

GOVERNMENT OF PUNJAB
DEPARTMENT OF SCIENCE, TECHNOLOGY, ENVIRONMENT AND NON-CONVENTIONAL ENERGY

Notification

The 26th DECEMBER, 2012

No. 10/174/2012/STE(3)/4725 -The Governor of Punjab is pleased to formulate a 'New and Renewable Sources of Energy (NRSE) Policy – 2012', to develop and promote new and renewable sources of energy based technologies and energy conservation measures as well as providing financial & fiscal assistance, thereby addressing the problems arising from depletion of conventional sources of energy and environment pollution. This policy shall replace and supersede the previous policy notified vide No. 10/106/2006-STE (1)/5390 dt. 24th November, 2006, unless specifically stated otherwise hereunder. The Policy would be effective from the date of its notification in the official gazette of Punjab Government and shall remain in operation till the Government notifies the new policy. For giving effect to this policy, necessary amendments in various policies, rules & regulations, wherever necessary, shall be expeditiously undertaken by the concerned departments.

1. OBJECTIVES

1.1 Punjab has considerable potential in NRSE sector which is being harnessed. With a view to maximize the utilization of these resources; this policy aims to achieve the following objectives:

- To maximise and improve the share of new and renewable sources of energy to 10% of the total installed power capacity in the state by 2022. NRSE sector wise details are mentioned separately.
- To promote renewable energy initiatives for meeting energy / lighting needs in rural areas and supplementing energy needs in urban, industrial and commercial sectors.

1.2 Further, in order to achieve the aforesaid objectives, the following shall be the major strategic initiatives :-

- To create conducive conditions for attracting private sector investment in NRSE projects along with broader participation by public community/civil society.
- To provide decentralized renewable energy for agriculture, industry, commercial and household sector particularly in rural areas thereby improving the quality of power and reducing transmission & distribution losses.
- To give support to specific NRSE projects and schemes for generating energy and conserving energy through energy efficiency.
- To support research and development, demonstration and commercialization of new and emerging technologies in renewable energy sector such as fuel cell, hydrogen and chemical energy, alternate fuels for transportation etc.

2. NRSE THRUST AREAS

2.1 NRSE are defined as Small hydro upto 25MW, Biomass including Co-generation, Solar Photovoltaic, Solar Thermal, Urban, Municipal and Industrial solid / liquid Wastes, Biomethanation, Gasification, Wind and New NRSE sources like fuel cells/Hydrogen/Biofuels etc. of any capacity. This form of energy would mitigate carbon dioxide emissions and combat climate change. Given the geographical location of the State of Punjab, and its access to various sources of energy, the State would promote investment through private/public sector participation in the following areas:

2.2 Small/ Mini / Micro Hydel:

By virtue of its topographic location and agriculture base, the State has an extensive irrigation canal network with estimated total potential of over 250 MW. The State Government is committed to exploit the total potential by the year 2022.

2.3 Biomass/Agro residue:

Punjab is primarily an agrarian economy and holds tremendous potential for energy generation from agro- residues like Cotton stalks, Paddy Straw,

Paddy Husk etc. It is proposed to achieve a target of 600 MW power generation in this sector by 2022.

Also the existing industries like Sugar, Paper and others have still an estimated unexploited potential of about 500MW of co-generation. Details are placed at **Annexure-1A**.

2.4 Urban, Municipal and Industrial Liquid / Solid Waste:

At present about 5000 Metric Tons of Municipal, Urban and Industrial solid waste is being produced every day in the urban areas of the State. Introducing scientific processing and treatment of this quantity of waste would add to power generation besides being environmentally benign. Such projects shall be supported on different waste streams in the State. It is proposed to achieve a target of 50 MW power generation in this sector by 2022.

2.5 Solar Power generation:

Punjab is endowed with vast potential of solar energy with over 300 days of sunshine in a year with insolation level varying between 4-7 Kw/sq.mtr. Solar Power Generation capacity is targeted at 1000MW by 2022. With these projects located closer to the load in distribution/transmission network, distribution losses will be reduced considerably and voltage drop at peak day time load will be minimized. Details are placed at **Annexure-1B**.

2.6 Wind Power :

Wind power potential is low in the State as the necessary wind speed is not there. The state will support programmes to set up innovative technology based wind turbines.

2.7 Upcoming NRSE technology based projects:

Lot of research is going on around the world for efficient and economic transformation of available renewable sources of energy for usage by the society. Fuel cells, Hydrogen energy, geothermal energy, Bio fuels, Bio-ethanol etc. have great potential of becoming commercial RE technologies. Pilot, demonstration & commercial projects in these upcoming NRSE

technology sector shall be encouraged to be set up in the state by PEDDA. In addition PEDDA shall take up R&D projects in the Biomass especially paddy straw combustion for power generation through Rankin cycle/gasification in pilot mode. GIS mapping shall be carried out for land, biomass and solar radiation and made available to project developers for project facilitation. PEDDA shall also carry out Power transmission/distribution grid network study on 132/66 KV substations for assessing the location suitability of RE projects for max grid/power benefits in terms of voltage improvement, reduction in transmission/distribution losses, evacuation infrastructure/support and decentralized power supply.

2.8 Promotion of Green Technologies:

PEDDA shall facilitate and promote the green technologies in the state for furthering the economic and industrial development. Technologies such as Electric Vehicles, Compressed Biogas for Transportation, Green battery technologies, energy efficient, carbon neutral building technologies shall be promoted.

3. ENERGY CONSERVATION

Conservation of energy in domestic, commercial, agriculture, transportation and industrial sectors can lead to major savings in terms of reduced energy consumption thereby leading to bridge the energy demand supply gap in the state. There is a potential of saving of energy upto 20-25% in different sectors of the economy in the state. Energy Conservation Measures shall be implemented and enforced in the state in accordance with the provisions contained in the Energy Conservation Act-2001 by PEDDA, in consultation with Bureau of Energy Efficiency, Ministry of Power, Govt. of India.

Punjab has issued notifications for mandatory use of CFL, Roof Top Solar Water Heating Systems, BIS approved & minimum BEE 4 Star Labeled pump sets and promotion of energy efficient buildings. Demo projects have been initiated for development of energy efficiency in municipal street lighting, water pumping & existing Govt. buildings. Use of BEE Star Labeled electrical appliances in all government organizations has also been mandated.

Energy Conservation Building Code (ECBC) has been launched by Bureau of Energy Efficiency, MOP, GOI on 27th May, 2007 to be implemented on voluntarily basis. The code is applicable to buildings / building complexes that have a connected load / contract demand of 100 kW / 120 KVA or more and is being amended as the Punjab Energy Conservation Building Code (PECBC) to be applicable in the state of Punjab which falls in the composite climate zone within the provision of the EC Act-2001. Three types of Green building rating are also available i.e. Leadership in Energy and Environmental Design (LEED), Green Rating for Integrated Habitat Assessment (GRIHA) & BEE Star Rating of Buildings.

An energy conservation action plan team has been constituted under the chairmanship of Principal Secretary, Science & Technology, Environment and NCES which reviews implementation of various energy conservation programmes in the State.

4. FACILITATION OF NRSE PROJECTS

4.1 Govt. of Punjab shall provide assistance for setting up of NRSE projects in the state. In addition the Govt. shall also provide fiscal and technical assistance to encourage setting up of these projects.

4.2 NODAL AGENCY: Punjab Energy Development Agency (PEDA) is the nodal agency for the implementation of the NRSE Policy on behalf of the Govt. of Punjab. PEDA will be responsible for laying down the procedure for inviting of proposals from NRSE project developers i.e. preparing bid documents, managing the bid process, evaluation of project proposals and its award to successful bidder, project approvals and scrutiny of DPR, project implementation and monitoring.

All NRSE project developers in the state (including Captive, Cogeneration, IPP and merchant power developers) will be required to submit their project proposals with PEDA for approval and validation for sale of power in or outside the state.

4.3 SINGLE WINDOW CLEARANCE: Setting up of NRSE projects involves sanctions/clearances from a number of Government Agencies/Departments. The State Government shall provide the

clearances in a time bound manner through a single window mechanism within a period of 60 days after the submission of complete application along with necessary enclosures, fees/charges and DPR. The Detailed procedure for according approvals/clearances is placed at **Annexure-II**.

4.4 FISCAL AND TECHNICAL ASSISTANCE: These have been detailed out in annexure on “FISCAL AND TECHNICAL ASSISTANCE” attached at **Annexure-III**.

4.5 ALLOTMENT OF PROJECTS: All NRSE Projects including Small Hydro Projects upto 25 MW capacity, Biomass IPP, MW scale Solar PV & Solar Thermal Projects, Waste to energy projects under IPP mode and MW scale roof top solar PV for net metering/sale of power shall be allocated through competitive bidding by PEDDA. The project developers shall sell all the energy generated from the projects to PSPCL/Licensee at the tariff arrived after competitive bidding. Financial eligibility Criteria for NRSE projects to be allocated through competitive bidding is given at **Annexure-IV**.

Projects under REC mechanism may be allocated through competitive bidding based on the percentage share of REC price. For any project to be set up under REC mechanism, the first right to purchase power will lie with PSPCL/LICENSEE at APPC tariff . On their refusal, the bidding will envisage sale of power in open access.

Self-identified projects in the field of Small Hydro, ,waste to energy based on cattle dung/ vegetable waste / poultry waste projects& Biomass Power Projects Based on Energy Plantation & Rice Mill Integrated shall be allocated on the recommendation of the project allocation committee on case to case basis. Surplus Power from NRSE Co-generation Projects shall be procured by signing of Implementation Agreement (IA).In case of upcoming NRSE technology demonstration projects, the MOU route may be considered.

All NRSE projects of capacity upto 1 MW shall be allocated on the recommendation of PEDDA, whereas all NRSE projects of capacity more than 1 MW shall be allocated on the recommendation of the Project Allotment Committee consisting of following members:-

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|---|------------|
| 1. Principal Secretary to Government of Punjab,
Department of Science, Technology,
Environment and Non-Conventional Energy. | - Chairman |
| 2. Principal Secretary to Government of Punjab,
Department of Power | - Member |
| 3. Principal Secretary to Government of Punjab,
Department of Finance | - Member |
| 4. Chief Executive, Punjab Energy Development
Agency. | - Member |
| 5. Chairman cum MD, Punjab State Power
Corporation Ltd. | - Member |
| 6. Director, PEDA. | - Member |
| 7. Jt. Director (Projects), PEDA | - Convener |

The Committee shall examine/evaluate the techno-commercial conditions in the bidding documents for projects to be allocated through competitive bidding/detailed project report for project proposals under MOU route & shall grant approval to the offers/project proposal after considering the financial capability, technical capability, status of technical collaboration with proven technology suppliers, status of land identification and its availability etc.

5. RE Tariff

The NRSE projects shall be provided tariff for sale of power as per PSERC RE tariff orders and shall be governed by RE regulations.

- 5.1** The preferential tariff of sale of power to the PSPCL/licensee from NRSE projects to be set up under this Policy shall be as notified by the PSERC for the financial year in which PPA is signed but shall be revised as per tariff notified for the financial year in which the scheduled date of commissioning of the project falls except in case of Solar PV and Solar Thermal power projects in which the tariff applicability is for two years and three years respectively inclusive of the Financial year in which PPA is signed in accordance with the CERC RE regulations. Likewise, in case of NRSE projects allocated through tariff based competitive bidding / discount on preferential tariff, the tariff arrived after competitive bidding /

discounted tariff shall be applicable in accordance with CERC RE regulations.

- 5.2** The developer in technologies/resources where tariff has not been notified by the PSERC shall be required to submit petition to the Commission for determination of tariff.
- 5.3** To maximize the availability of NRSE Power for PSPCL/LICENSEE and to meet its RPO, NRSE based captive / co-gen power projects setup and commissioned during the period of NRSE Policy-2006 having surplus power and not registered with PEDDA so far or not signed the Implementation agreement will be allowed to get themselves registered with PEDDA and to sign agreement to facilitate power purchase by PSPCL/LICENSEE. PSPCL will sign only long term PPA with such registered projects on the last escalated tariff of NRSE Policy-2006 payable for FY 2011-12.
- 5.4** As per Power Purchase Agreements signed with PSEB (now PSPCL) by IPP Biomass/Biogas power projects allocated by PEDDA & set-up during the period of NRSE Policy 2001, the tariff has become stagnant at Rs. 3.49 per unit since 2006. The generic tariff as per RE tariff regulation 2012 notified by CERC and adopted by PSERC for biomass power projects allows 5% annual rise in the fuel cost for the tariff period from the date of commissioning. Therefore to enable these projects to continue generation, the tariff for these projects will be re-determined by PSERC for the remaining period of PPA.
- 5.5** No parallel operation charges shall be levied on NRSE projects.

6. IMPLEMENTATION OF PROJECTS

- 6.1** After issuing of all applicable statutory clearances the Producer shall enter into an Implementation Agreement with PEDDA within a period of 15 days from the date of grant of applicable statutory clearances for the project and also notification of tariff if applicable. The project developer shall be required to submit a performance security in the shape of Bank Guarantee of Rs 20lacs per MW in case of non-solar projects and Rs. 40

Lacs per MW in case of solar projects before signing of implementation agreement or as stipulated in the bid document. The performance security shall be forfeited by PEDDA for delays attributable to the developer as given in the allotment letter/implementation agreement/bid document.

- 6.2** The implementation agreement shall contain the major provisions for project allocation, land, location, power evacuation, project completion schedule ,time period, project life, tariff, tariff period, PPA period, various fiscal and technical assistance granted to the projects under NRSE policy, penalty provisions in case of delay, arbitration etc.
- 6.3** PSPCL/LICENSEE shall sign a Power Purchase Agreement within 30 days from the date of order issued by Commission in case tariff approval is to be given by PSERC. In case of competitively arrived tariff/preferential tariff and APPC, the PPA shall be signed within 30 days from the date of signing Implementation agreement by PEDDA.
- 6.4 Scheduling:** The NRSE projects operating in synchronization with PSPCL /PSTCL system and selling /wheeling power shall be required to adhere to scheduling as per applicable regulations of the Appropriate Commission.
- 6.5 Banking:** The banking facility for the power generated shall be allowed for a period of one year by the PSPCL/LICENSEE/PSTCL. However, the energy banked during non-paddy season and non peak hours will not be allowed to be drawn during paddy season and peak hours respectively.
- 6.6 Injection of NRSE power:** PSPCL/LICENSEE/PSTCL will accept the injection of energy in full even during sustained high frequency hours to ensure full utilization of non-conventional energy resources and merit order shall not be applicable.
- 6.7 Energy Payment:** PSPCL/LICENSEE will clear dues within 60 days. However if the Developer requests for payment in 30 days or against Letter of Credit / payment in 7 days, rebate of 1% or 2% respectively, as the case may be, will be admissible to PSPCL/LICENSEE. Delay in payments will attract interest as per PSERC/CERC regulations.
- 6.8 Letter Of Credit:** PSPCL/LICENSEE/PSTCL will provide facility of irrevocable and revolving, Letter of Credit issued by any nationalized bank. The amount of the Letter of Credit shall be equal to the bill amount

of one month on the basis of average of last three months. All expenditures on Letter of Credit shall be borne by the power producers.

- 6.9** All project developers shall be required to submit monthly statement for verification of usage of fuel as detailed out in RE regulations and orders for determination of generic tariff issued by CERC. In addition, monthly information with regard to other parameter like energy generated, revenue earned, power factor and plant load factor achieved, reasons for non-achievement of full generation etc as directed by PEDDA shall also be submitted so as to maintain and update data bank on NRSE generation in the state and also for the purpose of monitoring generation under RPO regulations.

7. AMENDMENTS/ RELAXATION/ INTERPRETATION OF PROVISIONS OF THE POLICY

Government of Punjab, Department of Science, Technology, Environment and Non-Conventional Energy shall take up cases for amendment/ relaxation/ addition/ interpretation of provisions under this policy.

Karan A. Singh

Principal Secretary to Govt. of Punjab,

Department of Science, Technology,
Environment & Non-Conventional Energy

No. 10/174/2012/STE(3)/4726

Dated: 26th Dec,2012

A copy is forwarded to the Controller, Printing and Stationary Punjab, Chandigarh for publishing the above Notification in Punjab Government Gazette and supply 50 copies thereof for official use.

Special Secretary

A copy is forwarded to the following for information and necessary action

1. Financial Commissioner, Excise & Taxation, Punjab.
2. Financial Commissioner, Revenue & Rehabilitation, Punjab.
3. Financial Commissioner, Forests & Wildlife Preservation, Punjab.
4. Principal Secretary to Govt. Of Punjab, Deptt. of Industries & Commerce.
5. Principal Secretary to Govt. Of Punjab, Deptt. of Local Government.
6. Principal Secretary to Govt. of Punjab Deptt. of Finance.
7. Principal Secretary to Govt. of Punjab Deptt. of Power.
8. Principal Secretary to Govt. of Punjab Deptt. of Irrigation.
9. Principal Secretary to Govt. of Punjab Deptt. of Housing & Urban Development.
10. The Chairman cum MD, Punjab State Power Corporation Limited.
11. The Chairman cum MD, Punjab State Transmission Corporation Limited.
12. The Secretary, Punjab State Electricity Regulatory Commission.
13. The Chairman, Punjab Pollution Control Board.
14. The Chief Executive, Punjab Energy Development Agency.

Special Secretary

To,

1. Financial Commissioner, Excise & Taxation, Punjab.
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12. The Secretary, Punjab State Electricity Regulatory Commission.
13. The Chairman, Punjab Pollution Control Board.
14. The Chief Executive, Punjab Energy Development Agency.

I.D. No. 10/174/2012/STE(3)/4727

Dated: 26th Dec,2012

BIOMASS POWER GENERATION

a) Biomass IPP Project: Punjab agriculture is dominated by wheat paddy cycle producing more than 10 million tons of paddy straw. Unlike the past, where these were burnt in the fields, crop residue would now contribute to farmer's income and also lead to power generation. It is estimated that huge quantities of surplus agro residues (including rice straw) and agro industrial/processing waste is produced annually which can generate decentralized power of more than 600 MW. The State Government is committed to support and facilitate harnessing the total potential by the year 2022.

b) Energy Plantations based small capacity biomass plants: Punjab has some tracts of degraded/waste lands and non-forest areas. This could be used for raising dedicated plantations of fast growing high yielding plant species such as Bambusa balcooa, melia dubia etc. Lantana which is available in forest areas shall be encouraged for use as biomass in such projects. These small capacity projects up to 2 MW can be set up in technology neutral mode i.e. Rankin cycle, Gasification cycle or Otto cycle.

c) Rice mills integrated small capacity Biomass Plants: Presently very low pressure non-efficient boilers, based on obsolete technologies are used in rice mills for parboiling/process steam requirements. There is untapped potential of surplus power generation which can be realized by promoting the setting up of small high pressure boilers based biomass plants with higher plant efficiency. Rice mills integrated small capacity Biomass Plants in IPP mode up to 5 MW capacity shall be allowed to be setup with due approval of PEDDA with the condition that at least 25% of the biomass used has to be rice straw. A rice mill of 4 TPH cap. shall be allowed to set up a 1 MW cap. Biomass plant and rice mill of 20 TPH and above shall be allowed to set up a 5MW cap. Biomass plant. These small capacity projects can be set up in technology neutral mode i.e. Rankin cycle, Gasification cycle or Otto cycle& will not infringe upon the command area of the biomass IPP projects.

d) Co-generation: The State of Punjab has an established industrial base which is expanding , Co-gen plants have proved to be highly beneficial for the industry. The sugar, paper, fertilizer, chemical, textile and other industries are still having an estimated combined potential of 500 MW, which is still to be realized. It is proposed to encourage the industry to set up co-gen plants and achieve capacity addition of 500 MW by 2022. These projects shall meet the qualifying criteria under topping cycle as per CERC regulations.

Cogeneration projects under bottoming cycle or based on back pressure turbines and tri-generation projects utilizing the waste heat for heating/cooling/chilling purposes shall also be encouraged.

SOLAR POWER GENERATION

Solar energy would mitigate carbon dioxide emissions and combat climate change.

Rooftop projects shall be promoted in all sectors including Govt. buildings in order to enhance the share of solar power in the state. PEDDA will implement MNRE,GOI scheme which provides 30% capital subsidy for Stand alone rooftop SPV systems. PEDDA shall also undertake a solar rooftop programme in the state for the domestic, industrial and commercial sectors through Grid interconnectivity by deploying net metering / sale of power to PSPCL/LICENSEE.

PEDDA shall facilitate bundled power scheme of MNRE, IREDA and NVVN allocated MW scale solar power projects under JNNSM.Solar IPP projects (MW Scale) shall be promoted under this policy.

REC based Solar projects will be encouraged where the Solar PV and Solar Thermal IPP projects will be bid out competitively based on the share of REC revenue.The power can be sold on APPC/Open Access and proponent can claim REC for trading in power exchange . However, PSPCL/LICENSEE shall retain the first right of refusal to such NRSE power and in case of refusal, the developer can sell power under open access.

Punjab State will also promote decentralized and off-grid solar applications, including hybrid system as per guidelines issued by MNRE to meet various electrical and thermal energy requirements. Some of the major applications of solar thermal technologies include solar water heaters, solar cooling systems, air drying, steam cooking, power generation, sterling engine. The off grid photovoltaic applications include solar PV home lighting, police stations communication and lighting, Small powered looms, solar inverters, solar PV pumps, powering computers in schools, Small milk chilling plants, refrigeration for medicine in primary health centers and Hybrid systems for Powering telecom towers etc. The off-grid solar applications shall be promoted for replacement of diesel based generators sets. Guidelines and incentives issued by MNRE (www.mnre.gov.in) from time to time shall be followed in State for promotion of decentralized and off-grid solar applications.

PROCEDURE FOR PROJECT CLEARANCE

- (1) The project developers who are allocated projects by PEDDA shall be issued a detailed allocation letter, while the developers for upcoming technology projects shall sign an MOU with PEDDA. The parties selected to set up projects on the basis of competitive bidding or desirous of setting up NRSE projects under this policy will be required to submit a comprehensive proposal to PEDDA for appraisal.
- (2) The developer shall submit a Detailed Project Report (DPR) within two months of issue of allocation letter/signing of MOU. The DPR should contain the complete details of power generation technology, plant technical details and parameters, fuel, fuel collection and sourcing mechanism, water and land utilization and complete cost and financial analysis indicating proposed tariff for the life of the project. The developer shall be required to deposit the facilitation charges at the time of approval of DPR. PEDDA shall examine the DPR and give comments/approval within a period of 30 days and thereafter the developer shall submit a complete application for seeking applicable clearances.
- (3) All necessary and applicable clearances to be granted by State Govt.(viz. Change of land use, Pollution Control, water, use of NRSE resources ,factories/ labour clearances etc.) required for a project would be considered in a time bound manner (within a period of 60 days from the date of submission of complete application along with requisite fee as per the requirement of clearance issuing bodies / departments).
- (4) The procedure for obtaining applicable clearances is as follows:-
 - a) The developer shall proceed ahead for filing the complete applications on the required prescribed formats for obtaining all necessary applicable clearances, forests, pollution control, land, water, technical feasibility for evacuation of power etc. along with the requisite applicable fees to the PEDDA, which is the single window clearance body for facilitating such NRSE projects.

- b) PEDA along with the nodal officers of the concerned departments will scrutinize the applications and get the shortcomings completed and will forward the applications to the relevant Departments for their consideration and concerned department will convey their clearance or comments, if any within the stipulated time period of 30 days from the date of forwarding the completed application. Private developers shall be required to fulfill all statutory / legal requirements with regard to project reports/documents submission as per requirement of approval/clearance issuing bodies/organizations under the Govt. rules, regulations & Acts. Project developer shall be required to arrange fuel and water linkages for the project.
- c) In case, the concerned department fails to respond within the stipulated time of 30 days, the cases shall be taken up in the empowered committee. PEDA shall seek a meeting of the Empowered Committee constituted as under for this purpose within the next 15 days.
- (5) The Empowered Committee of Administrative Secretaries for according statutory and non- statutory clearances of NRSE projects, intra-departmental issues, clearances of upcoming technology RE projects and policy matters is constituted as under:-
- | | | |
|------|---|------------|
| I) | Chief Secretary to Government of Punjab | - Chairman |
| II) | Secretary to Government of Punjab,
Department of Science, Technology,
Environment and Non-Conventional Energy | - Member |
| III) | Principal Secretary to Government of Punjab,
Department of Finance | - Member |
| IV) | Principal Secretary to Government of Punjab,
Department of Power. | - Member |
| V) | Principal Secretary to Government of Punjab,
Department of Forests. | - Member |
| VI) | Chairman cum MD, Punjab State Power
Corporation Ltd. | - Member |
| VII) | Chief Executive, Punjab Energy Development
Agency. | - Convener |

The Committee may co-opt other Administrative Secretaries/ State Government officials as and when required (e.g. Principal Secretary, Irrigation, Industries and Commerce, Local Bodies, Rural Development etc.) in respect of projects/ Clearances in their respective jurisdiction. The Committee will also oversee implementation of this Policy by the other Departments/ Agencies.

- (6) Representative(s) of the concerned department will participate in the meeting of Empowered Committee to elaborate their comments/observations, if any, for consideration of the committee. The Secretariat of the Empowered Committee established in PEDDA will bring up the agenda items inclusive of the comments of the concerned Departments if any along with its internal assessment/note on the subject. The Empowered Committee would take a decision for according its clearances within the stipulated period. The decision of the Empowered Committee shall be final and binding on all concerned departments.
- (7) Punjab Irrigation Department/PSPCL/LICENSEE will designate Officers who will accord technical/feasibility clearances of drawings/technical specifications within 30 days.

FISCAL AND TECHNICAL ASSISTANCE

With the objective to promote and develop NRSE programmes/ projects, the State Government will provide fiscal and technical assistance for energy recovery and power generation projects based on NRSE, to be set up in the State to eligible power producers as under:-

1. Eligible Producers:

“Persons” generating electricity from non-conventional energy sources such as small hydro projects upto 25MW, biomass combustion and gasification, biomass and baggasse Co-generation process, Solar Photovoltaic, Solar Thermal, Urban, Municipal and Industrial Waste, Wind Electric Generators, biogas, gasification, Bio-methanation and upcoming NRSE technologies like fuel cells/Hydrogen/Biofuel technologies of any capacity etc. will be eligible to avail the assistance under the scheme. There will be no restriction on generation capacity or supply of electricity to the State grid.

2. Grid Interfacing:

- (i) Interfacing, including installation of transformers, panels, kiosks, protection and metering equipment on LT/ HT side of the generating station up to interconnection point and its subsequent maintenance shall be undertaken by the power producer/plant owner. Punjab State Power Corporation (PSPCL/LICENSEE) shall provide jumpers at the interconnection point as defined in applicable regulations or tariff order for evacuation of power to PSTCL/PSPCL/LICENSEE’s grid substation.
- (ii) If the power is proposed to be sold to PSPCL/LICENSEE on Preferential tariff on long term basis, then the transmission line and associated bay at PSPCL/LICENSEE grid substation along with ABT compliant Check meters and associated equipment will be provided by PSPCL/LICENSEE. In all other cases, the private developer shall be required to lay its own transmission lines from the switchyard of its generation facility to the PSPCL/LICENSEE/PSTCL grid sub-

station at its own cost in addition to all equipment required for evacuation of power in its own generating facility switchyard. All Associated equipment(s) at the PSPCL/LICENSEE grid substation for accepting energy from the project including up gradation required if any shall be provided by the PSPCL/LICENSEE including Check meters and associated CTs/PTs.

- (iii) PSPCL/LICENSEE approved main ABT meter having two independent registering facilities, one for the export of power to the grid and another for import from the grid will be installed on the HT side of Generator transformer in the switch yard at interconnection point by the producer. The meters and metering boxes will be sealed by the PSPCL/LICENSEE/PSTCL. The energy meter(s) and associated CTs/PTs etc. shall comply with the requirements of State Grid Code and CEA guidelines.
- (iv) Necessary current limiting devices will be installed in the generating equipment by the producer. Producer shall generate matching MVARs so that monthly average power factor does not exceed 0.90 or as specified from time to time.

3. Facilities by Punjab State Power/Transmission Corporation Limited:

- i) **Power Wheeling:** The PSPCL/LICENSEE/PSTCL will undertake to transmit/wheel the surplus power through its grid, and make it available to the producer for captive use in the same company units located in the State at a uniform wheeling charge of 2% of the energy fed to the grid or as amended from time to time by PSERC, irrespective of the distance from the generating station. Such wheeling and/or transmission of power shall be governed by Open Access Regulations /procedures. The captive power production and consumption by beneficiaries i. e. same group companies shall meet the requirements laid down in Electricity Rules 2005. Captive power generators will be required to seek permission of PSPCL/PSERC for laying of transmission line for taking power to destination of use in Punjab.

(ii) **Open Access:** The NRSE Project developer as per entitlement under the policy will also be allowed inter/intra state open access in accordance with the open access regulations. This facility shall be available only after refusal by State licensee to purchase the power on preferential tariff under long term PPA.

4. Fiscal assistance by Govt. of Punjab:

- (i) Wherever Irrigation land on canal banks is available, Punjab Irrigation Department (PID) will transfer canal land to PEDDA on notional lease amount of Rs. 1.50 lac per annum per site. The leased canal land will be subsequently transferred to the power producers for development of Small Hydro Projects on Build, Operate and Own basis for 38 (three years shall be considered as construction period) years on the same terms and conditions set forth by PID subject to further renewal on mutually agreed terms and conditions. Ownership of such land will remain with PID. For setting up MHP on canals, wherever the Irrigation Department executes the Deposit work inside the canal on behalf of Private Developer, no Departmental Charges shall be paid to PID by the private developer however, supervision charges on actual basis shall be payable subject to maximum 5% of the deposit work executed by PID. In case the work is executed by the private developer on his own, these works shall be done after approval of the detailed design and drawings by PID under the Supervision of Punjab Irrigation Department and the Supervision Charges to be borne by the Private Developer shall be on actual basis subject to maximum 5% of the total work executed by the developer inside the canal.
- (ii) Wherever the required land belonging to local bodies/ panchayats is available, the State would encourage the local bodies/ panchayats to provide the land for NRSE projects on the terms and conditions specified in para (i) above.

- (iii) The power producers setting up hydel projects will pay cess @ 1.5 paisa per unit of electricity generated for use of river/ canal water.
- (iv) For canal based hydel projects, pondage of water upto Full Supply Level in the upstream of canal shall be allowed for optimal utilization of water resources.
- (v) The NRSE Power Generation and consumption by generators themselves as a captive unit from NRSE projects shall be fully exempted from levy of Electricity Duty. 100% Electricity Duty for power consumed from state licensee during construction and testing of the project shall be waived.
- (vi) Octroi on NRSE fuels to be used for energy generation and NRSE devices/equipment/machinery for NRSE Power Projects shall be fully exempted. Similarly Octroi on self-consumption of power by captive power plants in the same premises or thru wheeling by open access to same group companies shall also be exempted.
- (vii) To promote usage /generation from NRSE, manufacturing & sale of NRSE devices/systems, and equipments / machinery required for NRSE Power Projects shall be exempted from Value Added Tax (VAT) and any cess thereupon
- (viii) 100% exemption from entry tax in respect of all supplies (including capital goods, structure and raw materials) made for setting up and trial operations of the projects.
- (ix) 100% exemption from payment of fee and stamp duty for registration/lease deed charges for the land required for the project.
- (x) Agricultural land shall be allowed to be used for setting up of Renewable Energy Power Projects in the state and no CLU, EDC/or any other charges/fees for the same shall be payable.
- (xi) Solar PV Power projects shall be exempt from obtaining any NOC/consent under Pollution control laws from the PPCB.
- (xii) All projects developed under this policy will be treated as industry in terms of industrial policy of the state and all the incentives available

to new industrial projects will be applicable to Renewable power projects set up under this policy as per industrial policy of the state, for which approval shall be taken from the Department of Industries and Commerce.

(xiii) Any benefits under any relevant policy such as Mega projects Policy of State Government can be availed by the project covered under this policy, subject to qualifications and approval of the concerned departments, if any, and subject to conditions as may be prescribed on case to case basis by the Concerned Administrative Department.

FINANCIAL QUALIFICATION CRITERIA FOR NRSE PROJECTS

1. Existing Companies: The company/entity desiring to setup NRSE projects in State of Punjab must fulfill the following minimum financial criteria & required to submit its proposal to PEDDA for approval of the project.

Financial Criteria:

- (i) **Internal Resource Generation:** Rs. 75 Lacs or equivalent US\$* per MW of the capacity, computed as five times the maximum internal resources generated during any of the last five years business operations.
- (ii) **Net worth:** Rs. 1.00 crore or equivalent US\$* per MW of the capacity. The computation shall be derived from any of the last three year's annual accounts.
- (iii) **Annual Turnover:** Rs. 3.00 crore or equivalent US\$* per MW of the capacity. The computation shall be derived from any of the last three year's annual accounts.

** The US\$-Indian Rupee Exchange rate shall be considered as the corresponding TT buying rate specified by the State Bank of India seven days before the last date of submission of proposal to PEDDA*

2. Newly Incorporated Companies:

For a newly incorporated Company/Consortium relying solely on its own credentials, where the annual accounts have not been prepared, The Net Worth requirement for such companies/consortium shall be Rs.2 Cr / MW and should be met as on day not more than seven days prior to the last date of submission of response to RFP by the bidding Companies/Consortium. To demonstrate fulfillment of the criteria, the Bidder shall submit a certificate from a Chartered Accountant certifying the availability of Net Worth on the date not more than seven days prior to submission of response to RFP along with a certified copy of balance sheet, profit & loss account, schedules and cash flow statement supported with the Bank Statement.

GOVERNMENT OF PUNJAB
DEPARTMENT OF NEW AND RENEWABLE ENERGY
(ENERGY BRANCH)

NOTIFICATION

No. 18/7/2015-PE1/1605

Dated: Chandigarh 09-07-2015

In exercise of powers conferred under Clause 7 of the NRSE Policy 2012, the Governor of Punjab is pleased to make the following additions/amendment(s)

a. Clause 2, Sub clause 2.7 (Upcoming NRSE technology based Projects):-

Lot of research is going on around the world for efficient and economic transformation of available renewable sources of energy for usage by the society Fuel Cells, Hydrogen Energy, Geothermal Energy, Bio-Fuels, Bio-Ethanol, Canal Top Solar, Canal Bank Solar, Reservoir Solar and Hybrid NRSE Projects etc. have great potential of becoming commercial RE technologies. Pilot, demonstration & commercial projects in these upcoming NRSE technology sector shall be encouraged to be set up in the state by PEDDA. In addition PEDDA shall take up R&D projects in the Biomass especially paddy straw combustion for power generation through Rankin Cycle/Gasification in pilot mode GIS mapping shall be carried out for land, biomass and solar radiation and made available to project developers for project facilitation. PEDDA shall also carry out Power transmission/ distribution grid network study on 132/66 KV substations for assessing the location suitability of RE projects for max grid/power benefits in terms of voltage improvement reduction in transmission/distribution losses, evacuation infrastructure / support and decentralized power supply.

b. Clause 2.9:-

The Govt. of Punjab endeavor to promote solar energy projects at farm level through land owning farmers with a minimum capacity of 1 Mwp and maximum capacity of 2.5 Mwp per land owning farmer in the state for sale of power to PSPCL at applicable generic tariff determined by PSERC from time to time. A group of farmers can also get together for setting up solar power project on the land owned by the members of the group. The government of Punjab shall facilitate purchase of energy generated under this category through PSPCL. The cumulative capacity under this category shall be limited to 500MW.

Clause 4.5 (Allotment of Projects), Para 1:

Financial eligibility criteria for NRSE projects shall be specified in the project bidding documents.

Annexure-IV deleted

C. Clause 4.5 (Allotment of Projects), Para 3:-

Self-identified projects in the field of Small Hydro, waste to energy based on Cattle Dung/ Vegetable Waste /Poultry Waste Projects 86 Biomass Power Projects based on Energy Plantation & Rice Mill Integrated shall be allocated on the recommendation of the project allocation committee on case to case basic. Surplus Power from NRSE Co-generation Projects shall be procured by signing of Implementation Agreement (IA). In case of upcoming NRSE technology based projects, the MOU route may be considered.

d. Clause 7 (Amendments/Relaxation/Interpretation of Provisions of the Policy):-

At all places in the NRSE Policy 2012 "Department of Science, Technology, Environment & Non-Conventional Energy" be replaced with "Department of New and Renewable Energy"

Government of Punjab, Department of New and Renewable Energy can amend relax / make addition / interpret provisions under this policy

with due approval of the Chief Minister.

e. Annexure-HI, Clause 3 (Facilities by Punjab State Power Transmission Corporation Limited):-

- (i) **Power Wheeling: The PSPCL/ LICENSEE/ PSTCL will undertake to transmit/wheel the NRSE power through its grid, to consumers located in the State without any transmission and wheeling charges on the energy fed to the grid, irrespective of the distance from the generating station. However, all transmission & distribution losses and all other charges as per open access regulation shall be to the account of the OA consumers. Such wheeling and / or transmission of power shall be governed by Open Access Regulations I procedures.**
- (ii) **The captive power production and consumption by beneficiaries i.e. same group companies shall meet the requirements laid down in Electricity Rules 2005. Captive power generators will be required to seek permission of PSPCL / PSERC for laying of transmission line for taking power to destination of use in Punjab.**
- (iii) **The facility of exemption of transmission & wheeling charges on intra state open access shall be available to the NRSE plants achieving commercial operation (COD) from the date of issuance of this amendment notification uptill 31.3.2017 for a period of ten years from the date of COD of the plant.**

f. Annexure-III Clauses 4 (Fiscal assistance by Govt. of Punjab) Sub clause (i):-

g. For canal and reservoir based solar projects special scheme shall be launched in consultation with Punjab Irrigation Department.

Annexure-III Clauses 4 (Fiscal assistance by Govt. of Punjab) Sub clause (ii):-

Wherever the required land belonging to local bodies / panchayats is available, the State would encourage the local bodies / panchayats to provide the land for NRSF, projects on the terms and conditions specified **by**

the Deptt. Of Rural Development & Panchayats / Deptt. of Local Government.

It shall come into force with immediate effect.

Dated Chandigarh, the

2 July, 2015

(Anirudh Tewari) IAS

Principal Secretary to Govt. of Punjab
Department of New and Renewable Energy

Endst. No. 18/7/2015-PE 1/

Dated: Chandigarh

A copy of the above is forwarded to The Controller, Printing 86 Stationery, Punjab, Chandigarh with the request that this notification may be published in the Punjab Government Gazette and 200 copies thereof be sent to this department.

Deputy Secretary

Dated, Chandigarh 9/7/2015

Endst No. 18/7/2015-PE1/1610

A copy of the above is forwarded to the following for information and necessary action:-

- 1) Chairperson, Punjab State Electricity Regulatory Authority, SCO No. 220-221, Sector-34, Chandigarh.
- 2) Chairman-cum-Managing Director, Punjab State Power Corporation Limited, The Mall, Patiala.
- 3) Chairman-cum-Managing Director, Punjab State Transmission Corporation Limited, The Mall, Patiala.
- 4) Chief Executive, Punjab Energy Development Agency, Chandigarh.
- 5) Chief Electrical Inspector, Punjab

Superintendent

