapur	198	3.30
		SKMCH-1Maximum Load =	IVIVA	Bochaha	228	3.80
		17 MW		TOTAL:-:	724	12.07
			Maithi	Dholi	219	3.65
	OKMOLIO 50		1 x 5 MVA+ 1X3.15	Gaighat	161	2.68
	SKMCH2 x 50 MVA132/33 KV		MVA	TOTAL:-:	380	6.33
73	TransformerMax.		CRPF Camp	CRPF	249	4.15
	Load=28MW		1 x 5 MVA	TOTAL:-:	249	4.15
				Gosouth	137	2.28
		SKMCH-2	Banghara 1 x 5 MVA	Meenapur	114	1.90
		Maximum Load = 11 MW	I X S IVIVA	TOTAL:-:	251	4.18
				Bandra	43	0.72
			Bandra 2 x 3.15 MVA	Gaighat	53	0.88
			Z X 3. 13 IVIVA	TOTAL:-	96	1.60
	Grand Total:-	28.00		Grand Total:-		28.33
74	Dehri-on-sone2 X 50	BMPMaximum Load = 16	BMP, Dehri4 x 5 MVA	Dehri-1	240	4.00

MVA132/33 KV	MW		Dehri-2	400	6.67
TransformerMax.			Hydel	150	2.50
Load=36 MW			Dalmiyanagar	180	3.00
			Laxmanbigha	160	2.67
			Ramgarh	150	2.50
			TOTAL:-	1280	21.33
			PHED	40	0.67
		PHED 1x1.5 MVA	Narayan Medical College	10	0.17
			TOTAL:-	50	0.83
			Bansaha	100	1.67
		Karbandiya	Kanchanpur	120	2.00
		2x3.15 MVA	Railway	140	2.33
			TOTAL:-	360	6.00
	Akhorigola Maximum Load = 9 MW		Town	100	1.67
			Rural	50	0.83
		Akhorigola 1x5+1x3.15 MVA  Hydel Rajpur-2	Hydel	50	0.83
			Rajpur-2	160	2.67
	Waxiiiidiii Load = 9 WW	TXO+TXO. TO IVIVA	Darihat	200	3.33
			Bank	40	0.67
			TOTAL:-	600	10.00
			Town	100	1.67
	Nasriganj	Nasriganj	Rural	150	2.50
	Maximum Load = 8 MW	1x5+1x3.15 MVA	Mangrao	160	2.67
			TOTAL:-	410	6.83
			Rajpur-1	120	2.00
	Rajpur Maximum Load = 3 MW	Rajpur 2x3.15 MVA	Habbupur	125	2.08
	IVIANITIUTI LUAU = 3 IVIVV	ZX3. 13 IVIVA	TOTAL:-	245	4.08
Grand Total:-	36.00		Grand Total:-		49.08

				Town-1 (U)	140	2.33
				Town-2 (U)	140	2.33
				Town-3 (U)	22	0.37
				Manibaba (U)	160	2.67
		RamchandrapurMaximum	Ramchandrapur6 x 5	Magra -1 (R)	90	1.50
		Load = 16 MW	MVA	Magra-2 (R)	60	1.00
				Tungi (R)	180	3.00
				Nari (R)	90	1.50
				TOTAL:-	882	14.70
				PHED (R)	12	0.20
				Sohsarai -1 (U)	215	3.58
				Sohdih (U)	200	3.33
			Sohsarai	ashanagar	180	3.00
	Bari Pahari2 X50 + 1		4 x 5 + 1x 3.15 MVA	Mandathi (R)	30	0.50
75	x 20 MVA132/33 KV	20 MVA132/33 KV TransformerMax. Load= 74 MW Sohsarai Maximum Load = 14 MW		Industrial (R)	16	0.27
'				New North (R)	60	1.00
	LOAGE 74 IVIVV			TOTAL:-	713	11.88
				Rahui Bazar ( U)	30	0.50
			Rahui	Punha sohsandi (R)	35	0.58
			3 x 3.15 MVA	Utarnama (R)	40	0.67
			0 X 0.10 WV/	Ganjgobariya(R)	65	1.08
				TOTAL:-	170	2.83
				Town (M)	120	2.00
			Noorsarai	Marhara (R)	50	0.83
			3x3.15 MVA	Dharampur (R)	120	2.00
		Noorsarai		Dedicated (R)	100	1.67
		Maximum Load- 18 MW		TOTAL:-	390	6.50
			Chandi	Nagarnausa (R)	90	1.50
			2 x5 +2x 3.15 MVA	Barohna (R)	50	0.83
				Microwave (M)	80	1.33

	1	Bishunpur (R)	60	1.00
		TOTAL:-	280	4.67
		Kariyama(R)	90	1.50
		Asha (R)	55	0.92
	Tharthari 2x 3.15 MVA	Chariyari (U)	90	1.50
	2X 3. 13 IVIVA	Pratappur (R)	75	1.25
		TOTAL:-	310	5.17
		Railway-1(U)	200	3.33
		Railway-3(M)	170	2.83
		Mugal Kuwan ( U)	200	3.33
Baripahari-1Maximum Load- 11 MW	Baripahari4 x5 +2x3.15 MVA	Emergency	16	0.27
Load- 11 MVV	IVIVA	Badi pahadi-1	200	3.33
		Badi pahadi-2	110	1.83
		TOTAL:-	896	9.77
		Dhamauli (R)	40	0.67
Baripahari-2 Maximum Load- 11 MW	Dhamauli 1x3.15 MVA	Bhagambigha (R)	35	0.58
Waximum Load- 11 WW	TX3. T3 WVA	TOTAL:-	75	1.25
	Asthawan	Asthawan (M)	44	0.73
	1x 1.6 MVA	TOTAL:-	44.00	0.73
		Teus (R)	30	0.50
		Asthawa (M)	25	0.42
	Gilanai	Konan	30	0.50
Asthawan	1x3.15 MVA	Amama(R)	35	0.58
Maximum Load = 4 MW		TOTAL:-	120	2.00
		Sarbahadi	20	0.33
		Nogama	21	0.35
	Sarbahdi 2x5 MVA	Konan	18	0.30
	ZX3 IVIVA	Majidpur	17	0.28
		TOTAL:-	76	1.27

	Grand Total:-	74.00		Grand Total:-		59.51
				Dumraon Town (U)	179	2.98
				Rural (R)	90	1.50
				Bhojpur (R)	145	2.42
		DumraonMaximum Load =9		Baruna (R)	0	0.00
		MW	Dumraon2 x 5 MVA	Bahuara	30	0.50
				Textile (M)	0	0.00
				Nirbhay cold storage (M)	5	0.08
				TOTAL:-	449	7.48
				Athar (R)	122	2.03
				Navodaya (R)	122	2.03
			Nawanagar	Chaugai Ram (R)	122	2.98 1.50 2.42 0.00 0.50 0.00 0.08
	Dumraon2 X 20 MVA132/33 KV		2 x 3.15 MVA	Nawanagar (R)	122	2.03
		Maximum Load = 6 MW sformerMax.		Murar (R)	60	1.00
76				TOTAL:-	304	5.07
70	TransformerMax.		Ekrasi	Ekrasi (R)	65	1.08
	Load=36 MW		1 x 3.15 MVA	TOTAL:-	65	1.08
			Murar	Murar (R)	60	
			1 x 3.15 MVA	TOTAL:-	60	1
				Nuaon (R)	175	2.92
			Krishna Braham	Brahampur- 2 (R)	160	2 67
		Brahampur	2 x 3.15 MVA	Jogiya Katahar (R)		
		Maximum Load =9 MW		TOTAL:-	335	
		2000 0 1111	Brahampur	Brahampur -1 ( U)	167	
			1 x 3.15 MVA	Raghunathpur (R)	160	2.67
				TOTAL:-	327	5.45
		Ci vi		Simri ( U)	120	2.00
		Simri Maximum Load = 4 MW	Simri	Parari (R)	120	2.00
		IVIAAIIIIUIII LOAU – 4 IVIVV	2 x3.15 MVA	Dhulpur (R )	110	1.83
				TOTAL:-	230	3.83

				Sahpur Town (U) Sahpur Rural ( R)	165	2.75
			Sahpur 2 x 3.15 MVA	Dedicated STW (R)	405	0.75
		Calamon	2 X 3. 15 IVIVA	Banahi (R)	165	2.75
		Sahpur Maximum Load =9 MW		TOTAL:-	330	5.50
		Maximam 2000 =0 MW		Bihiya (M)	220	3.67
			Bihiya	Industrial (R)	220	3.07
			1 x5 + 1 x 3.15 MVA Gajrajganj ( R) TOTAL:-	220	3.67	
	0 17 11				440	7.33
	Grand Total:-	36.00		Grand Total:-	2540	42.33
				Town-I	140	2.33
	Khagaria2 x 10 MVA132/33 KV TransformerMax. Load=24.78 MW	KhagariaMaximum Load=	Khagaria3 x 5 MVA	Town-II	230	3.83
		10.2 MW	Maganao x o mv/	Dama	120	2.00
				TOTAL:-	490	8.17
				Railway	50	0.83
77			Mansi 1 x3.15 MVA	Mansi	160	2.67
		Mansi	1 XO. 10 WIV/	TOTAL:-	210	3.50
		Maximum Load=14.58 MW		Gogari	240	4.00
			Maheshkhut 1 x3.15 MVA	Chotham	120	2.00
			1 X3. 13 WVA	TOTAL:-	360	6.00
	Grand Total:-	24.78		Grand Total:-		17.67
				Town-1		4.20
				Town-2		4.20
	Aurangabad		Aurangabad	Hariharganj		3.50
70	2 x20 MVA	Aurangabad	4 x 5 MVA	Deo		2.5
78	132/33 KV Transformer	Maximum Load = 14.6 MW		TOTAL:-	0	14.40
	Max. Load=22.60 MW		0.00	Chauriya		0.5
			Gangti 2 x3.15 MVA	Poiwar		2.00
			Z AO. TO IVIVA	H. K.		2.5

				Gangti Town		2.00
				TOTAL:-	0	4.00
				Deo Rural	Meter	
			Deo	Deo Urban	not	
			1 x 1.6 +1x 3.15 MVA	Belsara	working	
				TOTAL:-	0	2.50
				Town (M)		1.5
			Doudnogor	Haspura		8.0
			Daudnagar 1X5+1X3.15 MVA	Ginoria		0.5
			17.6 . 17.6 . 10	Obera		1
		Daudnagar		TOTAL:-	0	3.80
		Maximum Load = 8 MW	Obra 1X1.6+1X3.15 MVA	Town		1
				Jamhaur		0.5
				Karsawan		0.8
				Kara	0	2
	0 17 (1	22.22		TOTAL:-	0	4.30
	Grand Total:-	22.60		Grand Total:-		29.00
				Gopalpur	120	2.00
		MakandpurMaximum Load	Makandpur 2 x 5 MVA	Kharik	26	0.43
,		= 5 MW	+ 1X3.15MVA	High Level	90	1.50
				TOTAL:-	210	3.93
				Madrauni	95	1.58
79	Naugacihhya2x20 MVAMax. Load=13	Rangra	Rangra	Murli	20	0.33
13	MW	Maximum Load = 4 MW	2 x 3.15 MVA	Rangra	30	0.50
				TOTAL:-	145	2.42
			D.1	Sonbarsha	60	1.00
	Bihpur Maximum Load = 4	Bihpur	Bihpur 2 x 3.15 MVA	Babhangama	65	1.08
		Maximum Load = 4 MW	2 X 3. 13 WWA	TOTAL:-	125	2.08
			Narayanpur	Bhramarpur	35	0.58

### Request for Proposal of Grid Connected Solar PV Projects

Grand Total 33 KV Feeder Load	2460.63 MW		Grand Total 11 KV Feeder Load		2723.17 MW
Grand Total:-	13.00		Grand Total:-		9.60
			TOTAL:-	70	1.17
			Satishnagar	10	0.17
		2 x 3.15 MVA	Nagarpara	25	0.42

#### Format 6.8 - Format for Disclosure

### [On the letter head of Bidding Company/Each Member in a Bidding Consortium]

#### Disclosure

We hereby declare that our Parent, Affiliate or Ultimate Parent-or any Group Company with which we have direct or indirect relationship are not separately participating in this selection process.

#### OF

That we are participating in the RfP selection process and that in addition to our Proposal, the following companies are also separately participating in this selection process with which we have direct or indirect relationship as our Parent / Affiliate / Ultimate Parent / Group Company. The names of such other companies are given below: -

SI. No.	Name of the Company	Relationship with bidding Company	Capacity (MW)	Location (if available)
1				
2				

We further declare that we have not been barred by the Central/ any State Government, or any entity controlled by them, from participating in any project (BOT or otherwise), and no such bar is subsisting as on the date of Bid.

We further declare that the above statement is true & correct. We are aware that if at any stage it is found to be incorrect, our response to RfP bid will be rejected and if LoI has been issued or PPA has been signed, the same will be cancelled and the bank guarantees will be encashed.

(Signature & Name of the person Authorised By the board)

Format 6.9 Summary Data Sheet (to be filled separately for individual projects)

1	Name & Address of Bidding Company / Lead Member of Bidding Consortium	
2	In case of Consortium, Name & Address of Member Companies	
3	Project Wise Capacity proposed	Project 1: MW Project 2: MW Project 3: MW Project 4: MW
4	EMD Details	
a)	Amount	
b)	Banker	
c)	DD/Banker's Cheque No. & Date	
5	Processing Fee Details	
a)	Amount	
b)	Banker	
c)	DD/Banker's Cheque No. & Date	
6	Name & Contact Details of Person Authorized by the Company/Consortium to sign the RfP	
a)	Name & Contact Address	
b)	Telephone, Fax & Mobile Numbers	
c)	E-mail id	

(Signature & Name of the person Authorized By the board)

# Format 6.10 Details of the Proposed Technology (to be filled separately for individual projects)

1	Name of Bidding Company / Lead Member of Bidding Consortium	
2	Project proposed	
3	Capacity proposed	
4	Location of the Project (if available)	
5	Technology proposed to be used for the project	(Indian/Imported) (PI Indicate)
a)	Crystalline Silicon Solar Cell Modules	
b)	Thin Film Modules	
c)	Concentrated PV Modules	
d)	Any Other Technology	
6	Confirmation of Technical Parameter of PV Module for use in our Grid Connected Solar Power Plants	As per Annexure - D
7	Estimated Capacity Utilisation Factor	
8	Estimated Annual Generation	
9	Give Brief about the proposed Techno	ology

(Signature & Name of the person Authorized By the board)

### Annexure - D

### Technical Parameter of PV Module for use in Grid Connected Solar Power Plants

All components of the PV plant shall be in accordance with technical specifications given in relevant IS/IEC Standards. The design and commissioning also shall be as per latest IEC/IS standards. The following are some of the technical measures required to ensure quality of the major components used in grid connected solar power projects.

### 1. PV Module Qualification

1.1 The PV modules used in the grid connected solar power projects must qualify to the latest edition of any of the following IEC PV module qualification test or equivalent BIS standards.

Crystalline Silicon Solar Cell Modules IEC 61215 Thin Film Modules IEC 61646 Concentrator PV modules IEC 62108

1.2 In addition, PV modules must qualify to IEC 61730 for safety qualification testing. For the PV modules to be used in a highly corrosive atmosphere throughout their lifetime, they must qualify to IEC 61701.

### 2. Power Conditioners/ Inverters

The Power Conditioners/Inverters of the SPV power plants conform to the latest edition of IEC/ equivalent BIS Standards as specified below:

Efficiency Measurements IEC 61683 Environmental Testing IEC 60068-2

Electromagnetic Compatibility (EMC) IEC 61000 series-relevant parts

Electrical Safety IEC 62109-1&2

Protection against Islanding of Grid
Grid Connectivity

IEEE1547/UL1741/equivalent BIS Standard
Relevant CERC Regulations and Grid Code
as amended and revised from time to time.

### 3. Cables and connectors:

All cables and connectors for used for installation of solar field must be of solar grade which can withstand harsh environment conditions for 25 years and voltages as per latest IEC standards. (**Note:** IEC Standard for DC cables for PV systems is under development. It is recommended that in the interim, the Cables of 600-1800 Volts DC for outdoor installations should comply with the draft EN50618 for service life expectancy of 25 years)

### 4. Other Sub-systems/Component

Other subsystems/components used in the SPV power plants (Cables, Connectors, Junction Boxes, Surge Protection Devices, etc.) must also conform to the relevant international/national Standards for Electrical Safety besides that for Quality required for ensuring Expected Service Life and Weather Resistance (IEC Standard for DC cables for PV systems is under development. It is recommended that in the interim, the Cables of 600-1800 Volts DC for

outdoor installations should comply with the draft EN50618 for service life expectancy of 25 years).

#### 5. Authorized Test Centres

The PV modules/Power Conditioners deployed in the power plants shall have valid test certificates for their qualification as per above specified IEC/ BIS Standards by one of the NABL Accredited Test Centres in India. In case of module types/ equipment for which such Test facilities may not exist in India, test certificates from reputed ILAC Member Labs abroad will be acceptable..

### 6. Warranty

- The mechanical structures, electrical works and overall workmanship of the grid solar power plants must be warranted for a minimum of 5 years.
- PV modules used in grid connected solar power plants must be warranted for peak output wattage, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years.
- The modules shall be warranted for at least 10 years for failures due to material defects and workmanship.

### 7. Identification and Traceability

Each PV module used in any solar power project must use a RF identification tag. The following information must be mentioned in the RFID used on each module (This can be inside or outside the laminate, but must be able to withstand harsh environmental conditions.)

- (i) Name of the manufacturer of PV Module
- (ii) Name of the Manufacturer of Solar cells
- (iii) Month and year of the manufacture (separately for solar cells and module)
- (iv) Country of origin (separately for solar cells and module)
- (v) I-V curve for the module at Standard Test Condition (1000 W/m<sup>2</sup>, AM 1.5, 25°C)
- (vi) Wattage, Im, Vm and FF for the module
- (vii) Unique Serial No and Model No of the module
- (viii) Date and year of obtaining IEC PV module qualification certificate
- (ix) Name of the test lab issuing IEC certificate
- (x) Other relevant information on traceability of solar cells and module as per ISO 9000

Site owners would be required to maintain accessibility to the list of Module IDs along with the above parametric data for each module.

### 8. Performance Monitoring

As part of the performance monitoring, the following shall be carried out:

- The project developer shall maintain the list of Module IDs along with performance characteristic data for each module. This data shall be submitted to BREDA/MNRE.
- The project developer shall install equipment to monitor solar radiation on the module plane, and other climatic parameters including ambient temperature and wind speed.
   The system monitoring generation data of DC and AC power from the plant shall also be put in place. This data shall be submitted to BREDA/MNRE at a periodicity as

- defined from time to time by them. The mode could be on-line or uploading on the website as informed later.
- The project developer shall provide access to SECI/MNRE or their authorized representatives for installing any additional monitoring equipment to facilitate on-line transfer of data.
- All data shall be made available as mentioned above for the entire duration of the PPA.

### 9. Safe Disposal of Solar PV Modules

The SPD will ensure that all Solar PV modules from their plant after their 'end of life' (when they become defective/ non-operational/ non-repairable) are disposed in accordance with the "e-waste (Management and Handling) Rules, 2011" notified by the Government and as revised and amended from time to time.

### 10. Capacity of Solar PV Projects

i) The rated capacity to be installed shall be considered as minimum DC Arrays Capacity and maximum AC Capacity at the delivery point as described below:

Sl. No.	Solar PV Project	Minimum DC Arrays	Maximum AC
	Capacity Bid	Capacity to be	Capacity Limit at
		installed	Delivery point
1	5 MW	5 MW	5 MW
2	10 MW	10 MW	10 MW
3	15 MW	15 MW	15 MW
4	20 MW	20 MW	20 MW

- ii) Higher DC capacity arrays so as to achieve AC capacity limit as mentioned above for scheduling at the delivery point in compliance to Article 4.4 "Right to Contracted Capacity & Energy" of the PPA is allowed.
- iii) For commissioning of the Project, capacity of DC arrays installed shall be considered in multiple of 5 MW per unit.

### **FORMAT 6.11 Format for Clarification on RfP Document**

SI. No.	Clause No. & existing Provision	Clarification Required	Suggested text for the amendment	Rationale for the Clarification or Amendment

This format shall be used for submission of request for clarification / amendments on the RfP Document.

Signature of Authorized Signatory of the Bidder:

Date:

(Please also affix Bidder's Stamp.)

## FORMAT 6.12 Format for Discount on BERC Approved Tariff (to be filled in separately for each Project)

OFFER OF M/s	
Capacity:	

SI. No.	Capacity (MW)	Rate of Depreciation	Bench Mark Tariff (paisa/kWh)	Discount Offered (paisa/kWh)	Offered Tariff After Discount (paisa/kWh)
		Normal/	875/787		
		Accelerated			
		Normal/	875/787		
		Accelerated			
		Normal/	875/787		
		Accelerated			
		Normal/	875/787		
		Accelerated			

(Signature & Name of the person Authorised By the board)

**Date** 

(Please also affix Bidder's Stamp.)

### Format 6.13

Draft of Power Purchase Agreement to be executed between Procurer and the Selected Bidder(s)

NIT No. :	19/PR/BSPHCL/2014-15	Dated:
	-, ,	_ = ===================================

### **Draft**

### **POWER PURCHASE AGREEMENT**

### **FOR**

### **PROCUREMENT**

## ON

### **LONG TERM (25 YEARS) BASIS**

### **Between**

[Insert the name of the successful bidder]

and

**Bihar State Power (Holding) Company Limited** 

### Issued by:

Bihar State Power (Holding) Company Ltd.

Vidyut Bhawan, Jawahar Lal Nehru Marg Patna – 800 021

Tel. No.: 0612 - 2504020 / 2504371\_

Fax No.: 0612 - 2504557

	This Power Purchase Agreement is made on the[Insert date] day of [Insert month] of Two thousand fourteen (2014) at Patna:		
	Between		
to as "	[Insert name of the Solar Power Developer], a company incorporated the Companies Act 1956 or the Companies Act 2013, having its registered office at [Insert address of the registered office of Solar Power Developer] (hereinafter referred Seller" or "Solar Power Developer" or "SPD", which expression shall, unless repugnant to ntext or meaning thereof, be deemed to include its successors and permitted assigns) as a for the First Part;		
	and		
Act 19 800 02 repugn	State Power (Holding) Company Limited, a company incorporated under the Companies 56, having its registered office at Vidyut Bhawan, Jawahar Lal Nehru Marg, Patna, Bihar – 21 (hereinafter referred to as "BSPHCL", or "Procurer" which expression shall, unless nant to the context or meaning thereof, be deemed to include its successors and permitted s) as a Party of the Second Part.		
	" or "Solar Power Developer (SPD)" and "Procurer" are individually referred to as 'Party' ellectively referred to as 'Parties'.		
Where	eas:		
a)	Energy Dept., Govt. of Bihar has proposed the setting up of Grid connected Solar Photovoltaic Projects within the State of Bihar. As per the directives, Projects totaling to a capacity of about 100 MW based on Solar Photovoltaic Technology are proposed to be established by the private project developers who are required to be selected through a competitive bidding basis		
b)	Bihar State Power (Holding) Company Limited (BSPHCL), a company engaged in planning, promoting and developing the power sector in the state of Bihar, had initiated a competitive bidding process through issue of RfP (Request for Proposal) Document datedfor selecting SPD for setting up of Solar PV Project (total aggregate capacity of 100 MW) for supply of solar energy for 25 years to BSPHCL.		
c)	The(SPD), after meeting the eligibility requirements has been selected by BSPHCL for the construction, operation & maintenance and supply of power from the Solar PV project of capacity MW at Location [if available] to the Procurer in accordance with the terms of this Agreement.		
d)	The [SPD or "Seller"] has provided to the Procurer, Contract Performance		

- e) The SPD has agreed to sign this Power Purchase Agreement with Procurer for sale of Solar Photovoltaic Power by the SPD to the Procurer for 25 years as per the terms and conditions of this Agreement.
- f) Procurer agrees to procure Solar Photovoltaic Power up to the Contracted Capacity from the SPD as per the terms of this Agreement.
- g) The Parties hereby agree to execute this Power Purchase Agreement setting out the terms and conditions for the procurement sale of power by SPD to Procurer.
- h) All the other RfP Project Documents will be executed by the Procurer and the Seller simultaneously with the signing of this Agreement.

Now therefore, in consideration of the premises and mutual agreements, covenants and conditions set forth herein, it is hereby agreed by and between the Parties as follows:

### **SECTION 1**

#### 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 the Appropriate Commission (as defined hereunder), as amended or re- enacted from time to time.

"Act" or "Electricity Act, 2003"	Electricity Act, 2003 and include any modifications, amendments and substitution from time to time;
"Agreement" or "Power Purchase Agreement" or "PPA"	shall mean this Power Purchase Agreement including its recitals and Schedules, amended or modified from time to time in accordance with the terms hereof;
"Appropriate Government"	shall mean Govt. of Bihar or Central Government;
"Auxiliary Consumption"	shall be as defined in Clause 32 (1) of the BERC (Terms and Conditions for Tariff determination from Solar Energy Sources) Regulation, 2010 issued vide Gazette Notification dated 04.08.2010 or as amended time to time.
"Bihar State Power Transmission Company Ltd." or "BSPTCL"	Shall mean the State Transmission Utility as specified by the State Government under Sub-section (1) of Section 39 of the Act;

"Bill Dispute Notice"	shall mean the notice issued by a Party raising a Dispute regarding a Monthly Bill or a Supplementary Bill issued by the other Party;
"Business Day"	shall mean with respect to the Seller and Procurer, a day other than Sunday or a statutory holiday, on which the banks remain open for business in the state of Bihar.
"BREDA"	shall mean Bihar Renewable Energy Development Agency.
"Capacity Utilisation Factor" or CUF"	shall mean 19 % availability of the Solar PV Project at the Metering point of the solar plant on Contract Year basis;
"Change in Law"	shall have the meaning ascribed thereto in Article 12.1 of this Agreement;
"Competent Court of Law"	shall mean any court or tribunal or any similar judicial or quasi- judicial body in Bihar that has jurisdiction to adjudicate upon issues relating to this Agreement;
"Consents, Clearances and Permits"	shall mean all authorizations, licenses, approvals, registrations, permits, waivers, privileges, acknowledgements, agreements, or concessions required to be obtained from or provided by any concerned authority for the purpose of setting up of the generation facilities and / or supply of power;
"Consultation Period"	shall mean the period of sixty (60) days or such other longer period as the Parties may agree, commencing from the date of issuance of a Seller Preliminary Default Notice or Procurer Preliminary Default Notice as provided in Article 13 of this Agreement, for consultation between the Parties to mitigate the consequence of the relevant event having regard to all the circumstances;
"Contract Year"	shall mean the period beginning from the Effective Date 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 Contract Year of this Agreement shall end on the last day of the Term of this Agreement;
"Contracted Capacity"	shall meanMW(AC)of Solar PV power contracted with Procurer for sale of such power in MU's by the Seller corresponding to CUF of 19% (Viz. 2 MW AC capacity means 2 MW AC output at
"Commission"	shall mean Bihar Electricity Regulatory Commission (BERC);
"Commercial Operation Date (COD)"	shall mean the actual commissioning date of the full capacity of the Power Project where upon the SPD starts injecting power from the Power Project to the Delivery Point;
"CERC"	shall mean Central Electricity Regulatory Commission
"Day"	shall mean a day, if such a day is not a Business Day, the immediately succeeding Business Day;
"Delivery Date"	shall mean the date on which the Seller commences supply of the aggregate Contracted Capacity to the Procurer;

"Delivery Point"	shall be the 33/11 kV power sub-station of Discom or 132/33 kV grid sub-station of BSPTCL. The metering shall be done at this point of Interconnection. All charges and losses up to the Delivery Point shall be borne by the SPD
"Delivered Energy"	means the kilowatt Hours of electricity actually fed into the Grid system and measured by energy meters at Delivery Point in a Billing Period
"Discoms"	"Discom" shall mean North Bihar Power Distribution Company Limited and/or South Bihar Power Distribution Company Limited;
"Dispute"	shall mean any dispute or difference of any kind between the Seller and the Procurer in connection with or arising out of this Agreement including but not limited to any issue on the interpretation and scope of the terms of this Agreement as provided in Article 16 of this Agreement;
"Due Date"	shall mean the last day of the month provided the bill is received and acknowledged by the Procurer up to 10th day of the month. For the bills received and acknowledged by the Procurer after 10 <sup>th</sup> , it shall be 30 <sup>th</sup> day from such date;
"Effective Date"	shall have the meaning ascribed thereto in Article 2.1 of this Agreement"
"Electricity Laws"	shall mean 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;
"Emergency"	means a condition or situation affecting either Procurer's electrical system or the Grid System, including without limitation, frequency variations beyond the Technical Limits, which threatens the safe and reliable operation of such system or which is likely to result in disruption of safe, adequate and continuous electric supply by Procurer or the Grid System or could endanger life or property.
" Energy Accounts"	shall mean the regional energy accounts/ state energy accounts as specified in the Grid Code issued by the appropriate agency for each Month (as per their prescribed methodology), including the revisions and amendments thereof;
"Event of Default"	shall mean the events as defined in Article 13 of this Agreement;
"Expiry Date"	Shall mean the date occurring twenty five (25) years from the Commercial Operation Date of the Solar PV Project;

"Financial Closure or Financial Close or Project Financing Arrangements"	shall mean arrangements of necessary funds by the Solar Project Developer either by way of commitments of funds by the company from its internal resources and / or tie up of funds through a bank/financial institution by way of sanction of a loan.
"Force Majeure" or "Force Majeure Event"	shall have the meaning ascribed thereto in Article 11 of this Agreement"
"Grid Code" / "IEGC" or "State Grid Code"	shall mean the Grid Code specified by the Central Commission under Clause (h) of Sub-section (1) of Section 79 of the Electricity Act and/or the State Grid Code as specified by the concerned State Commission, referred under Clause (h) of Sub-section (1) of Section 86 of the Electricity Act 2003, as applicable;
"Grid /Distribution System"	means 132/33 kV Grid S/s of BSPTCL or 33/11 kV power sub-station of Discoms through which Delivered Energy is evacuated and distributed.
"Incremental Receivables"	shall mean the amount of receivables, in excess of the amounts which have already been charged or agreed to be charged in favour of the parties by way of a legally binding agreement, executed prior to the Effective Date;
"Indian Governmental Instrumentality"	shall mean the Government of India, Governments of State of Bihar and any Ministry, Department, Board, Authority, Agency, Corporation, Commission under the direct or indirect control of Government of India or any of the above state Government(s) or both, any political sub-division of any of them including any court or Appropriate Commission(s) or tribunal or judicial or quasi-judicial body in India;
"Inter-connection Point"	shall mean the point where the power from the power station switchyard bus of the Seller is injected into the transmission system of BSPTCL/ NBPDCL/ SBPDCL (including the dedicated transmission line connecting the power station with the Delivery Point);
"Invoice" or "Bill"	shall mean either a Monthly Invoice, Monthly Bill or a Supplementary Invoice / Supplementary Bill by any of the Parties;
"KV"	shall mean kilo Volt;
"kWh"	shall mean Kilowatt-hour
"Late Payment Surcharge"	shall have the meaning ascribed thereto in Article 10.3.3 of this Agreement;

"Law"	shall mean 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 without limitation all applicable rules, regulations, orders, notifications by an Indian Governmental Instrumentality pursuant to or under any of them and shall include without limitation all rules, regulations, decisions and orders of the Appropriate Commission;
"Letter of Credit" or "L/C"	shall have the meaning ascribed thereto in Article 10.4 of this Agreement;
"Metering Point"	for purposes of recording of Delivered Energy will be the Delivery Point
"Month"	shall mean a period of thirty (30) days from (and excluding) the date of the event, where applicable, else a calendar month;
"NBPDCL / SBPDCL / Discom"	shall mean North Bihar Power Distribution Company Limited or South Bihar Power Distribution Company Limited
"Operating Period"	shall mean the period commencing from the Commercial Operation Date, until the last day of the Term of this Agreement or date of earlier termination of this Agreement in accordance with Article 2 of this Agreement;
"Open Access Charges"	shall mean the charges levied by the RLDC / STU/ SLDC of the State of Bihar for the grant of Open Access & for scheduling;
"Party" and "Parties"	shall have the meaning ascribed thereto in the recital to this Agreement;
"Payment Security Mechanism"	shall have the meaning ascribed thereto in Article 10.4 of this Agreement;
"Project" or "Project"	shall mean the solar power generation facility of Contracted Capacity of
"Preliminary Default Notice"	shall have the meaning ascribed thereto in Article 13 of this Agreement;
"PSS"	shall mean Power Sub-station

"Prudent Utility Practices"	shall mean 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 power generation equipment 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 Power Project;  b) the requirements of Indian Law; and the physical conditions at the site of the Power Project;
"RBI"	shall mean the Reserve Bank of India;
"Rebate"	shall have the same meaning as ascribed thereto in Article 10.3.4 of this Agreement;
"RLDC"	shall mean the relevant Regional Load Dispatch Centre established under Sub-section (1) of Section 27 of the Electricity Act, 2003;
"RPC"	shall mean 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;
"Rupees","Rs." or ""	shall mean Indian rupees, the lawful currency of India;
"Scheduled Commercial Operation Date" or "Scheduled COD"	shall be a date,(to be filled as per RfP) months from the Effective Date, when the Solar PV Project is required to be commissioned as per the terms and conditions of the PPA;
"SLDC"	shall mean the State Load Dispatch centre established under Subsection (1) of Section 31 of the Electricity Act 2003, relevant for the State of Bihar;
"SLDC Charges"	shall mean the charges levied by SLDC;
"Solar Photovoltaic" or "Solar PV"	shall mean the solar power project that uses sunlight for direct conversion into electricity and that is being set up by the Seller to provide Solar Power to the Procurer;
"Solar Power"	shall mean power generated from the Solar PV Project;
"State Transmission Utility" or "STU"	shall mean "BSPTCL" or the Government company notified by the respective State Government under Sub-section (1) of Section 39 of the Act;
"Tariff"	Shall have the same meaning as provided for in Article 9 of this Agreement;
"Tariff Payments"	shall mean the payments to be made under Monthly Bills as referred to in Article 10;
"Termination Notice"	shall mean the notice given by either Parties for termination of this Agreement in accordance with Article 13 of this Agreement;

"Term of Agreement"	shall have the meaning ascribed thereto in Article 2 of this Agreement;
"Week"	shall mean a calendar week commencing from 00:00 hours of Monday, and ending at 24:00 hours of the following Sunday;
"Voltage of Delivery"	shall mean the voltage at which the electricity generated by the project will be delivered to Procurer at the Delivery point

### 1.2 Interpretation

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

- 1.2.1 "Agreement" shall be construed as including a reference to its Schedules and/ or Appendices and/ or Annexure(s);
- 1.2.2 An "Article", a "Recital", a "Schedule" and a "paragraph / clause" shall be construed as a reference to an Article, a Recital, a Schedule and a paragraph/clause respectively of this Agreement;
- 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 "Rupee", "Rupees" "Rs." or "₹" (new rupee symbol) shall denote Indian Rupees, the lawful currency of India;
- 1.2.8 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;

- 1.2.9 Words importing the singular shall include the plural and vice versa;
- 1.2.10 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 only if agreed to between the parties;
- 1.2.11 A Law shall be construed as a reference to such Law including its amendments or re-enactments from time to time;
- 1.2.12 A time of day shall, save as otherwise provided in any agreement or document be construed as a reference to Indian Standard Time:
- 1.2.13 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;
- 1.2.14 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;
- 1.2.15 All interest, if applicable and 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;
- 1.2.16 The words "hereof" or "herein", if and when used in this Agreement shall mean a reference to this Agreement;
- 1.2.17 The terms "including" or "including without limitation" shall mean that any list of examples following such term shall in no way restrict or limit the generality of the word or provision in respect of which such examples are provided;

### **ARTICLE 2: TERM OF AGREEMENT**

#### 2.1 Effective Date

2.1.1 This Agreement shall come into effect from the date of its execution by both the Parties and such date shall be referred to as the Effective Date.

### 2.2 Term of Agreement

2.2.1 This Agreement subject to Article 2.3 and 2.4 shall be valid for a term from the Effective Date until the Expiry Date. This Agreement may be extended for a further period on mutually agreed terms and conditions at least one hundred eighty (180) days prior to the Expiry Date.

### 2.3 Early Termination

- 2.3.1 This Agreement shall terminate before the Expiry Date:
  - i. if either Seller or the Procurer terminates this Agreement, pursuant to Article 13 (Events of Default and Termination), of this Agreement; or
  - ii. in such other circumstances as the Seller or the Procurer may agree, in writing;

### 2.4 Survival

2.4.1 The expiry or termination of this Agreement shall not affect any accrued rights, obligations and liabilities of the Parties under this Agreement, including the right to receive liquidated damages as per the terms of this Agreement, nor shall it affect the survival of any continuing obligations for which this Agreement provides, either expressly or by necessary implication, which are to survive after the Expiry Date or termination including those under, Article 11 (Force Majeure), Article 13 (Events of Default and Termination), Article 14 (Liability and Indemnification), Article 16 (Governing Law and Dispute Resolution), Article 17 (Miscellaneous Provisions), 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.

### ARTICLE 3: CONDITIONS SUBSEQUENT TO BE SATISFIED BY THE SELLER/ PROCURER

### 3.1 Satisfaction of conditions subsequent by the SPP/ Seller

3.1.1 The SPD agrees and undertakes to duly perform and complete all of the following activities at the SPD's own cost and risk as per below mentioned time schedule from the Effective Date, unless such completion is affected by any Force Majeure event, or if any of the activities is specifically waived in writing by Procurer:

Milestone	Time Period from the Effective Date	Documentary Evidence to be produced to BREDA / BSPHCL
Approval from State Transmission Utility/ Discom regarding the feasibility of grid connectivity of the project site.	Four Months	Approval Letter from BSPTCL / NBPDCL/ SBPDCL
Clear Possession of the required land for project development	Five Months	<ul> <li>Ownership or lease hold rights from State agency only (for at least 30 years) in the name of the Project Developer and possession of 100% of the area of land required for the allotted project. Land can be taken on lease from State agency only.</li> <li>Certificate by the concerned and competent revenue / registration authority for the acquisition / ownership / vesting of the land in the name of the Project Developer.</li> <li>Sworn affidavit from the Authorized person of the developer listing the details of the land and certifying total land required for the project under clear possession of the Project Developer.</li> <li>In case of Bidding Consortium, the possession of land or</li> </ul>

Milestone	Time Period from the Effective Date	Documentary Evidence to be produced to BREDA / BSPHCL
		lease hold right of land from State agency is in the name of non lead member, the same will be accepted against application and would be required to be transferred to the Project Company before signing of PPA.
Financial Closure	Six Months	Copy of the Sanction Letter received from the Financial Institutes/ Banks

- 3.1.2 The SPP/ Seller shall have obtained all Consents, Clearances and Permits required for supply of power to the Procurer as per the terms of this Agreement. In case a Project Company is incorporated and the Consents, Clearances and Permits have been obtained in the name of a company other than the Project Company, all such Consents, Clearances and Permits shall have been transferred in the name of such Project Company;
- 3.1.3 Transmission Agreement between BSPTCL/ Discom and SPD confirming the evacuation and connectivity of STU system with their Power Project switchyard.
- 3.1.4 Failure or delay on the part of Seller in achieving the above conditions shall constitute sufficient grounds for encashment of the Performance Bank Guarantee

### 3.1A Satisfaction of conditions subsequent by the Procurer

- 3.1A.1 The Procurer agrees and undertakes to duly perform and complete the following activities at the Procurer's own cost and risk within nine months from the Effective Date, unless such completion is affected by any Force Majeure event or due to the Seller's failure to comply with their obligations under Article 3.1 of this Agreement or if any of the activities is specifically waived in writing by the Seller:
  - The Procurer shall have obtained the order of the Bihar Electricity Regulatory Commission for adoption of the tariff under Section 63 of the Electricity Act 2003 and given a copy of the same to the Seller.
- 3.2 Consequences of non-fulfillment of conditions subsequent under Article 3.1

- 3.2.1 In case of failure to submit the documents as above, Procurer shall have the right to terminate this Agreement by giving a Termination Notice to the SPD in writing of at least seven (7) days. The termination of the Agreement shall take effect upon the expiry of the 7<sup>th</sup> day of the notice.
- 3.2.2 Procurer shall be entitled to encash all the Performance Bank Guarantees submitted by the SPD.
- 3.2.3 For the avoidance of doubt, it is clarified that this Article shall survive the termination of this Agreement.
- 3.2.4 In case of inability of the SPD to fulfill any one or more of the conditions specified in Article 3.1 due to any Force Majeure event, the time period for fulfillment of the Conditions Subsequent as mentioned in Article 3.1, shall be extended for the period of such Force Majeure event.
- 3.2.5 Provided that due to the provisions of this Article 3.2, any increase in the time period for completion of conditions subsequent mentioned under Article 3.1, shall also lead to an equal extension in the Scheduled Commissioning Date.

### 3.3 Performance Bank Guarantee

- 3.3.1 The Performance Bank Guarantee of Rs. 30 Lakh/MW to be furnished under this Agreement shall be for guaranteeing the commencement of the supply of power up to the Contracted Capacity within the time specified in this Agreement.
- 3.3.2 The failure on the part of the SPD to furnish and maintain the Performance Bank Guarantee shall be a material breach of the term of this Agreement on the part of the SPD.
- 3.3.3 If the SPD fails to commence supply of power from the Scheduled Commissioning Date specified in this Agreement or any further extension thereof granted by Procurer, subject to conditions mentioned in Article 4.6.1, Procurer shall have the right to encash the Performance Bank Guarantee in accordance with Article 4.7 without prejudice to the other rights of Procurer under this Agreement.

#### 3.4 Return of Performance Bank Guarantee

- 3.4.1 Subject to Article 3.3, Procurer shall return/ release the Performance Bank Guarantee immediately after the Comercial Operation Date of the Project.
- 3.4.2 The return/ release of the Performance Bank Guarantee shall be without prejudice to other rights of Procurer under this Agreement.

## ARTICLE 4: CONSTRUCTION & DEVELOPMENT OF THE PROJECT

## 4.1 SPD's Obligations

- 4.1.1 The SPD undertakes to be responsible, at SPD's own cost and risk, for:
  - a) obtaining all Consents, Clearances and Permits other than those obtained under Article
     3.1.1 and maintaining all Consents, Clearances and Permits in full force and effect during the Term of this Agreement;
  - b) designing, constructing, erecting, commissioning, completing and testing the Power Project in accordance with the applicable Law, the State Grid Code, the terms and conditions of this Agreement and Prudent Utility Practices;
  - the commencement of supply of power up to the Contracted Capacity to Procurer not later than the Scheduled Commissioning Date; and continuance of supply of Power throughout the term of agreement;
  - d) owning the Power Project throughout the Term of Agreement free and clear of encumbrances, except those expressly permitted under Article 15;
  - e) maintaining its controlling shareholding (having the shareholding of more than 50%) prevalent at the time of signing of PPA up to a period of one (1) year after Commercial Operation Date; and
  - f) fulfilling all obligations undertaken by the SPD under this Agreement.
- 4.1.2 Further, the SPP should adhere to the following milestone schedule after the achievement of the financial closure for the project.

Milestone	Time Period from the Achievement of Financial Closure	Documentary Evidence to be produced to BREDA / BSPHCL
No-Objection Certificate from State Pollution Control Board (if required)	Two months	Copy of approval letter from SPCB
Placement of Order/Agreement signing for purchase of plant and machinery for the project	Three months	Order/Agreement Copy
Payment of requisite advance or opening of irrevocable letter of credit with suppliers/contractors	Four months	Receipt of payment from the Supplier/Contractor
Receiving of plant and machinery for the project at site	Six Months	MDCC from Supplier/ Actual Site Photographs
Completion of Civil Infrastructure	Eight Months	Actual Site Photographs
Commissioning and commercial	Nine Months	Letter from

Milestone	Time Period from the Achievement of Financial Closure	Documentary Evidence to be produced to BREDA / BSPHCL
operation		NBPDCL/SBPDCL

## 4.1A Construction power and power during maintenance/ shutdown

The SPD shall apply to the Discom for availing temporary connection for the supply of Power and the Discom shall supply the power in accordance with then prevalent terms and conditions for such consumers at the tariff as determined by BERC from time to time.

The SPD shall also be allowed by the Discom to draw energy for their consumption during the maintenance/ shut down period of the Project after the Commercial Operation date. The Discom shall raise an invoice on the monthly basis as per the prevailing terms and conditions and tariff rates as applicable for such consumers as determined by BERC.

## 4.2 Grid Interfacing and Evacuation Arrangements

- 4.2.1 The plant should be designed for interconnection with the distribution/transmission network of Discom or BSPTCL. The responsibility of getting connectivity with the transmission system will lie with the SPD.
- 4.2.2 While identifying the site for the Project, the SPD shall be required to obtain an "in-principle" approval from the State Transmission Utility i,e Bihar State Power Transmission Utility Limited or North Bihar Power Distribution Company or South Bihar Power Distribution Company Limited regarding the feasibility of grid connectivity of the project site. The same is required to be obtained within 120 days from the date of signing of this Agreement.
- 4.2.3 In case of delay in achieving the above condition, as may be applicable, BSPHCL shall encash performance Bank Guarantees and shall remove the project from the list of the selected projects.
- 4.2.4 The generation project shall be located in the close proximity of existing /upcoming PSS (33 /11 KV) & Grid S/s (132/33 KV). In case the distance is larger than 10 km, based on the detailed feasibility studies, Transco / Discom may request Bidder to consider an alternate site for the project.
- 4.2.5 Based on the feasibility of the grid connectivity of the project site established by BSPTCL/ NBPDCL/ SBPDCL, the requisite arrangement for the evacuation of the power from the generation plant to the nearest grid/ sub-station will be developed at their own cost by BSPTCL/ NBPDCL/ SBPDCL. However, the installation of equipments for metering at the plant side will be the responsibility of the SPD.
- 4.2.6 The SPD shall provide step-up transformers, panels, kiosks, protection & metering equipment or any other equipment as required at the generation facility and fully equipped

line bay(s) in its switchyard for termination of interconnecting transmission line(s) at the Generation switchyard. In general, the SPD should procure and set up all such facilities required for facilitating the inter-connection till the point of inter-connection. The SPD shall also provide proper & reliable communication between the generation facility & Grid substation / Power S/S of BSPTCL/ NBPDCL/ SBPDCL where the power is to be delivered by the generation facility. The cost of the communication equipments and associated works will be borne by the SPD.

- 4.2.7 The SPD shall run the plant as a part of integrated system to generate power in synchronism with the grid and shall inject three phase 50 Hz (nominal) AC Supply into Discom's system at \_\_ kV as per provision of Bihar Grid Code-2010 as amended from time to time.
- 4.2.8 Delivery of power to the point of interconnection at substation of Discom/BSPTCL where the metering will be done shall be the responsibility of the SPD at its own cost. For this, the SPD shall enter into a Transmission Agreement with BSPTCL / NBPDCL / SBPDCL and shall pay the applicable Open Access charges at the rates to be determined by BERC for transmission of power from its power plant to the sub-station. The installation of equipments for metering at the power plant side will be the responsibility of the SPD.
- 4.2.9 The Company shall also generate matching MVArh corresponding to 0.80 PF & above, so that there is no adverse effect on Discom's Grid system. Monthly average PF shall be computed from ratio of kWh to kVArh injected into Discom's Grid system during the month.

## 4.3 Synchronization & Interconnection Facilities

- 4.3.1 The SPD shall be required to obtain all information with regard to the interconnection facilities as is reasonably necessary to enable it to design, install and operate all interconnection plant and apparatus on the generation plant side to enable delivery of electricity at the Delivery Point.
- 4.3.2 The synchronization equipment will be installed by the SPD at its generation facility at its own cost. The SPD shall synchronize its system with the Discom's system only after the grant of approval of synchronization scheme by Chief Engineer, Transmission (O&M) and subject to verification and checking made by Electrical Superintending Engineer, CRITL, BSPTCL of the control and protection system of the generation project & switchyard. The SPD shall, immediately after each synchronization / tripping of generator, inform the Grid sub-station / Power S/s to which the plant is electrically connected and SLDC, Patna. The SPP should also inform the concerned connected Grid sub-station / Power S/s / SLDC before any synchronization. The in-charge of the Grid Sub Station or Power Sub-station should also inspect the system of synchronization.
- 4.3.3 The SPD and Procurer in mutual consultation with each other shall decide on the scheme for protection of the interconnection line(s) and of the facilities at both ends as well as generation protection facilities in case of reverse power flow due to mal operation of the circuit breakers during tripping of the unit (s). All electrical equipment shall be installed as

- per Bihar Electricity Grid Code 2010 or as amended time to time by BERC. The installation and operation of meters shall be as per CEA (Installation and Operation of Meters) Regulations, 2010 or BERC Grid Code 2010 as amended time to time.
- 4.3.4 Notwithstanding the provisions of this agreement, the Procurer will not be responsible for any damage that may occur to the SPD's generation system for any reasons what-so-ever.

## 4.4 Purchase and sale of Contracted Capacity

4.4.1 Subject to the terms and conditions of this Agreement, the SPD undertakes to sell to Procurer and Procurer undertakes to pay Tariff for all the energy supplied at the Delivery Point corresponding to Contracted Capacity.

# 4.5 Right to Contracted Capacity & Energy

- 4.5.1 Procurer, at any time during a Contract Year, shall not be obliged to purchase any additional energy from the SPD beyond ........ Million kWh (MU) [Insert value of energy generated corresponding to a CUF of 19 %].
- 4.5.2 If for any Contract Year, it is found that the SPD has not been able to generate minimum energy of ...... Million kWh (MU) [corresponding to a CUF of 12%], on account of reasons solely attributable to the SPP, the non-compliance by SPD shall make SPD liable to pay the compensation to Procurer. This compensation shall be applied to the amount of shortfall in generation during the Contract Year. The amount of compensation shall be computed at the rate equal to the floor price payable by the Discoms towards purchase of Solar REC as determined by BERC subject to a minimum of 25% of the applicable tariff. However, the amount of shortfall in generation shall be adjusted as per methodology proposed by MNRE,on account of non-availability of grid for power evacuation which is beyond the control of the SPD and / or occurrence of abnormally low Global Horizontal Irradiance (GHI) year (i.e. if the actual global solar irradiance in the year under consideration is less than 50% of average values of two (2) years of annual GHI as available from the nearest IMD/SRRA stations).
- 4.5.3 Notwithstanding Article 4.5.1, the SPD is free to sell such power to any third party prior to the Scheduled Commissioning Date and any capacity, which is in excess of the quantum of power agreed to be supplied under this Agreement from Scheduled Commissioning Date. However, in case at any point of time, the peak of capacity reached is higher than the rated capacity and causes disturbance in the system at the point where power is injected, the developer will have to forego the excess generation and reduce the output to the rated capacity.
- 4.5.4 The sale of power under open access within or outside the state from the Solar Power Generating sources will be in accordance with the provisions of BERC (Terms and Conditions for Open Access) Regulation, 2006 for use of the Intra State transmission, distribution system or associated facilities as amended time to time and CERC (Open

Access in Inter State Transmission) (Amendment) Regulation, 2008 or as amended time to time.

# 4.6 Extensions of Time

- 4.6.1 In the event that the SPD is prevented from performing its obligations under Article 4.1 by the Scheduled Commissioning Date due to:
  - a) any STU/ Discom(s)/ Procurer Event of Default; or
  - b) Force Majeure Events affecting STU/ Discom(s)/ Procurer, or
  - c) Force Majeure Events affecting the SPD,

the Scheduled Commissioning Date and the Expiry Date shall be deferred for a reasonable period but not less than 'day for day' basis, to permit the SPD or STU/Discom(s)/ Procurer through the use of due diligence, to overcome the effects of the Force Majeure Events affecting the SPD or Procurer, or till such time such Event of Default is rectified by STU/Discom(s)/ Procurer.

- 4.6.2 Subject to Article 4.6.5, in case of extension occurring due to reasons specified in Article 4.6.1(a), any of the dates specified therein can be extended by Procurer, subject to the condition laid down in RfP. In case of extension due to reasons specified in Article 4.6.1(b) and (c), and if such Force Majeure Event continues even after a maximum period of three (3) Months, any of the Parties may choose to terminate the Agreement as per the provisions of Article 13.5.
- 4.6.3 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 the time period by which the Scheduled Commissioning Date or the Expiry Date should be deferred by, any Party may raise the Dispute to be resolved in accordance with Article 16.
- 4.6.4 As a result of such extension, the Scheduled Commissioning Date and the Expiry Date newly determined shall be deemed to be the Scheduled Commissioning Date and the Expiry Date for the purposes of this Agreement.
- 4.6.5 Notwithstanding anything to the contrary contained in this Agreement, any extension of the Scheduled Commissioning Date arising due to any reason envisaged in this Agreement shall not be allowed beyond the date determined pursuant to article 4.7.2 whichever is later.

## 4.7 Liquidated Damages for delay in commencement of supply of power to Procurer

4.7.1 If the SPD is unable to commence supply of power to Procurer by the Scheduled Commissioning Date other than for the reasons specified in Article 4.6.1, the SPD shall pay to Procurer, Liquidated Damages for the delay in such commencement of supply of power and making the Contracted Capacity available for dispatch by the Scheduled Commissioning Date as per following:

- a. Delay up to one month Procurer will encash 20% of the total Performance bank guarantee proportionate to the Capacity not commissioned.
- b. Delay of more than one month and up to two months Procurer will encash 40% of the total Performance Bank Guarantee proportionate to the Capacity not commissioned in addition to BG in clause-a above.
- c. Delay of more than two months and up to three months Procurer will encash the remaining Performance Bank Guarantees proportionate to the Capacity not commissioned in addition to BG in clause-a and b above

In case the commissioning of project is delayed beyond 3 (three) months, the Project Developer shall pay to Procurer the Liquidated Damages (LD) at the rate of Rs.1,00,000 per MW per day of delay for the delay in such remaining Capacity which is not commissioned.

- 4.7.2 The maximum time period allowed for commissioning of the Project with encashment of Performance Bank Guarantee shall be limited to 19 months from the date of signing of this agreement.
- 4.7.3 The amount of liquidated damages worked out as above shall be recovered by Procurer from the payments due to the Project Developer on account of sale of solar power to Procurer. In case, the Commissioning of the Project is delayed beyond 19 months from the date of signing of the PPA, the PPA capacity shall stand reduced / amended to the Project Capacity Commissioned and the PPA for the balance Capacity will stand terminated and shall be reduced from the selected Project Capacity.
- 4.7.4 Part commissioning of the Project shall be accepted by Procurer subject to the condition that the minimum capacity for acceptance of part commissioning shall be 1 MW and in multiples thereof. The PPA will remain in force for a period of 25 years from the date of acceptance of respective part commissioning of the project.

## 4.8 Acceptance/ Performance Test

4.8.1 Prior to synchronization of the Power Project, the SPD shall be required to get the Project certified for the requisite acceptance/ performance test as may be laid down by an agency identified by the Procurer to carry out testing and certification for the solar power projects.

## 4.9 Third Party Verification

4.9.1 The SPD shall be further required to provide entry to the site of the Power Project free of all encumbrances at all times during the Term of the Agreement to Discom / STU/ Procurer and a third Party/ committee consisting of officials of MNRE, BERC, CEA, Procurer, NBPDCL, SBPDCL, BSPGCL, BSPTCL, and nominated by State Governmental Instrumentality for inspection and verification of the works being carried out by the SPD at the site of the Power Project.

- 4.9.2 The third party may verify the construction works/ operation of the Power Project being carried out by the SPD and if it is found that the construction works/ operation of the Power Project is not as per the Prudent Utility Practices, it may seek clarifications from SPD or require the works to be stopped or to comply with the instructions of third party.
- 4.9.3 The third party may carry out checks for testing the CUF of the Power Project. During a contract year, if the CUF of the Power Project is found to be below ......... [Insert value i.e. 5% less than CUF] or if it is found that the SPD has not been able to maintain a CUF of .......... [Insert value i.e. 3% less than CUF] for a consecutive/non consecutive period of three (3) months during a Contract Year on account of reasons solely attributable to SPD, the SPD shall be liable for non fulfillment of its obligation.

## ARTICLE 5: SYNCHRONISATION, COMMISSIONING AND COMMERCIAL OPERATION

## 5.1 Synchronization, Commissioning and Commercial Operation

- 5.1.1 The SPD shall give the concerned RLDC / SLDC/ BSPTCL/ Discom(s) at least sixty (60) days advanced preliminary written notice and at least thirty (30) days advanced final written notice, of the date on which it intends to synchronise the Power Project to the Grid System.
- 5.1.2 Subject to Article 5.1.1, the Power Project may be synchronized by the SPD to the Grid System when it meets all the connection conditions prescribed in Bihar Grid Code then in effect and otherwise meets all other Indian/State legal requirements for synchronization to the Grid System.
- 5.1.3 The synchronization equipment shall be installed by the SPD at its generation facility of the Power Project at its own cost. The SPP shall synchronize its system with the Grid System only after the approval of synchronization scheme is granted by the head of the concerned sub-station/ Grid System of BSPTCL and checking/verification is made by the concerned BSPTCL and Discoms Authorities of the Grid System.
- 5.1.4 The SPP shall immediately after each synchronization/ tripping of generator, inform the sub-station of the Grid System to which the Power Project is electrically connected in accordance with State Grid Code.
- 5.1.5 The SPP shall commission the project within fifteen (15) months from the date of signing of PPA.

## ARTICLE 6: DISPATCH

## 6.1 Dispatch

- 6.1.1 The Power Project shall be required to maintain compliance to the applicable Grid Code requirements and directions, if any, as specified by concerned SLDC/ RLDC from time to time.
- 6.1.2 The Power Project shall be treated as "Must Run" power plants and shall not be subjected to "merit order dispatch" as per provision of Clause 11 of BERC (Terms and Conditions for Tariff determination from Solar Energy Sources) Regulation, 2010 notified in Bihar Gazette on 04.08.2010 or as amended time to time by BERC.

## 6.1.3 Continuity of Service

- 6.1.3.1 Procurer may require the SPD to temporarily curtail or interrupt delivery of energy when necessary in the following circumstances:
  - For repair, replacement and removal of the Procurer's equipment or any part of its system that is associated with the Company's facility. However, as far as practicable such an event shall be scheduled during the annual shut down period of the generation facilities.
  - Load crash in Procurer system due to wide-spread rains, cyclones or typhoons.
  - Conditions leading to overloading of interconnecting transformers, transmission lines and switchgears due to outage of some equipment at Procurer's interconnecting grid or power substation.
  - If Procurer determines that the continued operation of the facility may endanger the safety of the Procurer's personnel or integrity of the Procurer electric system or have an adverse effect of the electric service to the Procurer other customer(s).
  - Under Force-Majeure Conditions of Procurer.
  - Instructions for the disconnection of the generation facility from the Procurer system shall be notified by the State Load Despatch Centre, Patna for the period / duration indicated by it. However, Procurer shall take all reasonable steps to minimize the number and duration of such interruptions, curtailments or reductions.

## **ARTICLE 7: METERING**

- 7.1 Energy meters (Export –Import type) of 0.2 class or better accuracy and having kWh, kVAh & kVArh facility duly inspected and tested by the Procurer shall be installed at Delivery Point (hereinafter called Main Meters) and at the out going feeder of the generating station end (hereinafter called Check Meters) by Procurer and SPD respectively which shall be capable of recording and storing fifteen (15) minutes data of the Electrical Parameters for a minimum of 35 days with MRI downloading facility of the datas. Dedicated CTs and PTs of 0.2 or 0.5 class or better accuracy shall be made available by Procurer at the Delivery point (Grid Sub station / Power substation) and by SPD at the out-going feeder of the generating station end. The Energy meters will be DLMS compliant and with GPRS MODEM and having ABT feature also. The detail specification of Energy Meters will be approved by Procurer prior to placing order for the energy meter by the SPD. The finalization of the metering scheme will be through mutual discussion between Procurer and the SPD at the time of procurement in order to adopt latest developed technology and equipment.
- 7.2 All the meters, CTs and PTs described in Clause 7.1 above shall be jointly inspected and sealed on behalf of both Parties and shall not be interfered with except in the presence of the representatives of both Parties. For testing and calibration of meters, a notice of at least seven (7) days shall be given by the Party requesting the testing to enable the authorized representatives of both the parties to be present. All energy meters, CT, PT will be tested at laboratory of Procurer at Patna under Director (Metering). Necessary request and requisite testing charges if desired may be obtained from concerned Transmission/Supply Circles/Divisions.
- 7.3 All meters, CT and PT shall be checked for accuracy prior to commissioning & once in every six (6) months by both parties and shall be treated as working satisfactorily so long as the errors are within the limits prescribed for such meters.
- 7.4 Meter readings of the main meter will form the basis of billing.
- 7.5 Where the half yearly check indicates errors in the Main Meters beyond the prescribed limit but no such error is noticed in the Check Meters, billing for the month up to the date & time of such test check will be done on the basis of check meters and the Main Meters will be re-calibrated immediately. Billing for the period after the Main Meters are calibrated shall be as per the calibrated meters.
- 7.6 If during the half yearly checks, both the main meters and the check meters are found to be beyond permissible limits or error, the meters shall be immediately recalibrated and the correction shall be applied to the consumption registered by the Main Meters to arrive at the correct consumption of energy for billing purposes for the period of the month up to the time of such check, billing for the period thereafter till the next monthly meter reading shall be measured by recalibrated Main Meters. In case of meter reading at the generator end is taken for billing purpose then the energy supplied to Procurer will be taken care of after

deducting the Auxiliary consumption and transmission / wheeling loss as determined by BERC from time to time.

- 7.7 Corrections in billing, wherever necessary, shall be applicable to the period between date & time of the previous test calibration and the date & time of the test calibration in the current month when the error is observed and this correction shall be for the full value of the absolute error. For the purpose of the correction to be applied, the meter shall be tested at 100, 75, 50, 25 & 10 percent load at unity, 0.85 lag & 0.75 lag power factors. Of these fifteen values, the error at the load and power factor nearest the average monthly load served at the point during the period shall be taken as the error to be applied for correction.
- 7.8 The billing will be normally done on the basis of readings recorded by the meters installed at the Delivery point (Main Meters) at grid substation of BSPTCL or power substation of Procurer. In case the metering equipment of Delivery point becomes defective, the billing shall be done on the basis of meter readings of the meters installed at generating station switchyard. Under such condition the net power supplied to Procurer system will be calculated as follows:

Net Energy supplied to Procurer (in Kwh) = [Energy recorded at the check meter installed at the out going feeder of the generating station switchyard - Transmission loss - Wheeling loss (at 33 KV or 11 KV)]. Transmission and Wheeling loss will be as determined by BERC time to time. The defective meters shall however be replaced within three (3) months of the detection by either partly.

- 7.9 If both the Energy Meters located at the outgoing feeder of the generation switch yard and State utility Grid Substation / Power substation fail to record the Electricity supplied then the Electricity supplied will be computed from the log sheets maintained at Procurer's Grid substation / Power Substations for that period of defect. The M.R.I of the meter will be considered an authentic document for verification of the meter reading and will be final & binding on both parties.
- 7.10 For the purpose of test & calibration, the sub standard meter shall be got calibrated and sealed from reputed testing Laboratory. This meter shall be calibrated once in every 2 years.

## 7.11 Reporting of Metered Data and Parameters

- 7.11.1 The grid connected solar PV power plants will install necessary equipment for regular monitoring of solar irradiance (including GHI DHI and solar radiation in the module plane), ambient air temperature, wind speed and other weather parameters and simultaneously for monitoring of the electric power (both DC and AC) generated from the Project.
- 7.11.2 Online arrangement would have to be made by the SPD at its own cost for submission of above data regularly for the entire period of this Power Purchase Agreement to BREDA/Procurer and the concerned Ministry.

## **ARTICLE 8: INSURANCES**

#### 8.1 Insurance

8.1.1 The SPD shall effect and maintain or cause to be effected and maintained, at its own cost and expense, throughout the Term of PPA, 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 and under applicable laws.

# 8.2 Application of Insurance Proceeds

- 8.2.1 Save as expressly provided in this Agreement or the Insurances, the proceeds of any insurance claim made due to loss or damage to the Power Project or any part of the Power Project shall be first applied to reinstatement, replacement or renewal of such loss or damage.
- 8.2.2 If a Force Majeure Event renders the Power Project no longer economically and technically viable and the insurers under the Insurances make payment on a "total loss" or equivalent basis, Procurer shall have no claim on such proceeds of such Insurance.

## 8.3 Effect on liability of Procurer

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

# **ARTICLE 9: APPLICABLE TARIFF**

9.1.1 The SPD shall be entitled to receive a Tariff of Rs....../kWh [Insert as applicable] fixed for the entire term of this Agreement, with effect from the Scheduled Date of Commissioning for the energy supplied at the Delivery Point. pertaining to the Contracted Capacity.

#### **SECTION 3:**

#### **ARTICLE 10: BILLING AND PAYMENT**

#### 10.1 General

- 10.1.1 From the commencement of supply of power by the Seller, the Procurer shall pay to the Seller the monthly Tariff Payments, on or before the Due Date, in accordance with Tariff as specified in this Article 9. All Tariff Payments by the Procurer shall be in Indian Rupees.
- 10.1.2 The designated representatives of the Parties shall record joint readings of the meters of the respective feeders at Delivery point at 1200 Hours on the first day of every calendar month.
- 10.1.3 Monthly energy account depicting energy delivered & wheeled to Procurer, shall be prepared and maintained by SLDC, Patna on behalf of Procurer.

# 10.2 Delivery and Content of Monthly Bills

10.2.1 The Seller shall issue to Procurer a signed Monthly Bill for the immediately preceding Month not later than ten (10) days of the next Month. In case the Monthly Bill for the immediately preceding Month issued after ten (10) days of the next Month, the Due Date for payment of such Monthly Bill shall be extended by thirty (30) days.

#### Provided that:

- a. if the date of commencement of supply of power 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
- b. if, the date of commencement of supply of power falls after the fifteenth (15th) day of a Month, the first Monthly Bill shall be issued for the period commencing from the Delivery Date 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.

- 10.2.2 The Monthly Bill prepared shall include the following;
  - i) Provisional Bill for Solar PV power supplied in the immediately preceding Month;
  - ii) Adjustments against the Provisional Bill(s) based on Energy Accounts for the Solar PV power supplied in the Month(s) proceeding to the previous month(s);
  - iii) Late Payment Surcharge, if any; and

iv) Taxes, Duties, Levies etc as applicable.

## 10.3 Payment of Monthly Bills

- 10.3.1 The Procurer shall pay the amount payable under the Monthly Bill on the Due Date to such account of the Seller, as shall have been previously notified to the Procurer in accordance with Article 10.3.2 below.
- 10.3.2 The Seller shall open a bank account at Patna, Bihar ("Seller's Designated Account") for all Tariff Payments be made by the Procurer to the Seller, and notify the Procurer of the details of such account at least ninety (90) Days before the dispatch of the first Monthly Bill. The Procurer shall also designate a bank account at Patna (the "Procurer's Designated Account") for payments to be made by the Seller to the Procurer, if any, and notify the Seller of the details of such account ninety (90) days before the dispatch of the first Monthly Bill. The Seller and the Procurer shall instruct their respective bankers to make all payments under this Agreement to the Procurer' Designated Account or the Seller's Designated Account, as the case may be, and shall notify either Party of such instructions on the same day.

# **10.3.3 Late Payment Surcharge**

In the event of delay in payment of a Monthly Bill by the Procurer sixty (60) days beyond its due date, a Late Payment Surcharge shall be payable by the Procurer to the Seller at the rate of 1.25% per month on the outstanding amount calculated on a day to day basis. The Late Payment Surcharge shall be claimed by the Seller through the next Monthly Bill.

## 10.3.4 Rebate

For payment of any Bill within due date, the following Rebate shall be paid by the Seller to the Procurer in the following manner.

- a) A Rebate of 2% shall be payable to the Procurer for the payments made in full within three Business Day of receipt of the Bill by the Procurer.
- b) For payment of Bill subsequently but up to the Due Date, a rebate of 1% shall be allowed for the payments made in full.
- c) No Rebate shall be payable on the Bills raised on account of taxes, duties and cess etc.

## 10.3.5 Sharing of CDM Benefits

The proceeds of carbon credit from approved CDM project shall be shared between generating company and concerned beneficiary (ies) in the manner as specified in Clause 21 (1) (a) (b) of BERC (Terms and Conditions for Tariff determination from Solar Energy Sources) Regulation, 2010 notified in Bihar Gazette on 04.08.2010 or as amended time to time by BERC.

# 10.4 Payment Security Mechanism

## Letter of Credit (LC):

- 10.4.1 The Procurer shall provide to the Seller, in respect of payment of its Monthly Bills, an unconditional, revolving and irrevocable letter of credit ("Letter of Credit"), opened and maintained by the Procurer, which may be drawn upon by the Seller in accordance with this Article. The Procurer shall provide to the Seller draft of the Letter of Credit proposed to be provided to the Seller two (2) months before the Scheduled Commissioning Date.
- 10.4.2 Not later than one (1) Month before the start of supply, the Procurer shall through a scheduled bank at Patna open a Letter of Credit in favour of the Seller, to be made operative at least 15 days 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 reviewed every year, in the month of January and revised w.e.f. April for an amount equal to:
  - i) for the first Contract Year, equal to the estimated average monthly billing;
  - ii) for each subsequent Contract Year, equal to the one point zero five (1.05) times the average of the monthly Tariff Payments of the previous Contract Year.
- 10.4.3 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 drawl in a Month.
- 10.4.4 Provided further that if at any time, such Letter of Credit amount falls short of the amount specified in Article 10.4.2 due to any reason whatsoever, the Procurer shall restore such shortfall within seven (7) days.
- 10.4.5 The Procurer shall cause the scheduled bank issuing the Letter of Credit to intimate the Seller, in writing regarding establishing of such irrevocable Letter of Credit.
- 10.4.6 The Procurer shall ensure that the Letter of Credit shall be renewed not later than thirty (30) days prior to its expiry.
- 10.4.7 All costs relating to opening, maintenance of the Letter of Credit shall be borne by the Procurer.
- 10.4.8 If, the Procurer fails to pay a Monthly Bill or part thereof within and including the Due Date, then, subject to Article 10.4.6, 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, 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 the 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;

# **10.4.9 Collateral Arrangement**

As a further support for the Procurer' obligations, on or prior to the Effective Date, the Procurer and the Seller shall execute Default Escrow Agreement (referred as "Default Escrow Agreement") for the establishment and operation of the Default Escrow Account in favour of the Seller, through which the revenues of the Procurer shall be routed and used as per the terms of the Default Escrow Agreement. The Procurer and the Seller shall contemporaneously with the execution of the Default Escrow Agreement enter into the Agreement to Hypothecate Cum Deed of Hypothecation, whereby the Procurer shall agree to hypothecate, Incremental Receivables to the extent as required for the Letter of Credit as per Article 10.4.2. The Default Escrow Agreement and the Agreement to Hypothecate Cum Deed of Hypothecation are collectively referred to as the "Collateral Arrangement".

Provided that the Procurer shall ensure that the Seller shall have first ranking charge on the Receivables in accordance with the terms of the Agreement to Hypothecate Cum Deed of Hypothecation.

- 10.4.10The Default Escrow would come into operation if,
  - The Letter of Credit is not recouped by the Procurer to its required value by the 7th day of its operation;
  - ii) The Seller is unable to draw on the Letter of Credit on the Due Date, if the Procurer fails to pay by the Due Date.
  - iii) Non-restoration of Escrow Arrangement by the 7th day of the Due Date.

# 10.5 Disputed Bill

- 10.5.1 If the Procurer does not dispute a Monthly Bill raised by the other Party within fifteen (15) days of receiving such Bill shall be taken as conclusive.
- 10.5.2 If the Procurer disputes the amount payable under a Monthly Bill it shall pay 95% of the disputed amount and it shall within fifteen (15) 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.
- 10.5.3 If the Seller agrees to the claim raised in the Bill Dispute Notice issued pursuant to Article 10.5.2, the Seller shall make appropriate adjustment in the next Monthly Bill. 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 by the Procurer and up to and including the date on which such payment has been received as refund.
- 10.5.4 If the Seller does not agree to the claim raised in the Bill Dispute Notice issued pursuant to Article 10.6.2, it shall, within fifteen (15) days of receiving the Bill Dispute Notice, furnish a notice (Bill Disagreement 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.
- 10.5.5 Upon receipt of the Bill Disagreement Notice by the Procurer under Article 10.5.4, authorized representative(s) of the Procurer and the Seller shall meet and make best endeavors to amicably resolve such dispute within fifteen (15) days of receipt of the Bill Disagreement Notice.
- 10.5.6 If the Parties do not amicably resolve the Dispute within fifteen (15) days of receipt of Bill Disagreement Notice pursuant to Article 10.5.4, the matter shall be referred to Dispute resolution in accordance with Article 16.
- 10.5.6 For the avoidance of doubt, it is clarified that despite a Dispute regarding an Invoice, the Procurer shall, without prejudice to its right to Dispute, be under an obligation to make payment, of 95% of the Disputed Amount in the Monthly Bill.

## 10.6 Quarterly and Annual Reconciliation

- 10.6.1 The Parties acknowledge that all payments made against Monthly Bills shall be subject to quarterly reconciliation within 30 days of the end of the quarter of each Contract Year and annual reconciliation at the end of each Contract Year within 30 days thereof to take into account the Energy Accounts, Tariff adjustment payments, Tariff Rebate, Late Payment Surcharge, or any other reasonable circumstance provided under this Agreement.
- 10.6.2 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 Procurer and the Seller shall jointly sign such reconciliation statement. After signing of a reconciliation statement within 15 days, the Seller shall make appropriate adjustments in the following Monthly Bill, with Surcharge/Interest, as applicable. Late Payment Surcharge/ interest 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 Article16.

## 10.8 Payment of Supplementary Bill

- 10.8.1 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 (if applicable);

- ii) Tariff Payment for change in parameters, pursuant to provisions in Schedule 4; or
- iii) Change in Law as provided in Article 12,
- and such Supplementary Bill shall be paid by the other Party.
- 10.8.2 Procurer shall remit all amounts due under a Supplementary Bill raised by the SPD to the SPD's Designated Account by the Due Date. Similarly, the SPD shall pay all amounts due under a Supplementary Bill raised by Procurer, if any, by the Due Date to concerned Procurer designated bank account. For such payments by Procurer, Rebate as applicable to Monthly Bills pursuant to Article 10.3.5 shall equally apply.
- 10.8.3 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 10.3.3.

## **ARTICLE 11: FORCE MAJEURE**

#### 11.1 Definitions

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

## 11.2 Affected Party

11.2.1 An affected Party means the Seller or the Procurer whose performance has been adversely affected by an event of Force Majeure.

## 11.3 Force Majeure

- 11.3.1 A 'Force Majeure' means any event or circumstance or combination of events and circumstances as 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 in performing its obligations or complied with Prudent Utility Practices:
  - a) 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
  - b) Explosion, accident or breakage of transmission facilities to deliver power from the Delivery Points to the receiving substation(s); or
  - c) 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 making the performance of obligations as specified herein as impossible; or
  - d) radioactive contamination or ionising radiation originating from a source in India or resulting from another Force Majeure Event mentioned above excluding circumstances where the source or cause of contamination or radiation is brought or has been brought into or near the Power Project by the Affected Party or those employed or engaged by the Affected Party.
  - e) An event of force majeure affecting the concerned STU/ Discom(s), as the case may be, thereby affecting the evacuation of power from the Delivery Points by the Procurer;

# 11.4 Force Majeure Exclusions

11.4.1 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:

- a) Unavailability, late delivery, or changes in cost of the plant, machinery, equipment, materials, spare parts or consumables for the Power Project;
- b) Delay in the performance of any contractor, sub-contractor or their agents;
- c) Non-performance resulting from normal wear and tear typically experienced in power generation materials and equipment;
- d) Strikes 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.

# 11.5 Notification of Force Majeure Event

11.5.1 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 pre-condition to the Affected Party'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 Force Majeure Event.

11.5.2 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.

## 11.6 Duty to Perform and Duty to Mitigate

11.6.1 To the extent not prevented by a Force Majeure Event pursuant to Article 11.3, 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 Force Majeure Event as soon as practicable.

## 11.7 Available Relief for a Force Majeure Event

## 11.7.1 Subject to this Article 11

- a) No Party shall be in breach of its obligations pursuant to this Agreement except 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 as specified under this Agreement;
- c) For avoidance of doubt, neither Party's obligation to make payments of money due and payable prior to occurrence of Force Majeure events under this Agreement shall be suspended or excused due to the occurrence of a Force Majeure Event in respect of such Party.
- d) Provided that no payments shall be made by either Party affected by a Force Majeure Event for the period of such event on account of its inability to perform its obligations due to such Force Majeure Event;

## **ARTICLE 12: CHANGE IN LAW**

#### 12.1 Definitions

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

- 12.1.1 "Change in Law" means the occurrence of any of the following events after the Effective Date resulting into any additional recurring/ non-recurring expenditure by the SPD or any income to the SPD:
  - the enactment, coming into effect, adoption, promulgation, amendment, modification or repeal (without re-enactment or consolidation) in India, of any Law, including rules and regulations framed pursuant to such Law;
  - a change in the interpretation or application of any Law by any Indian Governmental Instrumentality having the legal power to interpret or apply such Law, or any Competent Court of Law;
  - the imposition of a requirement for obtaining any Consents, Clearances and Permits which was not required earlier;
  - a change in the terms and conditions prescribed for obtaining any Consents, Clearances and Permits or the inclusion of any new terms or conditions for obtaining such Consents, Clearances and Permits; except due to any default of the SPD;
  - any change in tax or introduction of any tax made applicable for supply of power by the SPD as per the terms of this Agreement.

but shall not include (i) any change in any withholding tax on income or dividends distributed to the shareholders of the SPD, or (ii) any change on account of regulatory measures by the Appropriate Commission including calculation of Availability.

## 12.2 Relief for Change in Law

- 12.2.1 The aggrieved Party shall be required to approach the State Commission for seeking approval of Change in Law.
- 12.2.2 The decision of the Appropriate (State) Commission to acknowledge a Change in Law and the date from which it will become effective, provide relief for the same shall be final and governing on both the Parties.

## **ARTICLE 13: EVENTS OF DEFAULT AND TERMINATION**

#### 13.1 SPD Event of Default

- 13.1.1 The occurrence and/or continuation of any of the following events, unless any such event occurs as a result of a Force Majeure Event, shall constitute a SPD Event of Default:
  - i) the failure to commence supply of power to Procurer up to the Contracted Capacity, relevant to the Scheduled Commissioning Date, by the end of the period specified in Article 4,or
  - ii) if
    - a) the SPD assigns, mortgages or charges or purports to assign, mortgage or charge any of its assets or rights related to the Power Project in contravention of the provisions of this Agreement; or
    - b) the SPD transfers or novates any of its rights and/ or obligations under this agreement, in a manner contrary to the provisions of this Agreement; except where such transfer
      - is in pursuance of a Law; and does not affect the ability of the transferee to perform, and such transferee has the financial capability to perform, its obligations under this Agreement, or
      - is to a transferee who assumes such obligations under this Agreement and the Agreement remains effective with respect to the transferee;
  - iii) if (a) the SPD 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 SPD, or (c) the SPD 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,
    - Provided that a dissolution or liquidation of the SPD will not be a SPD Event of Default if such dissolution or liquidation is for the purpose of a merger, consolidation or reorganization and where the resulting company retains creditworthiness similar to the SPD and expressly assumes all obligations of the SPD under this Agreement and is in a position to perform them; or
  - iv) the SPD repudiates this Agreement and does not rectify such breach within a period of thirty (30) days from a notice from Procurer in this regard; or
  - v) (except where due to any Procurer's failure to comply with its material obligations, the SPD is in breach of any of its material obligations pursuant to this Agreement, and such material breach is not rectified by the SPD within thirty (30) days of receipt of first notice in this regard given by Procurer.

- vi) Failure to replace the Performance Bank Guarantee, as per the terms of this Agreement; or
- vii) change in controlling shareholding before the specified time frame as mentioned in Article 4.1.1 of this Agreement; or
- viii) Occurrence of any other event which is specified in this Agreement to be a material breach/ default of the SPD.

## 13.2 Procurer Event of Default

- 13.2.1 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 SPD of its obligations under this Agreement, shall constitute the Event of Default on the part of defaulting Procurer:
  - (i) Procurer fails to pay (with respect to a Monthly Bill or a Supplementary Bill) subject to Article 10.5, for a period of ninety (90) days after the Due Date and the SPD is unable to recover the amount outstanding to the SPD through the Letter of Credit/Default Escrow Account; or
  - (ii) Procurer repudiates this Agreement and does not rectify such breach even within a period of thirty (30) days from a notice from the SPD in this regard; or
  - (iii) except where due to any SPD's failure to comply with its obligations, Procureris in material breach of any of its obligations pursuant to this Agreement, and such material breach is not rectified by Procurer within thirty (30) days of receipt of notice in this regard from the SPD to Procurer;

(iv) if

- 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
- any winding up or bankruptcy or insolvency order is passed against Procurer , or
- Procurer goes into liquidation or dissolution or a receiver or any similar officer is appointed over all or substantially all of its assets or official liquidator is appointed to manage its affairs, pursuant to Law, Provided that it shall not constitute a Procurer Event of Default, where such dissolution or liquidation of Procurer or 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 Procurer and expressly assumes all obligations of Procurer and is in a position to perform them; or;

(v) Occurrence of any other event which is specified in this Agreement to be a material breach or default of Procurer.

## 13.3 Procedure for cases of SPD Event of Default

- 13.3.1 Upon the occurrence and continuation of any SPD Event of Default under Article 13.1, Procurer shall have the right to deliver to the SPD a notice stating its intention to terminate this Agreement (Procurer Preliminary Default Notice), which shall specify in reasonable detail, the circumstances giving rise to the issue of such notice.
- 13.3.2 Following the issue of Procurer Preliminary Default Notice, the Consultation Period of sixty (60) days or such longer period as the Parties may agree, shall apply and it shall be the responsibility of the Parties to discuss as to what steps shall have to be taken with a view to mitigate the consequences of the relevant Event of Default having regard to all the circumstances.
- 13.3.3 During the Consultation Period, the Parties shall, save as otherwise provided in this Agreement, continue to perform their respective obligations under this Agreement.
- 13.3.4 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 SPD Event of Default giving rise to the Consultation Period shall have ceased to exist or shall have been remedied, Procurer may terminate this Agreement by giving a written Termination Notice of thirty (30) days to the SPD.
- 13.3.5 Subject to the terms of this Agreement, upon occurrence of a SPD Event of Default under this Agreement, the lenders in consultation with Procurer may exercise their rights, if any, under Financing Agreements, to seek substitution of the SPD by a selectee for the residual period of the Agreement, for the purpose of securing the payments of the total debt amount from the SPD and performing the obligations of the SPD. provided that any substitution under this Agreement can only be made with the condition that the selectee meets the eligibility requirements of Request for Proposal (RfP) issued by Bihar State Power Holding Company Limited (BSPHCL) and accepts the terms of Power Purchase Agreement signed between SPD and Procurer.
- 13.3.6 The lenders in consultation with Procurer may seek to exercise right of substitution under Article 13.3.5 by an amendment or novation of the PPA in favour of the selectee. The SPD shall cooperate with the Procurer to carry out such substitution and shall have the duty and obligation to continue to operate the Power Project in accordance with this PPA till such time as the substitution is finalized.
- 13.3.7 In case the lending institution exercises the right to step in or take over the Project Procurer will also have right to step in along with the lending institution.

## 13.4 Procedure for cases of Procurer Event of Default

13.4.1 Upon the occurrence and continuation of any Procurer Event of Default specified in Article 13.2 the SPD shall have the right to deliver to Procurer, a SPD Preliminary Default

- Notice, which notice shall specify in reasonable detail the circumstances giving rise to its issue.
- 13.4.2 Following the issue of a SPD Preliminary Default Notice, the Consultation Period of sixty (60) days or such longer period as the Parties may agree, shall apply and it shall be the responsibility of the Parties to discuss as to what steps shall be taken with a view to mitigate the consequences of the relevant Event of Default having regard to all the circumstances.
- 13.4.3 During the Consultation Period, the Parties shall continue to perform their respective obligations under this Agreement.
- 13.4.4 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 Procurer Event of Default giving rise to the Consultation Period shall have ceased to exist or shall have been remedied, the SPD shall be free to sell the Contracted Capacity to any third party of the SPD's choice.
  - Provided further that at the end of three (3) months period from the period mentioned in this Article 13.4.4, this Agreement may be terminated by the SPD.

## 13.5 Termination due to Force Majeure

13.5.1 If the Force Majeure Event or its effects continue to be present beyond the period as specified in Article 4.5.3, either Party shall have the right to cause termination of the Agreement. In such an event, this Agreement shall terminate on the date of such Termination Notice.

## **ARTICLE 14: LIABILITY AND INDEMNIFICATION**

## 14.1 Indemnity

- 14.1.1 The SPD shall indemnify, defend and hold Procurer harmless against:
  - a) any and all third party claims against Procurer 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 SPD of any of its obligations under this Agreement; and
  - b) any and all losses, damages, costs and expenses including legal costs, fines, penalties and interest actually suffered or incurred by Procurer from third party claims arising by reason of:
  - breach by the SPD of any of its obligations under this Agreement, (provided that this Article 14 shall not apply to such breaches by the SPD, for which specific remedies have been provided for under this Agreement), or
  - any of the representations or warranties of the SPD, if any made under this Agreement, being found to be inaccurate or untrue.
- 14.1.2 Procurer shall indemnify, defend and hold the SPD harmless against:
  - a) any and all third party claims against the SPD, 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; 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 SPD from third party claims arising by reason of
  - a breach by Procurer of any of its obligations under this Agreement (Provided that this Article 14 shall not apply to such breaches by Procurer, for specific remedies have been provided for under this Agreement), or
  - any of the representations or warranties of Procurer, if any made under this Agreement, being found to be inaccurate or untrue.

## 14.2 Procedure for claiming Indemnity

## 14.2.1Third party claims

a) Wherethe Indemnified Party is entitled to indemnification from the Indemnifying Party pursuant to Article 14.1.1(a) or 14.1.2(a), the Indemnified Party shall promptly notify the Indemnifying Party of such claim referred to in Article 14.1.1(a) or 14.1.2(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. 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 refer the dispute before the Arbitrator in accordance with Article 16.3.2; 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 the claim by referring to the Arbitrator for which it is entitled to be Indemnified under Article 14.1.1(a) or 14.1.2(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 without first getting the consent of the Indemnifying Party, which consent shall not be unreasonably withheld or delayed.
- c) 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.

#### 14.3 Indemnifiable Losses

14.3.1 Where an Indemnified Party is entitled to Indemnifiable Losses from the Indemnifying Party pursuant to Article 14.1.1(b) or 14.1.2(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 nonpayment of such losses after a valid notice under this Article 14.3, such event shall constitute a payment default under Article 13.

## 14.4 Limitation on Liability

14.4.1 Except as expressly provided in this Agreement, neither the SPD nor Procurer nor its/ 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 or equipment used therefore, irrespective of whether such claims are based upon breach of warranty, tort (including negligence, whether of Procurer , the SPD or others), strict liability, contract, breach of statutory duty, operation of law or otherwise.

14.4.2 Procurer shall have no recourse against any officer, director or shareholder of the SPD or any Affiliate of the SPD or any of its officers, directors or shareholders for such claims excluded under this Article. The SPD shall have no recourse against any officer, director or shareholder of Procurer, or any Affiliate of Procurer or any of its officers, directors or shareholders for such claims excluded under this Article.

## 14.5 Duty to Mitigate

14.5.1 The Parties shall endeavor to take all reasonable steps so as mitigate any loss or damage which has occurred under this Article 14.

## **SECTION 5:**

#### **ARTICLE 15: ASSIGNMENTS AND CHARGES**

## 15.1 Assignments

- 15.1.1 This Agreement shall be binding upon, and insure to the benefit of the Parties and their respective successors and permitted assigns. This Agreement shall not be assigned by any Party other than by mutual consent between the Parties to be evidenced in writing:
  - Provided that, procurer shall permit assignment of any of SPD's rights and obligations under this Agreement in favour of the lenders to the SPD, if required under the Financing Agreement.
  - Provided that, such consent shall not be withheld by the SPD if procurer seeks to transfer to any affiliate all of its rights and obligations under this Agreement.
  - Provided further that any successor(s) or permitted assign(s) identified after mutual
    agreement between the Parties may be required to execute a new agreement on the
    same terms and conditions as are included in this Agreement.

## 15.2 Permitted Charges

15.2.1 Neither Party shall create or permit to subsist any encumbrance over all or any of its rights and benefits under this Agreement, other than as set forth in Article 15.1.

## **ARTICLE 16: GOVERNING LAW AND DISPUTE RESOLUTION**

### 16.1 Governing Law

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

Any legal proceedings in respect of any matters, claims or disputes arising out of or in connection with this Agreement shall be under the jurisdiction of court in Patna.

## **16.2 Amicable Settlement and Dispute Resolution**

#### 16.2.1 Amicable Settlement

- i. Either Party is entitled to raise any claim, dispute or difference of whatever nature arising under, out of or in connection with this Agreement ("Dispute") by giving a written notice (Dispute 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.
- ii. The other Party shall, within thirty (30) days of issue of Dispute Notice issued under Article 16.2.1, furnish:
  - (i) Counter-claim and defenses, if any, regarding the Dispute; and
  - (ii) All written material in support of its defenses and counter-claim.
- iii. Within thirty (30) days of issue of Dispute Notice by any Party pursuant to Article 16.2.1 both the Parties shall endeavor and make all efforts to amicable settle the Dispute.
- iv. If the Parties fail to resolve the Dispute amicably within thirty (30) days from the later of the dates mentioned in this Article 16.2.1(iii)., the Dispute shall be referred for dispute resolution in accordance with Article 16.3.

# 16.3 Dispute Resolution

- 16.3.1 Dispute Resolution by the Appropriate Commission
- 16.3.1.1 Where any Dispute (i) 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, 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.

# 16.3.2 Dispute Resolution through Arbitration

- 16.3.2.1 If the Dispute arises out of or in connection with any claims not covered in Article 16.3.1 (i), such Dispute shall be resolved by arbitration under the Indian Arbitration and Conciliation Act, 1996 as under:
  - i. The Arbitration Tribunal shall consist of three (3) arbitrators. Each party shall appoint one Arbitrator within 30 days of the receipt of request for settlement of dispute by Arbitration. The two appointed Arbitrators shall within 30 days of their appointment, appoint a third Arbitrator who shall act as presiding Arbitrator. In case the party fails to appoint an Arbitrator within 30 days from the date of receipt of request or the two appointed Arbitrator fails to agree on third Arbitrator within 30 days of their appointment, the appointment of Arbitrator, as the case may be, shall be made in accordance with the Indian Arbitration and Conciliation Act, 1996.
  - ii. The place of arbitration shall be Patna. 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 provisions of this Article shall survive the termination of this PPA for any reason whatsoever.
  - v. The award shall be of majority decision. If there is no majority, the award will be given by the presiding Arbitrator.

## 16.4 Parties to Perform Obligations

16.4.1 Notwithstanding the existence of any Dispute and difference referred to the Appropriate Commission or the Arbitration Tribunal as provided in Article 16.3 and save as the Appropriate Commission or the Arbitration 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.

## **ARTICLE 17: MISCELLANEOUS PROVISIONS**

#### 17.1 Amendment

17.1.1 This Agreement may only be amended or supplemented by a written agreement between the Parties.

## 17.2 Third Party Beneficiaries

17.2.1 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.

## 17.3 Waiver

- 17.3.1 No waiver by either Party of any default or breach by the other Party in the performance of any of the provisions of this Agreement shall be effective unless in writing duly executed by an authorised representative of such Party:
- 17.3.2 Neither the failure by either Party to insist on any occasion upon the performance of the terms, conditions and provisions of this Agreement nor time or other indulgence granted by one 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.

## 17.4 Confidentiality

- 17.4.1 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
  - c) disclosures required under Law.

without the prior written consent of the other Parties.

## 17.5 Severability

17.5.1 The invalidity or unenforceability, 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.

## 17.6 Notices

- 17.6.1 All notices or other communications which are required to be given under this Agreement shall be in writing and in the English language.
- 17.6.2 If to the Procurer, all notices or other communications which are required must be delivered personally or by registered post or facsimile or any other method duly acknowledged to the addresses below:

(i) Address :

Attention :

Email :

Fax. No. :

Telephone No. :

- 17.6.3 If to the Seller, all notices or communications must be delivered personally or by registered post or facsimile or any other mode duly acknowledged to the address(es) below:
  - (i) Address :

Attention :

Email :

Fax. No. :

Telephone No.

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

## 17.7 Language

17.7.1 All agreements, correspondence and communications between the Parties relating to this Agreement and all other documentation to be prepared and supplied under the Agreement shall be written in English, and the Agreement shall be construed and interpreted in accordance with English language.

17.7.2 If any of the agreements, correspondence, communications or documents are prepared in any language other than English, the English translation of such agreements, correspondence, communications or documents shall prevail in matters of interpretation.

# 17.8 Restriction of Shareholders / Owners' Liability

17.8.1 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.

## 17.9 Taxes and Duties

- 17.9.1 The SPD shall bear and promptly pay all statutory taxes, duties, levies and cess, assessed/ levied on the SPD, contractors or their employees that are required to be paid by the SPD as per the Law in relation to the execution of the Agreement and supplying power as per the terms of this Agreement.
- 17.9.2 The Procurer shall be indemnified and held harmless by the SPD against any claims that may be made against the Procurer in relation to the matters set out in Article 17.9.1.
- 17.9.3 The Procurer shall not be liable for any payment of, taxes, duties, levies, cess whatsoever for discharging any obligation of the SPD by the Procurer on behalf of Seller or its personnel.

## 17.10 No Consequential or Indirect Losses

17.10.1 The liability of the Procurer and The Seller shall be limited to that explicitly provided in this Agreement.

Provided that notwithstanding anything contained in this Agreement, under no event shall the Seller or the Procurer claim from one another any indirect or consequential losses or damages.

## 17.11 Order of priority in application

In case of inconsistencies between the agreement(s) executed between the Parties, applicable Law including rules and regulations framed thereunder, the order of priority as between them shall be the order in which they are placed below:

- i. applicable Law, rules and regulations framed thereunder;
- ii. the state Grid Code; and
- iii. the terms and conditions of this Agreement;

## 17.12 Independent Entity

17.12.1 The SPD shall be an independent entity performing its obligations pursuant to the Agreement.

17.12.2 Subject to the provisions of the Agreement, the SPD shall be solely responsible for the manner in which its obligations under this Agreement are to be performed. All employees and representatives of the SPD in connection with the performance of the Agreement shall be under the complete control of the SPD and shall not be deemed to be employees, representatives, of the Procurer and nothing contained in the Agreement or in any agreement or contract awarded by the SPD shall be construed to create any contractual relationship between any such employees, representatives or contractors and the Procurer.

## 17.13 Compliance with Law

17.13.1 Despite anything contained in this Agreement but without prejudice to this Article, if any provision of this Agreement shall be in deviation or inconsistent with or repugnant to the provisions contained in the Electricity Act, 2003, or any rules and regulations made thereunder, such provision of this Agreement shall be deemed to be amended to the extent required to bring it into compliance with the aforesaid relevant provisions as amended from time to time.

IN WITNESS WHEREOF the Parties have caused the Agreement to be executed through their duly authorized representatives as of the date and place set forth above.

For and on behalf of [the Procurer]	For and on behalf of [the Seller]
Signature with seal	Signature with seal
WITNESS	WITNESS

Request for Proposal of Grid Connected Solar PV Projects		
Format 6.14		
Draft of Default Escrow Agreement to be executed between Procurer and the Selected Bidder(s)		

