

**Haryana Government**  
**Renewable Energy Department**

**Notification**  
**The 4<sup>th</sup> September, 2014**  
**Haryana Solar Power Policy, 2014**

No. 19/14/14-5Power.- The Government of Haryana has formulated Haryana Solar Power Policy 2014 to promote the generation of power from solar energy. For giving effect to this Policy, necessary amendments in various policies, rules and regulations, wherever necessary, shall be expeditiously undertaken by the concerned Department.

**1. Vision**

Energy is the national resource and basic requirement of mankind. The challenges of climate change and global warming increasingly impact the world community. Although achieving energy efficiency as an objective has been deliberated upon for a long time, only a few nations have translated this as an emphatic state policy and implemented the paradigm shift necessary in the manner Renewable Energy is produced, transmitted, distributed and sold.

Haryana has been an undisputed leader in industrial development and agricultural production in India. It has also pioneered various social developmental initiatives, that has established its position as a dynamic, achievement and innovation oriented State.

As a result of the progressive policies of the State Government and the inherent dynamism of its hardworking citizens, the State is experiencing rapid urbanization and industrialization. The demand of energy is growing rapidly. However, the current energy supply of the State is heavily dependent on fossil fuels whose stocks are exhaustible and fast depleting, besides their volatile and fluctuating market prices aggravate energy insecurity. Also its usage leads to high concentration of Green House Gases (GHG) which has a harmful effect on our environment.

Recognizing the crucial importance of Renewable Energy, the Govt. of Haryana has already notified a “Policy for Promoting Generation of Electricity through Renewable Energy Sources” on November 23, 2005. The objective of this policy is to create conditions conducive for the involvement of private sector or public private sector participation in setting up and promoting Biomass, Cogeneration, Small Hydro, Wind Energy, Waste Energy and Solar Energy based power projects in the State.

The State of Haryana is endowed with high solar radiation levels with about 320 days of clear Sun in a year. Harnessing our untapped and inexhaustible solar energy potential would therefore not only usher in the required “energy mix” but also reduce the emission of carbon dioxide (CO<sub>2</sub>) and other toxic gases significantly. Although at present the cost of producing solar energy is uniformly high throughout the country, it is progressively coming down and its propagation cannot be delayed any further as it offers energy security, environmental benefits besides improving grid quality and reduces transmission losses.

In view of the above mentioned facts, it is imperative to have a comprehensive policy to pro-actively promote production of solar power as an alternative and renewable source of clean energy.

## **2. Preamble**

- 2.1 As per clause No.6.4 ( Non-Conventional and Renewable sources of energy generation including co-generation) of the National Tariff Policy notified vide No.23/2/2005-R&R (Vol.III) dated 6.1.2006, pursuant to provision of section 86 (1) (e) of the Electricity Act, 2003, the appropriate Commission shall fix a minimum percentage of total consumption of electricity in the area of distribution licensee for purchase of energy from such sources, taking in to account availability of such sources in the region and its impact on retail tariffs. Such percentages for purchase of energy shall be made applicable of the tariff to be determined by the SERC’s latest by April 1, 2006. The said Tariff Policy has been amended vide No. 23/17/2009-R&R dated 20.01.2011 and as per the revised National Tariff Policy, within the percentage so made applicable, to start with, the SERC’s shall also reserve a minimum percentage for purchase

of Solar Energy from the date of notification in the Official Gazette which will go up to 0.25% of the total consumption by the end of 2012-13 and further up to 3% by 2022.

2.2 The annual energy consumption of Power utilities of the State of Haryana is about 36,000MU from conventional sources and it is increasing @ 8-10% every year. By the year 2022, the energy consumption of Power utilities is likely to go up to 73838 MU and considering Solar RPO of 0.25% of total energy consumption of both power utilities, then Power utilities will have a Solar RPO shortfall of 176MU (110MW) . In case the Solar RPO is increased by 3% of total energy consumption as per the amended National Tariff policy No. 23/17/2009-R&R dated 20.01.2011, than it shall be up to 2215 MU by the year 2022, for which, state shall require an installed capacity of 1300 MW approximately of Solar Power Plants.

2.3 The required solar power generation capacity by 2022 is required to be increased to 1300 MW as against present installed capacity of only about 8 MW. Thus, there is an urgent need to have a Solar Energy Policy in place in the State to meet solar RPO and to promote solar power generation. The Haryana State Solar Power Generation Policy has accordingly been framed by the Govt. of Haryana to meet these objectives. This policy endeavours to create an enabling environment to attract public & private investments in solar power generation and also in creating manufacturing facilities for system/devices/ components used in solar power generation in the State.

### 3 **Title and enforcement:**

3.1 This policy will be known as Haryana Solar Power Policy, 2014.

3.2 The policy will come into operation with effect from the date of its notification and will remain in force up to 31.3.2017.

3.3 The State Government may undertake review of this policy as and when the need arises in view of any technological breakthrough or to remove any inconsistencies with Electricity Act , Rules & Regulation made

thereof or any Government of India policy/State Electricity Regulatory Commission's order.

#### **4 Definitions:**

4.1 Following expressions used in the Policy would have meanings assigned to them as defined hereunder:-

- (1) "Act" means Electricity Act 2003, including amendments there to.
- (2) "APPC" means Average Power Purchase Cost.
- (3) "CEA" means Central Electricity Authority.
- (4) "CERC" means the Central Electricity Regulatory Commission of India, constituted under sub-section (1) of Section 76 of the Electricity Act, 2003, or its successors.
- (5) "Central Agency" means National Load Dispatch Centre (NLDC) as designated by the Central Electricity Regulatory Commission vide order dated 29.01.2010 for the purposes of the REC Regulations.
- (6) "Conventional Power Plants" means lignite; coal, fossil fuel or gas based thermal generating power stations and hydro generating stations of more than 25 MW capacities.
- (7) "DISCOM of Haryana" means a distribution licensee, such as UHBVNL, Panchkula, DHBVNL, Hisar.
- (8) "FDPR" means Feasible Detailed Project Report.
- (9) "Government" and "State" means the Government of Haryana and the State of Haryana respectively.
- (10) "IREDA" means Indian Renewable Energy Development Agency.
- (11) "Licensee" includes a person deemed to be a licensee under Section 14 of the Act.
- (12) "MNRE" means Ministry of New and Renewable Energy, a Central Government Ministry responsible to develop and deploy new and renewable energy for supplementary energy requirement of the country.
- (13) "MOU" means Memorandum of Understanding.
- (14) "National Solar Mission or Solar Mission" means Jawaharlal Nehru National Solar Mission 2009 launched by Government of India.

- (15) "Nodal agency" means Haryana Renewable Energy Development Agency (HAREDA) or any other agency designated by Government of Haryana for promotion of electricity generation from renewable energy sources.
- (16) "PPA" means Power Purchase Agreement.
- (17) "REC Regulation" or "CERC REC Regulation" means Central Electricity Regulatory Commission (Terms & Condition for recognition and issuances of Renewable Energy Certificate for Renewable Energy Generation) Regulation, 2010 notified by CERC vide Notification dated 14.1.2010 and amended from time to time.
- (18) "Renewable Energy Certificate" or "REC" means the Renewable Energy (Solar) Certificate issued by the Central Agency in accordance with the procedure prescribed by it and under the provision specified in the Central Electricity Regulatory Commission (Terms & Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulation, 2010.
- (19) "HERC"/"Commission" means Haryana Electricity Regulatory Commission.
- (20) "RPO" means Renewable Purchase Obligation.
- (21) "SECI" means Solar Energy Corporation of India.
- (22) "Solar Power Producer" means an entity, which owns facilities to generate electric power for sale to DISCOM of Haryana/Licensees/NVVN / to third party/captive use.
- (23) "Solar Plant/Solar Power Plant" means a power plant or system utilizing solar energy through solar photo-voltaic or concentrated solar thermal devices including its integration into conventional fossil fuel for generating of electricity.
- (24) "Solar PV Power Plant" means the Solar Photo Voltaic (SPV) Power Plant that uses sunlight for direct conversion into electricity through Photo Voltaic technology.
- (25) "Tariff" means the schedule of charges for generation, transmission, wheeling and supply of electricity together with terms and conditions for application thereof.

(26) "TOD" means Time of Day in Hours.

(27) "UI Charges" means unscheduled Interchange charges.

4.2 All other words and expressions used herein and not defined shall have the meanings respectively assigned to them in The Electricity Act-2003.

## **5 Objectives:**

The objectives of this policy are to:

- 5.1 Promote generation of green and clean power in the State using solar energy.
- 5.2 To create conditions conducive to the participation of private and public sector as well as PPP in promoting and setting up Solar Energy based power projects in the State.
- 5.3 Productive use of wastelands / non – agricultural lands thereby catalysing socio-economic transformation and reducing regional disparities in development.
- 5.4 Employment generation and skill up gradation of youth.
- 5.5 To put in place an appropriate investment climate that would leverage the benefits of Clean Development Mechanism (CDM) and result in lower Green House Gas (GHG) emissions.
- 5.6 Co-creation of Solar Centres of Excellence and pools of technical professionals which would work towards applied research and commercialization of indigenous and cutting edge technologies involving applications of solar energy generation and appliances.
- 5.7 Spreading of environmental consciousness among all citizens of the State especially the youth and school going children.
- 5.8 Decentralization and diversification of the energy portfolio and to increase the share of renewable solar power.

## **Targets:**

To achieve the objectives of this Policy, the targets are as under:

## **6. MW scale Grid connected Solar Power Project**

6.1 Projects selected through reverse bidding:-

The State will develop SPV Solar Power Plants of 1 MW -10 MW capacity to the extent of fulfilment of Solar Renewable Purchase Obligation. All efforts shall be made to ensure that the entire requirement of solar power required to be purchased by the Power Distribution Licensee (DISCOM) under Renewable Purchase Obligation (RPO), is purchased from developers situated within the State. By March 2017, HAREDA shall promote and get installed 100 MW capacity of MW Scale Grid connected Solar Power Project in two phases. In each phase, 50 MW capacities shall be selected through reverse bidding on the basis of maximum discount offered on the levelled tariff fixed by Haryana Electricity Regulatory Commission (HERC) for SPV solar power plants. The entire power from the Solar Power Plant shall be purchased by DISCOMS of Haryana at tariff so discovered.

After the completion of installation and commissioning of 100 MW capacities of solar Power Plants, for any additional capacity Board of Governors (BOG) of HAREDA shall decide, after consultation with power DISCOMS, the capacities of solar Power Plant to be promoted in subsequent phases to meet the RPO obligations of the power DISCOMS.

6.2 **Projects set up under Jawaharlal Nehru National Solar Mission (JNNSM):**

The State will support and get installed MW scale Solar Photovoltaic (SPV) & Concentrated Solar Power (CSP) Plants in the State under JNNSM. Eight (8) Solar Photovoltaic (SPV) Power Projects, approved by Indian Renewable Energy Development Agency Ltd. (IREDA), of aggregate capacity of 7.8 MW under JNNSM in Phase-1 have been commissioned and are supplying the solar power to the State of Haryana. The State Government shall also support future projects in the subsequent phases of JNNSM and these projects shall be eligible for incentives given by the state government as per this policy.

6.3 **Solar Power Project set up for captive use or 3<sup>rd</sup> party sale**

The State shall encourage and facilitate Independent Power Producers (IPPs) to install solar power plants for captive use or for 3<sup>rd</sup> party sale or sale of solar power on Average Power Purchase Cost (APPC) to the DISCOM under Renewable Energy Certificate (REC) mode as per the guidelines issued by Central Electricity Regulatory Commission (CERC) vide its notification No.-L- 1/12/2010-CERC, Dated 14.01.2010 and subsequent amendments thereafter. The IPPs shall submit the application along with Feasible Detailed Project Report (FDPR) and processing fee of Rs.20, 000 per MW. The FDPR shall be evaluated by the Technical Appraisal Committee (clause 23.1). On approval of TAC, the matter shall be placed before Board of Governors of HAREDA for giving principle approval for setting of Solar Power Plant under REC mode.

#### **6.4 Projects set up on Panchayat lands:**

The possibility of setting up of 50 MW capacity scale Solar Power Plants on barren Panchayat lands in the State shall also be explored. The department shall identify such suitable chunks in consultation with the Department Rural and Panchayat Department. The Panchayats interested in leasing the land under their possession shall be paid as per the prevailing state policy up to 25 years. The bidder shall be selected through reverse bidding on the basis of maximum discount offered on the levellised tariff fixed by HERC for SPV solar power plants. The entire power from the Solar Power Plant shall be purchased by DISCOMS of Haryana at tariff so discovered.

#### **6.5 Solar Power Projects set up on Canal overheads:**

The possibility of setting up of MW scale Solar Power Plants on canals shall be explored. This will not only help in providing sufficient space but also help in reducing the water evaporation. The site of canal overheads shall be indentified in consultation with Irrigation Department, Haryana for which no charges shall be payable. The bidder shall be selected through reverse bidding on the basis of maximum discount offered on the levellised tariff fixed by HERC for SPV solar power plants. The entire

power from the Solar Power Plant shall be purchased by DISCOMS of Haryana at tariff so discovered.

**7. Rooftop grid interactive SPV system**

State shall promote installation of small capacity roof top grid connected Solar Power Plants on the roofs of Industries, public and private Institutes, schools, colleges, commercial institutions/establishments, Charitable Trust Bhawans, Hospitals and residential buildings etc. for their captive use and for sale to power utilities. Apart from 30 % capital subsidy available to Solar Projects under MNRE schemes, the State DISCOMS shall procure the solar power generated at a fixed feed in tariff. During the tenure of this policy, State shall install aggregate 50 MW capacity of roof top grid connected Solar Power Plants.

The Haryana Electricity Regulatory Commission (Rooftop Solar Grid Interactive System based on Net Metering) Regulations shall be followed for promotion of grid interactive rooftop or small SPV systems in the state. There shall be following categories for promoting the grid interactive rooftop solar power plants:

i) Cluster of rooftops of public buildings:

HAREDA shall identify a cluster of public buildings in each district headquarter. The aggregate capacity in each cluster shall be 1 MW and on one building the maximum capacity of solar power plant shall not be more than 500 KW. The bidder shall be selected through reverse bidding on the basis of maximum discount offered on the levellised tariff fixed by HERC for roof top SPV solar power plants with or without subsidy. The entire power from the Solar Power Plant shall be purchased by DISCOMS of Haryana at tariff so discovered.

ii) Cluster of private buildings in a Cities:

The entire city (10 nos.) shall be offered as a cluster to the IPPs. The buildings in the city shall be identified by the IPP and the aggregate capacity in each cluster shall be 500 – 1000 KW. The

rent for roof top shall be decided mutually by roof top owner and IPP. The bidder shall be selected through reverse bidding on the basis of maximum discount offered on the levellised tariff fixed by HERC for SPV solar power plants with or without subsidy. The entire power from the Solar Power Plant shall be purchased by DISCOMS of Haryana at tariff so discovered.

iii) Rooftops of individual buildings:

The building owners shall also be encouraged to install the small capacity rooftop solar power plants (5KW to 100KW) at their own cost on net metering basis. The power generated shall be used by building owner as captive use and if any surplus power is generated than it shall purchased by DISCOMs of Haryana on the tariff fixed by HERC for roof top SPV power plants ( *the grid connectivity near the solar installation to be provided by DISCOMs subject to the condition that the individual building owner is the existing consumer of DISCOMs*).The State Govt. shall provide financial assistance @ 40 % of the cost of system to the beneficiaries (including financial incentive being provided by Ministry of Renewable Energy, GOI under JNNSM i.e. if 30% financial assistance is provided by MNRE, than additional 10% shall be provide from green energy fund).

For promotion of rooftop grid interactive solar power plants, HERC shall fix feed in tariff for roof tops with and without subsidy. For grid connectivity, the Central Electricity Authority (CEA) (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations notified by the Ministry of Power/HERC shall be adopted. The grid connectivity near the solar installation shall be provided by the concerned power DISCOMS.

**8. Small capacity off grid solar power projects and devices**

In order to sustain interest within the investor community, Ministry of New & Renewable Energy (MNRE), Govt. of India is supporting viable

business models with the objective to promote off-grid application of solar energy (both SPV & Solar Thermal). Under this scheme, MNRE is providing Central Financial Assistance for setting up of small capacity solar power plants for captive use(with or without battery backup) and on devices such as Solar Lanterns, SPV home lighting systems, Light Emitting Diode (LED) based SPV Street Lighting System, Solar cookers and Solar Inverters .The State Govt. shall provide financial assistance @ 40 % of the cost of system to the beneficiaries (including financial incentive being provided by Ministry of Renewable Energy, GOI under JNNSM i.e. if 30% financial assistance is provided by MNRE, than additional 10% shall be provide from green energy fund) for promoting these small solar power plants/devices. In case of schedule caste and below poverty line beneficiary, the financial incentive @ 80 % of the cost of the system shall be provided (including financial incentive being provided by Ministry of Renewable Energy, GOI under JNNSM i.e. if 30% financial assistance is provided by MNRE, than additional 50% shall be provide from green energy fund). For solar based agricultural implements such as Solar water pumping system, financial assistance @ 60 % of the cost of system to the beneficiaries (including financial incentive being provided by Ministry of Renewable Energy, GOI under JNNSM i.e. if 30% financial assistance is provided by MNRE, than additional 30% shall be provide from green energy fund). Under this category, State shall promote these off grid solar power plants and devices of aggregate capacity of 35 MW during the tenure of this policy. The targets for these small capacities off grid solar power project and devices shall be on the basis of funds collected through solar cess as per clause 13.4.

## **9. Promotion of Solar Thermal Collectors**

### **9.1 Solar Water Heating Systems (SWHS):**

To conserve electricity and other conventional fuels in water heating applications, State Government is implementing a scheme to popularize the use of solar water heating systems. Solar water heating is a techno-economically viable option for water heating application. For these

systems, Central Financial Assistance in case of flat plate collector system and evacuated tube collector systems is available in all the potential categories like.

- a) All industrial buildings where hot water is required for processing.
- b) All Government/Private Hospitals and Nursing Homes
- c) All Hotels, Resorts, Motels, Banquet Halls, Catering Units and Industrial Canteens.
- d) Residential Buildings.
- e) Hostels in educational institutions/Pvt. Hostels, Testing Labs/Laboratories of Educational Institutes /Hospitals
- f) Barracks of Police, Paramilitary forces and Jails.
- g) Private/Government Guest Houses, Govt. Tourist Hotels, Dak Bungalow, Circuit House and retiring rooms of Railways.
- h) Health Centres, Sports Complex.
- i) All weather swimming pools.
- j) Social Sector (Orphanage, Deaf and Dumb institutes etc.)

The State Govt. shall promote 50,000 Sqm of collector area of SWHS by providing financial incentive @ 40 % of the cost of system to the beneficiaries (including financial incentive being provided by Ministry of Renewable Energy, GOI under JNNSM i.e if 30% financial assistance is provided by MNRE, than additional 10% shall be provide from green energy fund) to all the above mentioned potential categories. In case of residential building belonging to schedule caste and below poverty line beneficiary, the financial incentive @ 80 % of the cost of the system shall be provided (including financial incentive being provided by Ministry of Renewable Energy, GOI under JNNSM i.e if 30% financial assistance is provided by MNRE, than additional 50% shall be provide from green energy fund).

## 9.2 **Solar Steam Systems:**

The Haryana State will promote the use of solar steam systems for wider applications such as:-

- a) Community cooking in residential institutions/industrial mess/ Hotels / Barracks/ mid day meal program/Hospitals etc.
- b) Industrial Application of steam in process industries such as Textile/Food industry etc.
- c) Laundries.
- d) Space Conditioning using Vapour Absorption Machines (VAM's).
- e) Process requirements of hot water.
- f) Process requirements of steam.
- g) Pre-heating applications in variety of industries.
- h) Drying applications
- i) Steam, press and laundry units

The State Govt. will promote 5000 Sqm of collector area these solar steam systems by providing financial incentive @ 40 % of the cost of system to the beneficiaries (including financial incentive being provided by Ministry of Renewable Energy, GOI under JNNSM i.e if 30% financial assistance is provided by MNRE, than additional 10% shall be provide from state fund).

10. **Introduction of training programme on solar energy power plant/devices in ITI and Diploma courses.**

HAREDA shall take initiative with consultation with Department of Technical Education/Industrial training to introduce the courses/training programme on the solar energy power plant/devices in ITI and Diploma courses in state. A separate course in ITI shall be started on the repair and maintenance of solar Energy Power plants/devices.

11. **Development of Model villages in the field of Solar Energy.**

One village in each district of the state shall be developed as model village in the field of solar energy. All the households in the model village shall be provided with 1KW capacity roof top solar power plant and 200LPD capacity of solar Water heating system. 20 LED based solar street lights shall be installed in each model village. The financial incentive @ 80 % of the cost of complete project shall be provided from

Green energy fund (including financial incentive being provided by Ministry of Renewable Energy, GOI under JNNSM i.e. if 30% financial assistance is provided by MNRE, than additional 50% shall be provide from green energy fund). Balance 20% of project cost shall be borne by respective Panchayats.

12. **Promotion of Research and Development in the field of solar energy in the Engineering Colleges.**

HAREDA shall promote Research and Development programme in the field of solar energy by way of providing financial incentives to the Engineering Colleges of the state. The research projects (5 nos.) up to Rs.20.00 lakhs shall be invited from the engineering colleges and the selection for the financial incentives shall be selected by the Board of Governors of HAREDA.

13 **Generation of funds for implementation of Haryana Solar Energy Policy**

13.1 The State govt. will create a separate fund known as Green Energy Fund under the control of Board of Governors of HAREDA and Director General, Renewable Energy Department & HAREDA for accelerated development of solar power projects in the state. The Chief Secretary, Govt. of Haryana shall be Chairman of the advisory committee to lay down the guidelines and polices for utilization of funds and power of day to day operations of the fund shall be delegated to Director General, HAREDA. The advisory committee shall be as under:

1. Chief Secretary, Haryana

Chairman

2. Secretary, Finance Department

Member

3. Secretary, Local Bodies Department

Member

4. Secretary, Power Department

Member

5. Secretary, Irrigation Department  
Member
6. Secretary, Agriculture Department  
Member
7. Secretary, Renewable Energy Department  
Member
8. Secretary, Industries Department  
Member
9. Secretary, Town & Country Planning  
Member
10. Secretary, Environment Department  
Member
11. Secretary, Forest Department  
Member
12. Director General, Renewable Energy Deptt & HAREDA  
Member  
Secretary

13.2 This fund will be utilised for providing State financial incentive for installation/promotion of Solar Power plants / solar energy based devices as per clause 8, 9,11 & 12 with the approval of Chief Minister, Haryana.

13.3 The funds for providing financial assistance to the beneficiaries under clause 8, 9, 11 & 12 of the policy shall be generated by levying and collecting solar cess on all categories of consumers of DISCOMs except agriculture consumers. The solar cess shall be levied along with Electricity Duty in the consumer monthly bill. Further, Solar cess shall also be levied on the open access consumers.

13.4 The Solar cess up to 2 paisa /unit shall be levied.

13.5 The Solar cess levied shall be payable by the power DISCOMs and the same shall be deposited in the newly created Green Energy Fund (clause 13.1).\_DISCOMs shall reimburse the solar cess collected from consumers on actual collection basis.

13.6 Funds shall be solicited from National Capital Region Development Board, Shiwalik Development Board and Mewat Development Board for promoting solar energy under their various programmes.

#### **14. Metering**

Metering equipments for the power generation & its sale under clause 6 & 7 will be installed at site by the unit at their own cost as per specification of Power Utilities of State/ HERC Grid Code/CEA Standards. Testing of these equipments will be carried out by Power utilities at the Unit's cost. Haryana Vidyut Parsaran Nigam Limited (HVPNL) will develop necessary infrastructure at locations where more than one project is installed.

Metering equipment & the allied equipment be installed in the following manner:-

1. Main meter at the interconnection point shall be provided by the Company.
2. Check meter at the interconnection point shall be provided by the Nigam/DISCOM.
3. Main Meter at the substation of the Nigam shall be provided by the Nigam/DISCOM.
4. Check meter at the substation of the Nigam shall be provided by the company.

Testing of metering equipment of the company shall be carried out by the Power Utilities at the cost of company. The Meter shall comply with Central Electricity Authority (Installation and Operation of meters) Regulations, 2006 and its subsequent amendments.

#### **15. Power Evacuation Facility**

15.1 Power evacuation will be an integral part of the solar power project under clause 6. All expenses for power evacuation, Transmission, distribution line and synchronizing equipment required for installation will be as per the orders of the Haryana Electricity Regulatory Commission for Electricity on Renewable energy Tariff & other issues, as modified from time to time.

15.2 For Rooftop grid interactive SPV system under clause 7, all arrangements for power evacuation i.e. step up, synchronizing equipments, metering shall be done by power generators as per the technical specification, guidelines and regulation fixed by HERC.

## **16 Incentives by the State Govt.**

### **16.1 Exemption from Land use charges, External Development Charges, scrutiny fee and infrastructure development charges.**

Setting up of Solar Energy Power Project in the State will be permitted by the Town and Country Planning Department without levying of conversion charges, change of land use charges, External Development charges, Scrutiny Fee and infrastructure development charges.

### **16.2 Wheeling and Reactive Power Charges**

Facility of wheeling will be available to the solar power project through Utilities and wheeling charges shall be levied as per Haryana Electricity Regulatory Commission (Terms & conditions for Tariff Determination from Renewable Energy Sources, Renewable Obligation and Renewable Energy Certificate) Regulation, 2010 along with its subsequent amendments. The reactive power charges shall be as per the grid code for transaction in the intervening transmission facilities as per the CERC notification no. L-1/10/2009-CERC Dt. 23/09/2010 and any amendment thereafter.

### **16.3 Status of Industry.**

All new projects of generating solar energy will be treated as "Industry" in terms of Industrial Policy of the State and all the incentives available to

industrial units under the industrial policy shall be available to the solar power producers/units.

## **17 Banking**

Haryana Vidyut Parsaran Nigan Ltd. (HVPNL)/ Dakshin Haryana Bijli Vitran Nigam Ltd. (DHBVN)/ Uttar Haryana Bijli Vitran Nigam Ltd. (UHBVN)/ licensee shall permit solar power generated by eligible producers to be banked (clause 6 & 7). The banking facility shall be allowed for a period of one year by the Licensee/ Utilities and IPP is to pay difference of Unscheduled Interchange charges (UI charges) at the time of injection and at the time of drawl. However, withdrawal of banked power should not be allowed during peak and Time of Day (TOD) hours. If the banked energy is not utilized within a period of twelve months from the date of power banked with the concerned power utilities/ licensee, it will automatically lapse and no charges shall be paid in lieu of such power.

## **18. Tenure of Power Purchase Agreement**

The Power Purchase Agreement (PPA) to be signed between IPP and concerned power utilities / licensee shall be valid for a minimum period of 25 years. After this period, the PPA shall be renegotiated between the power producer and concerned power utilities/ licensee. However, power utilities shall have the first right to refuse in case, it does not want to buy the power for period beyond 25 years.

## **19. Technical Requirements**

- 19.1 The Independent Power Producers/Off grid power producer/user of SPV devices would be required to strictly adhere to the national/international standards specified by the Ministry of New & Renewable Energy, Govt. of India from time to time i.e. relevant IEC/ BIS standards and / or applicable standards as specified by the Central Electricity Authority.
- 19.2 The minimal technical requirements and Quality Standards in respect of SPV power plants/ off-grid power plants systems should be as per the

technical requirements/ Quality Standards of the MNRE, GOI under JNNSM scheme or as amended from time to time.

**20. Clean Development Mechanism (CDM) benefits**

The CDM benefits from the solar power projects shall be shared as per Haryana Govt. Notification No. 22/69/2005-5P dated 23rd November, 2005 for the Policy for Promoting Generation of Electricity through Renewable energy Sources, amended vide Notification No. 22/69/2005-5Power dated 19th June, 2008 and No. 22/72/2005-5Power dated 29th March, 2010 or as per the latest amendments issued by the Haryana Electricity Regulatory Commission from time to time.

**21. Amendments/ Relaxation/ Interpretation of provisions of the Policy**

Secretary to Govt. of Haryana, Renewable Energy Department shall have the powers to amend / relax / issue clarification, if any, on any matter related to interpretation of any provisions under the policy in consultation with the concerned Govt. Departments / Agencies.

**22. Procedure and Guidelines for setting up of Solar Power Projects in Haryana under JNNSM (clause 6.2)**

For setting up of Solar Power Projects, State shall follow the procedure as per the guidelines issued by Ministry of New and Renewable Energy (MNRE)/ Indian Renewable Energy Development Agency (IREDA)/ Solar Energy Corporation of India (SECI) from time to time under the JNNSM.

**23. Procedure and Guidelines for setting up of Solar Power Projects in Haryana by HAREDA (clause 6.1,6.3,6.4,6.5 ,7(i) and 7(ii))**

23.1 A comprehensive bid document shall be designed for inviting proposals from Independent Power Producers, listing out technical and financial parameters for evaluation of the bids through competitive bidding. On the basis of evaluation parameters contained in the tender document, bids shall be evaluated by the Technical Appraisal Committee.

The Technical Appraisal Committee (TAC) shall be as under:

- |  |          |
|--|----------|
| 1. Director General, HAREDA                                  | Chairman |
| 2. Chief Engineer (Commercial & System operation),<br>HVPNL. | Member   |
| 3. Chief General Manager/Commercial, HPPC                    | Member   |
| 4. Chief General Manager/Commercial, UHBVN                   | Member   |
| 5. Chief General Manager/Commercial, DHBVN                   | Member   |
| 6. Superintending Engineer/Civil Thermal Design,<br>HPGCL    | Member   |
| 7. Chief Engineer, Irrigation Department                     | Member   |
| 8. Additional Director, Renewable Energy Department          | Member   |
| 9. Chief Scientific Engineer, HAREDA                         | Convenor |

23.2 TAC shall appraise the proposals / bids in terms of technical and financial capabilities and scrutinize their techno-economic feasibility. TAC is authorized to seek any additional information from the bidders to supplement the proposals and will submit its report within two months of receipt of bids.

23.3 Advisory Committee under the Chairmanship of Chief Secretary, Govt. of Haryana (as per clause 13.1) shall negotiate and recommend solar power projects on lowest tariff received after reverse bidding process for category 6.1,6.4, 6.5,7 (i) and 7(ii) . The Advisory Committee can co-opt any other members /experts as its member for a particular meeting with the prior approval of the Chief Secretary.

23.4 Once the proposal has been recommended by Advisory Committee and sanctioned by Chief Minister,Haryana, HAREDA will enter into an MOU with the private investors for preparation of FDPR and implementation of the project within one month's time of approval. Thereafter, within 15 days HAREDA will issue the allocation letter to successful IPP.

23.5 After receiving allocation letter from HAREDA, the private investor is required to enter into PPA with the concerned power utilities/ licensee for

the sale of power to it after getting necessary approval from the Haryana Electricity Regulatory Commission (HERC).

- 23.6 The Power Producer and the concerned Power Utility/ licensee shall make efforts to enter into a Power Purchase Agreement within two months time from the date of clearance by HAREDA. In case of delay beyond this period either party can approach, the Haryana Electricity Regulatory Commission within two months for a decision in the matter.
- 23.7 The IPP shall sign the PPA within 6 months of receiving allocation letter & commission the project within 1 year from date of signing of PPA. The IPP shall deposit Refundable security @ 30 lac/ MW (in the form of 6 Bank Guarantees (BG) of 5 lac each with HAREDA before signing of PPA and within 15 days from the issuance of allocation letter from HAREDA. It will be refunded within one month after the successful commissioning of the plant within the permissible period. For delay of every one month, BG of Rs 5 lac shall be revoked & after 6 months delay, the entire BG shall be revoked and the project cancelled. To facilitate and promote installation of small capacity roof top off-grid solar power plants, the conditions of security deposit and penalty are not being imposed. However, Director General may waive off the penalty in case of grid connected solar power plants of 100 KW to 10 MW capacity, if he/she is satisfied that the delay was for reasons beyond the control of the developer.

## **24 Procedure and Guidelines for setting up of Small roof top Solar Power Projects/Devices in Haryana by HAREDA (clause 8 & 9)**

- 24.1 HAREDA shall invite applications for setting up of small off roof top Solar Power Projects/Devices and Solar thermal devices through press advertisement from the residents of State of Haryana.
- 24.2 HAREDA shall send the comprehensive proposal to MNRE for sanction of central financial assistance/central capital subsidy.

- 24.3 On receipt of sanction from MNRE, HAREDA shall get the beneficiary's share deposited from the applicants of small roof top Solar Power Projects/Devices and Solar thermal devices.
- 24.4 A comprehensive bid document shall be designed for inviting proposals from manufacturers/System Integrators for supply, installation and commissioning of small roof top Solar Power Projects/Devices. On the basis of evaluation parameters contained in the tender document, bids shall be evaluated by the technical committee of HAREDA.
- 24.5 The procurement for the small roof top Solar Power Projects/Devices shall be done as per the policy guidelines of Department of Supply and Disposal, Haryana.

25 **Application fee**

- 25.1 For grid connected solar power projects (clause 6.1, 6.4, 6.5, 7(i) & 7(ii) ) along with application, developer shall have to pay @ Rs. 20,000/- as non-refundable application processing fee with Director General HAREDA.
- 25.2 For small capacity roof top grid connected solar power plant as per clause 7 (iii) no application/processing fee shall be charged.

26. **Earnest Money Deposit**

For grid connected solar power projects (clause 6.1, 6.3, 6.4, 6.5, 7(i) ,7(ii) & 7(iii) ) the application shall be accompanied with the Earnest Money Deposit (EMD) of Rs.5.00 lacs per MW (Rs.500/- per KW) in the shape of demand draft, which shall be refunded after signing of Memorandum of Understanding (MOU)/PPA. However, if the bidder / developer fail /refuses to deposit the security deposit or fails/ refuse to sign the MOU on receipt of such a communication from HAREDA within the stipulated time, the EMD of the bidder will be forfeited.

27. **Security Deposit for erection of line for Grid connectivity.**

The grid connected Solar project developer (clause 6.1, 6.2, 6.3, 6.4, 6.5,7(i) & 7(ii)) shall be required to provide a irrevocable Bank guarantee on any scheduled bank @ Rs.10.00 lacs per MW(Rs. 1000/- per KW at the time of signing of the Power Purchase Agreement (PPA) with the distribution licensee/transmission licensee and in case the project developer fails to achieve the Commercial operation within the stipulated time period as mentioned in the PPA, the Bank Guarantee shall be forfeited and entire amount recovered from encashing the bank guarantee shall be paid as compensation to HVPNL/DISCOM for erection of line for grid connectivity. If the developer achieves the commercial operation within the time period mentioned in the PPA or extended as per policy, the Bank Guarantee shall be refunded within 15 days of applying to the concerned distribution utility. However charges for erection of line for Grid connectivity shall be payable to distribution licensee/transmission licensee as notified by HERC.

**28. Financial Criteria**

The grid connected Solar project developer (clause 6.1, 6.3, 6.4, 6.5, 7(i) & 7(ii)) shall submit the letter of commitment along with Board Resolution for equity investments in the Project calculated on the basis of Rs.3 crore/MW (or Rs.30,000 per KW) on a pro-rata basis.

**29. Minimum Equity to be held by the Promoter**

The grid connected solar project developer (clause 6.1, 6.3, 6.4, 6.5, 7(i) & 7(ii)) shall provide the information about the Promoters and their shareholding in the company to HAREDA indicating the controlling shareholding. No change in the shareholding in the Company developing the Solar Power Project shall be permitted from the date of submitting the application and till execution of PPA. This shall not be applicable to the Solar Power Projects developed by the public limited companies.

After execution of PPA, the controlling shareholding (controlling shareholding shall mean at least 26% of the voting rights) in the Company developing the project shall be maintained up to a period of (3) three year after commencement of commissioning of the project.

Further, if it is found that minimum equity for two consecutive quarter falls below 26 % after the execution of PPA, the accreditation of the project with HAREDA will be cancelled and the PPA with the power utilities will stand terminated. Thereafter, any change may be undertaken only with the prior approval of HAREDA, who may charge such fees for the same as decided by the Board of Governors, HAREDA.

Further, only new plant and machinery shall be allowed under this policy.

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Chandigarh