

Annexure of G.O. No.263/I (2)/2008-04 (8)-96/2001, dated 29-1-2008

GOVERNMENT OF UTTARAKHAND

POLICY FOR HARNESSING RENEWABLE ENERGY SOURCES IN UTTARAKHAND WITH PRIVATE SECTOR/COMMUNITY PARTICIPATION

1. PREAMBLE

Uttarakhand is richly endowed with natural renewable resources for generating electricity. Most of this could be harnessed through environmentally clean Medium & Large Hydroelectric Projects (i.e. projects with capacity in excess of 25 MW); it is estimated that a capacity of more than 20,000 MW is yet to be tapped through these sources.

In addition, the State has significant Renewable Energy (RE) Sources that includes sites for developing Micro (up to 100 KW), Mini (100KW-5 MW) & Small (5-25 MW) Hydro power projects as well as sources for generating electricity through Biomass/Agro residue, Wind power, Solar energy, Cogeneration etc. This policy aims at expeditiously harnessing these sources of energy that are non-polluting and are useful for electrification of isolated and remote habitations in Uttarakhand. It is felt that more than 1,000 MW electrical power could be tapped through these sources before 2020.

2. OBJECTIVE

To create conditions conducive to Private Sector/Community Participation in power projects based on RE Sources in the State. In particular:

- 2.1 To harness the environment friendly RE resources and enhance their contribution to the socio-economic development of the State.
- 2.2 To meet and supplement minimum rural energy needs through sustainable RE projects.
- 2.3 To provide decentralized energy supply to agriculture, industry, commercial and household sector.
- 2.4 To improve the quality of grid power through such projects, as a consequence of tail-end generation and feeding.
- 2.5 To enhance the use of energy sources that assist in mitigating environmental pollution.
- 2.6 To support efforts for developing, demonstrating and commercializing new and emerging technologies in the RE sector and, to this end, help establish linkages with national and international institutions for active collaboration.

- 2.7 To create conditions conducive to the involvement of private investors in RE projects.
- 2.8 To create public awareness and involve users/local community along with their capacity building in establishing, operating and managing RE projects.
- 2.9 To create direct and indirect employment opportunities in the State.

3. MEASURES TO BE ADOPTED

In order to fulfill the above, the following measures are proposed to be adopted:

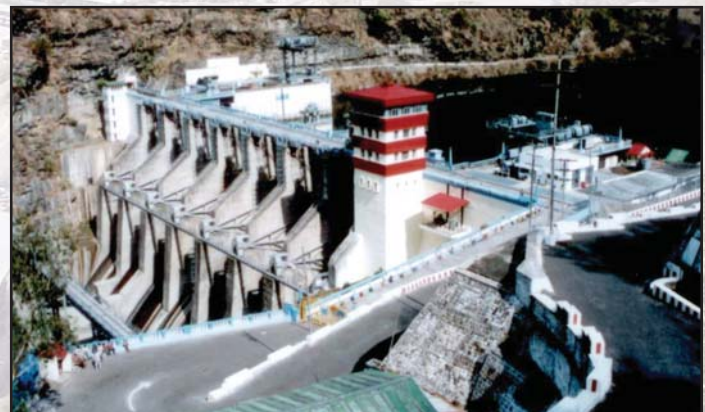
- Power generation through Hydro projects,
- Co-generation in industries such as Sugar, Paper, Fertilizer and Chemical etc.,
- Power generation from Biomass / Agricultural residue,
- Power generation from urban, municipal and industrial waste,
- Power generation from solar energy,
- Power generation from wind energy,
- Power generation from geothermal energy,
- Energy conservation in domestic, agriculture, industrial, commercial and transport sectors through induction of administrative/statutory/ legislative/ technical solutions and imposing stringent conditions for all categories of consumers.

4. POTENTIAL PROPOSED TO BE HARNESSSED:

Given the geographical conditions of the State of Uttarakhand, and availability of various sources of energy, the State proposes to harness the resources with active involvement of private/public sector/ community participation in the following manner :-

4.1 Hydroelectric Power:

By virtue of its topographic location, the State has a number of perennial streams where water is available throughout the year. The untapped potential that could be harnessed before 2020 through Micro/Mini/Small Hydro projects is about 600 MW. The State Government is committed to exploiting this potential.





4.2 Co-generation:

Uttarakhand has an established industrial base which is expanding. The Sugar, paper, fertilizer, chemical, textile and other industries have an estimated potential of about 220 MW that could be tapped by co-generation. This would not only augment the State's grid but would also help captive generation. This potential would also be exploited by the year 2020.

4.3 Biomass/Agro residue and waste :

It is estimated that about 20 million Metric Tons of agro residues and agro industrial/ processing waste is produced annually in Uttarakhand. It holds promising potential for generating decentralized power of about 300 MW. The State Government would support and facilitate harnessing this potential by 2020.



4.4 Urban, Municipal and Industrial Liquid/ Solid Waste :

At present about 1000 Metric Tons of Municipal, Urban and Industrial solid/ liquid waste is being produced every day in the State. Introducing scientific processing and treatment of this waste would lead to power generation along with abatement of environmental pollution. Initially a small number of such projects would be supported.

4.5 Solar Energy :

The State is endowed with vast potential of solar energy and the Government of Uttarakhand (GOU) is keen to tap this resource; the State would support efforts for setting up Solar based power projects.



4.6 Wind Power :

Sufficient untapped wind power potential is available in the State. There is immediate necessity for wind mapping in the State to assess and exploit the available potential. The State would support such programmes.

4.7 Geothermal Power :

Sufficient untapped geothermal power potential is available in the State. There is necessity for assessment of geothermal energy in the State to exploit the available potential. The State would support programmes for exploiting the available potential optimally.



4.8 Energy conservation :

Measures related to conservation of energy in domestic, commercial, agriculture and industrial sector could lead to 20% savings in energy consumption. The State Government is committed to introducing effective energy conservation measures in all sectors of economy. Energy auditing would be made mandatory in the State especially for industrial units where the load exceeds 25 kW. Appropriate mechanisms would be evolved for effective implementation of energy conservation measures.



5. INCENTIVES

- 5.1 **Sale of electricity:** On the electricity generated by the RE projects, UPCL will have the first right of purchase; such purchases may be made in whole or part as per the requirement of UPCL. The price of electricity to be purchased by the UPCL will be determined by the UERC; the price so determined will be announced in advance and will be uniformly applicable to all producers. The GOU will provide guarantee for the payments to be made by the UPCL for such purchases.
- 5.2 **Wheeling of electricity:** UPCL/PTCUL will undertake to transmit through its grid the power generated and make it available to the producer for captive use or third party sale within/outside the State for which wheeling charges uniformly applicable to all producers would be announced in advance.
- 5.3 **Banking:** UPCL would extend the facility of Banking to the Developers at mutually agreed terms.
- 5.4 For evacuating energy from the generation site, requisite network of transmission/ distribution lines would be provided by UPCL/PTCUL.
- 5.5 In case of power generation from Municipal Solid Waste, if Government land (belonging to Urban Local Bodies/Panchayats) is available, the required land for setting up RE projects would be provided on nominal lease rent of one rupee per square meter per year for a period of 33 years subject to further renewal on mutually agreed terms and conditions.

6. SINGLE WINDOW CLEARANCE FOR RE PROJECTS:

Setting up of RE projects involves sanctions/clearances from a number of Government Agencies/ Departments. The State Government would provide requisite clearances in a time bound manner through a

single window mechanism. For this purpose a high level empowered committee (composition at Appendix) is constituted to accord necessary approvals/clearances.

7. CLASSIFICATION OF PROJECTS:

Broadly, RE projects would be classified as

- (A) Hydro Projects (up to 25 MW)
- (B) Other RE Projects i.e. projects involving generation of power from co-generation, Biomass/Agro-residue, urban, municipal and industrial liquid/solid waste, wind, solar energy and including projects for energy conservation.

7(A) HYDRO PROJECTS :

- (I) Based on the generating capacity, Projects will be grouped into the following three categories:
 - a) Micro Projects with capacity upto 100 kW,
 - b) Mini Projects with capacity above 100 kW and upto 5 MW,
 - c) Small Projects with capacity above 5 MW and upto 25 MW.
- (II) On the basis of the mode for identification, projects may be grouped into the following two categories:
 - a) Self Identified Projects: Developers may identify projects, prepare the DPR and ask for allotment;
 - b) State Identified Projects: The State or State Sponsored Agencies may identify projects of any size, prepare the DPR and allot it in the manner prescribed below :-

Allotment of Hydro Projects:

Self Identified Projects:

Eligibility criteria

For Micro projects

- (i) Individuals who are domiciles of Uttarakhand,
- (ii) Gram Panchayats of Uttarakhand in the vicinity of the site,

- (iii) Societies of Uttarakhand registered under the Society Registration Act, 1860/UP Cooperative Society Act 1965

would be eligible for allotment.

For Mini projects

- (i) Individuals who are domiciles of Uttarakhand,
- (ii) Gram Panchayats of Uttarakhand in the vicinity of the site,
- (iii) Societies of Uttarakhand registered under the Society Registration Act, 1860/UP Cooperative Society Act 1965,
- (iv) Firms registered under the Company Act 1956 and having their manufacturing units located in Uttarakhand

would be given preference for allotment of project.

For Small Projects

These would be open to all; there would be no reservations. For this premium will be decided later.

Evaluation criteria

For evaluating suitability of a prospective Developer, the following would be considered :-

- a) Technical capability including past experience in developing, constructing or operating Energy Projects – this aspect would be evaluated based on a maximum of 60 marks;
- b) Financial capability, including the capacity to invest in the equity of the project and the ability to arrange for institutional finance. The minimum financial capability (Solvency Certificate to be provided) would be Rs.10.00 Lakhs and for Micro projects and Rs.50.00 Lakhs for Mini projects. Financial capability would be evaluated based on a maximum of 40 marks.

Payments to be made:

All payments would be made in the form of a Bank draft of any Nationalized Bank.

Application fee (Non-refundable): Rs.5000/-

Processing fee (Non-refundable): At the time of signing the Development Agreement

- For Micro projects: Rs. 10,000/-.
- For Mini projects : Rs. 25,000/-.
- For Small projects: Rs. 50,000/-

Security payment: At the time of signing the Implementation Agreement

- For Micro projects:: Rs.20,000/-.
- For Mini projects: Rs.50,000/-.
- For Small projects: Rs. 1,00,000/-

State Identified Projects:

Small Hydro projects would be allotted on the basis of open competitive bidding (without any reservation).

Eligibility and evaluation criteria;

Eligibility and Evaluation parameters shall be provided in the Request For Qualification (RFQ)/Request For Proposal (RFP)/ bidding documents.

Allotment Procedure:

The identified projects would be advertised in order to seek bids. Selection of Developers would follow a two-stage process.

- i **Prequalification:** Firstly, the applicants would be evaluated on the basis of pre-qualification criteria laid down in the RFQ document which will be made available on payment of a prescribed fee. Broadly, prequalification criteria would be based on balance sheet, annual report, technical and financial capacity etc. After evaluations, a short list of successful applicants would be prepared.
- ii **Financial bid:** Applicants short-listed on the basis of prequalification criteria would be invited to submit their financial bids based on premium payable to the Government of Uttarakhand. For this purpose the following threshold premium is prescribed (bids quoting premium below the threshold would be rejected out rightly) :-
 - Above 2 MW & upto 5MW: Rs. 1,00,000/- per MW
 - Above 5MW & Up to 25 MW: Rs. 5,00,000/- per MW

- iii A project will be allotted to the short-listed bidder who has offered the highest bid. The successful bidder shall be required to deposit the premium and other amount due within the time specified in the bid document.
- iv Complete transparency in allotment of the projects shall be ensured. Comprehensive RFQ/RFP/ bidding documents would be prescribed for inviting bids clearly enumerating technical and financial parameters.

7(B) OTHER RE PROJECTS:

Other RE Projects would be kept open for all categories of developers and these would be allotted on self identification basis or, wherever possible, on tariff based bidding.

The procedure for tariff based bidding would be prescribed separately. The Self Identified Projects would be allotted on the basis of the following:-

Evaluation Criteria:

For evaluating suitability of a prospective Developer of a Self Identified Projects, the following would be considered :-

- a) Technical capability including past experience in developing, constructing or operating Energy Projects – this aspect would be evaluated based on a maximum of 60 marks;
- b) Financial capability, including the capacity to invest in the equity of the project and the ability to arrange for institutional finance. Financial capability would be evaluated based on a maximum of 40 marks.

Payments to be made:

All payments would be made in the form of a Bank draft of any Nationalized Bank.

Application fee (Non-refundable): Rs.5000/-

Processing fee (Non-refundable): At the time of signing the Development Agreement

- For projects upto 1MW: Rs.10,000/-.
- For projects more than 1MW : Rs.25,000/-.

Security payment: At the time of signing the Implementation Agreement

- For projects upto 1MW: Rs.20,000/-.
- For projects more than 1MW: Rs.50,000/-.

8. BENEFITS UNDER CLEAN DEVELOPMENT MECHANISM (CDM)

Projects covered under this policy may not involve cheapest form of generating energy. However, keeping their environment friendly nature, the State would encourage projects to obtain the benefits available under the Clean Development Mechanism (CDM).

9. MISCELLANEOUS

- 9.1 Not more than three Projects in each category enumerated in paragraphs 4.1 to 4.8 will be allotted to a Developer.
- 9.2 Industrial units located in Uttarakhand and willing to participate in the open competitive bid for the purpose of establishing RE projects for their captive use, would be given preference by accepting their bids provided these are not less than 80% of the highest bid.
- 9.3 The Government of Uttarakhand reserves its rights to allot a project to a State owned enterprise.
- 9.4 If a feasible Micro/Mini Hydro project remains un-allotted on the basis of the procedure prescribed in this Policy, the same would be allotted to any developer through open competitive bidding, the procedure for which would be laid down separately.
- 9.5 In the event a Developer fails to achieve the various stages of completion of the allotted project as per the prescribed time schedule without valid reasons, the premium deposited shall be forfeited and the allotment would be cancelled.
- 9.6 Projects allotted before the date of publication of this Policy in the Official Gazette shall continue to be governed by the Policy under which they were allotted; these would not be eligible for incentives under this Policy.
- 9.7 In case of augmentation of capacity of Self Identified Projects due to any reason, the developer would be required to pay additional premium of Rs.1 Lakh per MW or fraction thereof for enhancement upto 5 MW and Rs.5 Lakh per MW or fraction thereof in case of enhancement beyond 5 MW along with requisite amount to take into effect the inflation from the date the premium was paid. For State Identified Projects allotted on the basis of open competitive bidding, the extra premium to be paid would be calculated on the basis of a formulation to be specified separately.
- 9.8 In case any developer, for any reason (before a project is commissioned), sells his project to some other developer, the developer selling the project shall be required to deposit an additional amount equal to the bid premium.
- 9.9 Projects would be offered for a period of 40 years from the date of award at the end of which they shall revert to the GOU or extended further on mutually agreed terms.

9.10 Royalty:

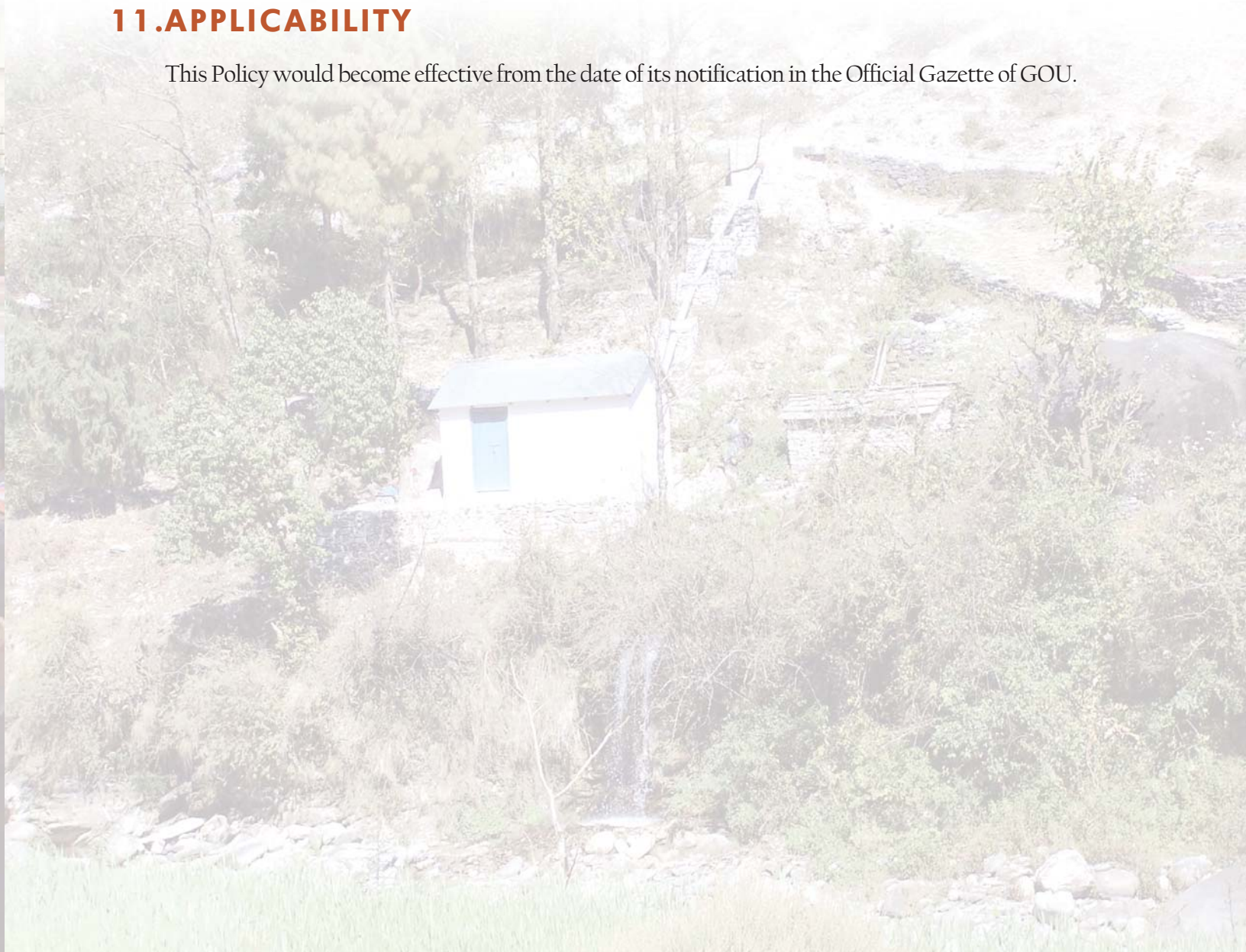
- (i) On Micro, Mini and Other RE projects governed by this policy, no royalty payment would be charged.
- (ii) On Small Hydro projects governed by this policy, royalty payment for the first 15 years of operation would be exempted. From 16th year of operation, a royalty @ 18% of energy generated would be charged.

10.AMENDMENTS / RELAXATION / INTERPRETATION OF PROVISIONS OF THE POLICIES

GOU shall have all powers to amend/ relax/ interpret provisions under the policy.

11.APPLICABILITY

This Policy would become effective from the date of its notification in the Official Gazette of GOU.



*Appendix***CONSTITUTION OF EMPOWERED COMMITTEE****Composition of Empowered Committee:**

The Empowered Committee of Administrative Secretaries for according approvals/ clearances is constituted as under:

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|-----|--|----------------|
| 1. | Chief Secretary, Government of Uttarakhand | –Chairman |
| 2. | Additional Chief Secretary, GOU | –Vice Chairman |
| 3. | Principal Secretary/ Secretary, Dept. of Energy, GOU | –Member |
| 4. | Principal Secretary/ Secretary, Dept. of Finance, GOU | –Member |
| 5. | Principal Secretary/ Secretary, Dept. of Irrigation, GOU | –Member |
| 6. | Principal Secretary/ Secretary, Dept. of Forest, GOU | –Member |
| 7. | Principal Secretary/ Secretary, Dept. of Industry, GOU | –Member |
| 8. | CMD/MD, Uttarakhand Power Corporation Limited. | –Member |
| 9. | CMD/MD, Uttarakhand Jal Vidhyut Nigam Limited. | – Member |
| 10. | CMD/MD, PTCUL | –Member |
| 11. | Vice President, UIPC | – Member |
| 12. | Director, UREDA | – Convener |

The Committee may co-opt other Secretaries/State Government officials and experts as and when required.