

Unconventional Energy Generation Policy-2020

Part-1 - New and Renewable (Unconventional) Energy of the State Transmission of power generation from sources for attached projects Integrated Policy-2020 and Part-II - New and Renewable State Transmission of power generation from (unconventional) energy sources Integrated Policy for Projects – 2020

Government of Maharashtra

Department of Industry, Energy and Labor,

Govt. Resolution No. : अपाऊ-2020 / Q.No.137/Energy-7

Hutatma Rajguru Chowk, Madam Kama Road, Mantralaya, Mumbai 400 032.

Dated: December 31, 2020.

- Ref:**
- 1) Government Resolution, Department of Industry, Energy and Labor, No. Apau-2015/ Q No.49 / Energy-7, dated 20/07/2015
 - 2) G.R., Department of Industry, Energy and Labor, No. Apau-2015 / S.No.367 /Energy-7, dated 11/02/2016.
 - 3) Number of Maharashtra Energy Development Agency, Pune: Mahaurja /Coordination/Government Correspondence / 2020-21 /Proposal dated 28/07/2020, 1947.

Preface: -

Due to increasing industrialization and urbanization in the state, the demand for conventional electricity is increasing day by day. This electricity is being generated mainly from energy resources like coal, petroleum products, natural gas. These energy resources are limited and will be depleted in the future. Excessive use of unknown energy sources is contributing to air pollution. This is causing global warming and the adverse effects of climate change on everyone. According to the Paris Agreement, it is committed to generate 40 per cent of energy from fossil fuel sources by 2030 as per the national standard.

Considering the importance of new and renewable (unconventional) energy sources, the central government has set a target of generating 175 gigawatts of electricity from various non-conventional energy sources by the year 2022. Of this, 100 gigawatts will be generated by solar energy, 60 gigawatts by wind energy and the remaining 15 gigawatts by other non-conventional energy sources. The participation of all the states will be important for the fulfillment of these objectives within the stipulated time. Considering the potential of power generation from available energy sources in the state, efforts need to be made to commission non-conventional power projects with a capacity of 25,000 MW by 2025.

The government has been formulating a policy on non-conventional energy generation since 1995 to increase the amount of electricity generated from alternative energy sources as compared to conventional power generation. Under this policy, non-conventional power projects with a capacity of 9305 MW have been commissioned by the end of March 31, 2020 and a total of 2123 MW capacity projects are in progress for commissioning. In view of this, there is a lot of scope in the field of unconventional energy generation in the state.

The Maharashtra State Electricity Regulatory Commission (MERC) has imposed renewable energy procurement restrictions (solar and non-solar) on power distribution companies in the state. This has required all power distribution companies to purchase a certain amount of non-conventional energy as compared to the total electricity consumption in their licensed area. As a result, planning is needed to achieve the goal of building a non-conventional power plant with a capacity of 25,000 MW by 2025. Therefore, it is necessary to reconsider the existing unconventional energy policy and formulate a new policy that encourages the participation of the government and the private sector. It is mainly intended to create a conducive environment for private / private investment in transmission attached, non-transmission and storage projects.

In view of the above, it was under consideration of the Government to issue a Connected Non-Conventional/non-transmission Energy Generation Policy-2020 for power generation projects new and renewable (non-conventional) energy sources.

Government Resolution: -

The Government is approving the implementation of Integrated/ non-transmission Non-Conventional Energy Generation Policy-2020 for power generation projects new and renewable (non-conventional) energy sources as follows: -

Objective:

- Considering the increasing demand for electricity in the state, there is a potential to increase the installed capacity by 17,360 KW in the next five years. There is a need to set up such environmentally friendly non-conventional energy generation projects.
- To help in increasing employment opportunities and investment through a policy that supports the investment made by the developer in the state while setting up such projects.
- To have a policy of the State Government to supplement the requirements of the Unconventional Energy Policy of the Central Government
- Establishment of projects subject to the provisions of various Acts of the State Government and mainly the Electricity Act 2003 and the rules under it; rules, regulations, codes etc. fixed by the Maharashtra Electricity Regulatory Commission and improvements thereto from time to time

Duration of implementation of policy and transition period of previous policy

- Shall be applicable from the date of publication of the policy till 31st March 2025.
- With this policy the integrated policy – 2015 on transmission allied electricity generation projects from New and Renewable Energy Sources of 20th July 2015 and Policy of 2016 dated

11 February 2016 towards non-transmission electricity generation projects from New and Renewable Energy Sources are being superseded.

- However, non-conventional energy projects for which registration letter has been issued during the policy period of 2015 and 2016, or within the next three months after the announcement of the policy, the project owner will be allowed to register projects under the respective 2015 and 2016 policy. The benefit of the incentives mentioned in the policy relating to such projects will be admissible if the project is implemented within one year from the date of promulgation of the new policy.

Licensing

Registered companies, local / civic bodies, government bodies, partnership bodies, private individuals, semi-government bodies, co-operative societies, farmers' groups are allowed to set up projects as per this norm. Pursuant to this, a committee constituted under the chairmanship of Hon'ble Minister of Energy will select the company / institution which is allowed in the project where financial participation / grant is being given by the State Government, after evaluating their financial and technical capacity, the work of the project will be awarded. The selection criteria will be decided by the Maharashtra State Electricity Board. The members of this committee will be Principal Secretary, Department of Energy as well as Chairman and Managing Director of Mahagenco, Mahatransco and MSEDCL and Director General of MEDA shall be the convener of this committee.

General guidelines

Until the objectives of this policy are met, the general guidelines will remain as follows:

- 1) Non-conventional energy projects will be developed following the guidelines of the Union Ministry of Energy, Ministry of New and Renewable Energy and various agencies under it and safeguarding the interests of the State.
- 2) Maharaja is being appointed as the steering agency for the implementation of this policy. All non-conventional energy generation projects will have to be registered with the Maharashtra Energy Development Authority. All transmission related projects will be implemented by MSEDCL and non-transmission projects will be implemented by Maharashtra Energy Development Authority.
- 3) Priority will be given to the development of hybrid projects by combining wind and / or solar projects with other conventional / non-conventional energy sources and incorporating storage capacity as required. Such projects will be categorized with those objectives according to their source.
- 4) In order to demonstrate the economic feasibility of a hybrid project with storage capacity, hybrid pilot projects for power generation through MEDA with the help of State Government / Central Government or from self-financing will be set up with government approval.
- 5) It will be mandatory to set up and implement the project within the stipulated time, otherwise the facilities in this policy will not be permissible. A committee constituted by the Department of Energy under the chairmanship of the Principal Secretary (Energy) shall have the power to extend the period of such projects up to two years in case the application is filed before the expiry of the prescribed period in case the project is not completed within the prescribed time

due to exceptional or emergency circumstances. However, this extension will not be extended beyond March 31, 2026.

- 6) Projects and Disposal Arrangements shall be subject to the provisions of the Electricity Act, 2003, Regulations, Orders, Interpretations, Government Orders, Regulations, Rules, Acts as well as the provisions prescribed by the State Government as enacted by the Maharashtra Electricity Regulatory Commission and applicable from time to time.
- 7) If any clarification is required about the contents of this policy or in the implementation of this policy, then the explanation given by the Department of Energy will be final and binding on all concerned.
- 8) Necessary procedures for setting up, implementing and effective implementation of projects under this policy will be issued separately by the Department of Energy thereafter.
- 9) A mid-term review of this policy will be conducted by the State Government as required. Also, appropriate changes will be made by taking into consideration the difficulties in the implementation of this policy, changes in the policy or technology of the Central Government and approval at the competent level.
- 10) This policy will be implemented literally and in principle by the Government of Maharashtra; However, failure to implement any part of this policy shall not be construed as a "change of law" for the purposes of legal agreements between the parties.
- 11) Non-conventional energy projects will be required to obtain a letter of consent from the Maharashtra Pollution Control Board as per the prevailing policy.

The following facilities are available to facilitate the implementation of the policy and are conducive to investment are being made:

- 1) Permits, approvals, consent etc. related to various administrative departments of the state government for non-conventional energy projects. Single window web system similar to the industry department's friendship plan for matters will be developed by MahaUrja. Registration will be issued automatically and immediately by MahaUrja after the project owner completes the required prescribed documents and uploads the documents on this web portal and assumes full responsibility for the accuracy and statutory fulfillment of the documents by self-declaration.
- 2) Short-term submerged land in reservoirs, seepage ponds, small irrigation ponds in Maharashtra will be used for feasibility study for setting up unconventional energy projects.
- 3) Under this policy, project owners who want to invest in projects worth Rs. 1500 Cr or more; MahaUrja shall make available Such an 'Assistance Officer' who will assist the Project Holder in obtaining approval without any hindrance. It will also coordinate with the concerned agencies regarding the problems faced by the government agencies in setting up the project.
- 4) In order to overcome the difficulties in the implementation of this policy, the progress of the projects sanctioned under this policy will be reviewed by MahaEnergy every month. Also, with a view to the completion of the project within the stipulated time, MEDA shall submit its report to the Department of Energy by the 10th of the next month.
- 5) Meetings of all registered project holders will be held at least once in three months or more times as required by MahaEnergy to resolve and assist in the implementation of the project.

The government will take feedback from the project owners where necessary and send recommendations for their suitability and policy in accordance with the policy.

- 6) A steering committee of representatives of the concerned departments will be constituted under the chairmanship of the Energy Secretary to resolve the issues of the project holders. Project owners of non-conventional energy sources with a capacity of more than 25 MW will contact the steering committee as required to resolve their issues.
- 7) Appropriate changes will be made in the existing policy and procedures to make the grid connectivity required for the project be available immediately as per the demand based on the progress of the project. Grid connectivity without prejudice will be treated as a "right" till the objectives are met. MSEDCL, Mahatransco Company and State Transmission Undertaking (511) will look into the technical feasibility of providing grid connectivity from a location close to the grid distribution network. The basic infrastructure required for this will be developed by the project developer or the concerned organization under the prevailing policies, rules and regulations.

Land Availability Policy: -

The following policy will be followed regarding availability of government land for non-conventional energy projects: -

In general, there will be three types of government land: -

Type 1: - Various Institutions of State Government, Companies, Corporations, Public Undertakings, Administrative Departments, Civil and Local Self Government Institutions, Universities etc. Lands owned by (excluding and owned and/or in possession of the Revenue Department) and leased by the Revenue Department.

Type 2: - Land owned and occupied by Revenue Department.

Types 3: - Lands owned or in possession of the private Central Government, Central Institutions / Corporations / Public Undertakings, Ordnance Factories, Defense etc.

Type 1: -

- A) MSEDCL / Mahanirmiti / Mahaurja will enter into agreements with the institutions under whose jurisdiction the land concerned is concerned for setting up unconventional energy projects on the first type of land. In concluding such an agreement, the premises may be made available on lease, lease agreement or on the basis of revenue sharing on the option agreed upon by both the parties. Lands which have been provided by the Government on non-transferable and non-transferable terms of use may be made available at the competent level with prior permission. Other conditions e.g. lease period, lease rate, etc. These matters will continue to apply. Apart from the lands which are allowed to be leased out by leasing the land, space can also be made available by constructing a special purpose vehicle (524). In order to use such lands for non-conventional energy projects, permission will first be sought at the competent level through the land authority to change the purpose of the said lands. Regarding the land of local bodies, the land required for the project can be made available at Gram Panchayat level if it is up to 15 acres, Panchayat Samiti for 15-25 acres and at Zilla Parishad

level if it is more than 25 acres. For this, changes will be made in the Acts as required. However, prior government permission will be required for government lands which have been transferred / leased to local bodies for specific purposes. In the case of civic self-governing bodies, the concerned civic bodies will make a final agreement by making a decision on making such lands available on terms and conditions. However, prior government permission will be required for government lands which have been transferred / leased to local bodies for specific purposes. In the case of civic self-governing bodies, the concerned civic bodies will make a final agreement by making a decision on making such lands available on terms and conditions.

- B) As well as for the transmission of electricity generated from non-conventional energy sources. Such places will be made available at the rate of preferred quick enumerators.

Type: 2 –

- A) Regarding the land under the jurisdiction of the Revenue Department, MSEDCL, Mahanirmiti and Mahaurja will make a demand to the concerned District Collector for the land required for their non-conventional energy projects. Pursuant to this demand, the concerned District Collector, excluding the land reserved for solid waste management and other restricted land, for the implementation of such unconventional energy projects, on appropriate terms and conditions as per the prevailing policy of the Government, on nominal / lease agreement, nominal Rs. 1 At this rate both parties will agree on a 30 year lease and will be able to make available on unknown options. However, this space can be made available without charge. However, after the commissioning of such an unconventional power generation project, the government will have to pay a share of 5% of the profits from the project (including 5% of the cost of the land in the project price). (For this, the Collector and the Divisional Commissioners will be empowered to transfer such land to the concerned up to a certain limit.) Also the required will be recognized there at the competent level.
- B) Also, MSEDCL, Mahanirmiti and Mahaurja will set up their non-conventional energy projects themselves or from the developer (on PPP principle). In view of this demand, the concerned District Collectors will be able to make such land available for implementation of non-conventional energy projects as a matter of priority in their jurisdiction. It will also seek recognition at the competent level where necessary. Lease or surcharge can be levied at the rate of 30% of the value of such land. (Assuming the land value is generally 30% of the developed land)
- C) Also, for the transmission of unconventional energy generation, the concerned District Collector will be able to make available such space within the limits of his powers at the rate of priority as per the ready reckoner rate.

Type 3: -

- A) As per the land policy of the State Government in respect of Central Government and other lands, lands for unconventional projects may be made available on appropriate terms and conditions in the option acceptable to both the parties. If the public sector undertakings of the Central Government come to MSEDCL with the developer to set up solar power projects on their land, they will be able to set up such solar power projects by mutual consent. If such a developer (97277) comes to MSEDCL regarding the solar park approved by the Ministry of

New and Renewable Energy of the Central Government, they will be able to set up such solar power projects by mutual consent.

- B) Apart from this, Mahanirmithi, Mahavitaran and Mahaurja will be able to acquire land from private landowners on their own at their own expense on lease basis, purchase or by mutual consent. For such projects, Mahanirmithi, Mahavitaran and Mahaurja will be able to take action through the company / independent company as per the requirements in terms of land availability.

Re-energization of existing Renewable Energy Projects: -

1. All existing non-conventional energy projects will be encouraged to increase their generating capacity. This can be achieved by either installing new equipment in the same source in such projects or by increasing efficiency or by hybridizing it with other unconventional sources.
2. These policies will include capacity building until the target is met. In the case of hybrid projects, this policy will be applied to those projects according to their needs.
3. Existing non-conventional power projects will continue for the duration of source, capacity and the rest of the tenure if there is an energy purchase agreement with the distribution companies and it is proposed to increase the generating capacity.
4. The extra production of the project will be considered as an unconventional project.
5. Such surplus power can be sold to the distribution company through prescribed process.
6. In case of hybrid sources, it will be necessary to install separate meters for separate sources. If it is not possible to do separate metering of the increased capacity by increasing the capacity of the project from the existing source, the capacity will be calculated first (including the use of capacity utilization factor for solar and wind sources) and so on. This power will be deemed to be outside / in addition to the purchase agreement. This amount will continue for the remainder of the power purchase agreement.
7. After the termination of the existing power purchase agreement of the project, the entire project will be considered as a single project and the electricity generated from it can be sold to the distribution company through the prescribed process.
8. Limitations of various sources will be considered according to the existing policy at that time.

Part-1

Transmission related projects from new and renewable energy sources

(1) Power generation project from solar energy: -

The plans / objectives of solar power generation covered under this policy are as follows: -

Sr. No.	Name of the scheme	Objective (Capacity/Potential MW)	Source of funds
1	A) To develop power generation projects from solar energy	10000	Private Developer
	B) Grid connected rooftop solar project	2000	Central Govt.
2	A) Apart from the government's Amrut Abhiyan and Maharashtra Suvarna Jayanti Nagarothan	500	Private developers,

Sr. No.	Name of the scheme	Objective (Capacity/Potential MW)	Source of funds
	Mahabhiyan, other urban, water grid and rural water supply schemes in the state should be implemented on solar energy. B) Use of transmission connected solar pumps for small water and tap water supply	30	central government, institutions
3	To develop transmission connected solar power generation projects by setting up farmer co-operative societies / companies / groups and providing private investment	250	Private developers, institutions
4	To develop energy storage system for solar / wind energy based power generation projects	50	Private developers, institutions
5	Construction of e-vehicle charging station based on solar energy	50	Private developers, institutions
6	Establishment of solar / wind solar-hybrid transmission attached power projects on the site of the mega energy itself	50	Private developers, institutions
	Total	12,930	

(1) (a) To develop power generation projects from solar energy: -

(1) (a) 1. Considering the increasing use of solar energy in the State, the availability of suitable solar radiation wise space and the obligation to purchase renewable energy, the objective is to operate a total of 10,000 MW solar power generation project under this policy. This will include a variety of solar projects and hybrid projects with other conventional or non-conventional energy sources associated with them.

(1) (a) 2. Under this policy, the minimum capacity of a power generation project from solar energy shall be 1 MW.

(1) (a) .3 Under this policy, solar power generation projects will be awarded to the power distribution / generation companies in the state through competitive bidding process to fulfill their routine energy purchase obligation or for open access / captive use in the state or outside the state or third party. Power can be developed for sale.

(1) (a) 4. Registration of Solar Power Projects to be connected with State Transmission Initiatives (STUs) and Interstate Transmission Initiatives (CTUs / ISTS) to be established in the State will be mandatory.

(1) (a) .5 Action shall be taken in accordance with the provisions of the guidelines prescribed by the Central Government regarding projects of the Central Government.

(1) (a) .6 The survey of low pressure, high pressure and ultra-high-pressure substations and transmission lines required for the project will be jointly conducted by the developers and distribution companies / Mahatransco. These substations will be constructed by the developer at their own cost as per the technical parameters of the distribution companies / MSETCL and as per the budget approved by them, as well as under the supervision of the distribution companies / MSETCL. This will include substations in the disposal system and any reinforcements or changes that need to be made to the transmission and distribution channels. Transmission connection projects will be made available within the stipulated period till the objectives under this policy are met. For this, Standard Operating Procedure will be prescribed by the Department of Energy.

(1) (a) .7 The period of power purchase agreement for solar power generation projects under this policy shall be subject to the rules prescribed by the Maharashtra Electricity Regulatory Commission. In order to make the project financially viable, the period of open access should be at least 10 years and this period will be finally decided by the Maharashtra Electricity Regulatory Commission. While developing such projects (Open Access / Captive / Group Captive / Third Party) producers / consumers will be given government tax-cess / charges etc. Filing will be required. They will also be required to pay the fees and tax rates applicable to their area-wise distribution company.

(1) (a) .8 Solar power generation projects will be facilitated for registration if required and deemed as industry component.

(1) (a) .9 Under this policy, if the solar power generation project is to be set up in the area / district where minerals are found, it will be necessary to submit a no-objection certificate from the Department of Geology and Mining.

(1) (a) .10 Under this policy, solar energy projects can be developed through solar park system even without the scheme of Central Government. The minimum capacity of such project will be 5 MW. Projects with a capacity of less than 5 MW but with a capacity of at least 1 MW can be developed in the solar park. If such small projects are physically connected and their capacity is increased to 5 MW, transmission connection will also be provided by the power distribution companies / MSETCL. Such projects shall have the right to receive transmission connections up to the prescribed purpose.

(1) (a) .11 Under this policy, the Chief Minister will set up the implementation mechanism for the Solar Agriculture Corridor Scheme in accordance with the objectives set by him.

(1) (a) .12 Under this policy, co-operative as well as private sugar factories, yarn mills, MIDC And other industries can set up solar energy projects on their remaining land, parking roads as well as roofs without violating the prevailing rules, regulations and regulations.

(1) (b) Grid connected rooftop solar project: -

(1) (b) 1. Under this policy, projects under the Central Government's Roof Transmission Attached Solar Scheme (GCRT) and self-financed rooftop transmission attached solar projects with a capacity of 2000 MW will be developed.

(1) (b) .2 Grid connectivity without prejudice shall be deemed to be a "right". MSEDCL will look into the technical feasibility of providing grid connectivity from a location close to the grid distribution network.

(2) (a) Implementing urban and rural water supply schemes in the state on solar energy: -

(2) (a).1 Under this policy, a target of 500 MW capacity is being set for the next 5 years.

(2) (a). 2 The space required for such projects shall remain with the concerned department / institution.

(2) (a).3 The Benchmark Cost per megawatt of the project will be fixed from time to time.

(2) (a) .4 Relevant Departments will be allowed to enter into agreements with Messrs. EESL, similar institutes or developers for implementation of ESCO scheme for urban and rural water supply schemes.

(2) (a).5 In order to implement this scheme, the concerned administrative department shall decide to implement the scheme.

(2) (a) 6. The procedure in this regard will be determined in detail by the Department of Energy thereafter.

(2) (b) To use transmission attached solar pump for small water and tap water supply:-

Under this policy, transmission connected solar pumps will be used for public water supply schemes for pumping and supplying drinking water to villages / wadas / pades / hamlets / gram panchayats which do not have electricity supply in rural and remote areas. For this, a scheme for small water and tap water supply will be implemented by installing 3, 5 and 7.5 horse power based pumps based on available sources like lakes / wells / coupon pipes.

(2) (b). 1. Under this, the objective is to set up 8,000 transmission connected solar pumps of 3, 5 and 7.5 HP capacity per annum in villages / pades / wadas / vastyas / gram panchayats in the State as required.

(2) (b). 2 Villages / Wadas / Pades / Vastyas / Gram Panchayats with population up to 5000 will be eligible for this as per technical qualification

(2) (b) .3 Under this transmission, installation of attached solar pump shall be done in accordance with the prescribed technical specifications and standards given by the Ministry of New and Renewable Energy from time to time.

(2) (b) .4 To implement this scheme, the concerned administrative department shall decide to implement the scheme

(2) (b) .5 The procedure and criteria for implementation in this regard shall be determined by the Department of Energy in consultation with the Department of Energy.

(3) To develop Solar Power Generation Project attached to transmission of PACS / SHG / Farmer Producer Organization: -

- (3) .1 Under this policy, the project is targeted to have a total capacity of 250 MW in the next 5 years.
- (3) .2 The land required for the project will be owned by the Farmers Co-operative Society (PACS / SHG / Farmer Producer Organization).
- (3) .3 The cost per MW will be fixed for the project by Mahaurja.
- (3) .4 Under this, various co-operative societies / companies may themselves participate in the scheme by raising the required share capital, mortgaging the land of the project or by private investment. Such electricity will be procured by MSEDCL.
- (3) .5 When the project holder installs such a project on hot land / reservoir, the structure for erection of solar module under solar energy project should be constructed at a distance of 4 m from the ground by taking responsibility for safety as required. Height or at least 1.5 m above the ground and from the dam control line. Must be tall.
- (3) .6 Also for the project holder the structure for erection of solar module of such project is 4 m from the ground. In case of height and taking responsibility for safety, the space under the structure of the project will be allowed to be used for other purposes. These include preparation of Kondwada for Mokat animals, poultry and goat / sheep rearing, storage, cold storage etc. Will be included. For this, the existing scheme of the concerned department can be availed as a supplementary grant.
- (3) .7 To implement this scheme, the concerned administrative department shall decide to implement the scheme.
- (3) .8 The procedure for implementation in this regard shall thereafter be determined by the Department of Energy.

(4) To develop energy storage projects based on solar / wind energy based pilot principle: -

- (4) .1 Under this policy, a target of 50 MW capacity has been set for the next 5 years. Of this, 20 MW capacity projects will be developed by Mahaurja and the remaining 30 MW capacity projects will be developed by private developers over a period of 5 years. Before starting such a project, the feasibility of the project will be checked by MSEDCL.
- (4) .2 Power and possible tariff for such project will be approved by MSEDCL.
- (4) .3 Power in such project will be procured from MSEDCL through power sale agreement.
- (4) .4 As per the sale agreement above, the electricity distribution companies will take the electricity from the storage system at the time of peak load demand and the electricity distribution company will pay the electricity bill to the power / private developer at the rate fixed by the Maharashtra State Electricity Regulatory Commission or their policy.
- (4) .5 To implement this scheme, the concerned administrative department will decide to implement the scheme.
- (4) .6. Under this, the ceiling of the project to be set up and the implementation procedure will be decided by the Department of Energy thereafter.

(5) Establishment of e-vehicle charging station based on solar energy: -

- (5) 1. Under this policy, a target of 50 MW e-vehicle charging station is being set for the next 5 years.
- (5) .2 The space required for such project shall belong to the project founder / investor.
- (5) .3 Installers of the scheme may participate in the scheme by raising the required share capital or through private investment.
- (5) 4. In order to implement this scheme, the concerned administrative department will decide to implement the scheme.
- (5) .5 The procedure in this regard will be explained in detail by the Department of Energy thereafter.

(6) Establishment of solar / wind solar-hybrid transmission attached power projects at the site of the mega energy: -

- (6) 1. Under this policy, the objective is to implement a total capacity of 50 MW projects in the next 5 years. The space required for the project will be mega energy. Mahaurja will determine the working procedure in this regard and submit a proposal to MSEDCL and the government and get proper approval.
- (6) .2 All electricity generated from these projects will be discharged into the electrical system of MSEDCL at market discovered rate.

(2) Wind Power Generation Policy: -

Under this policy, wind power projects can be set up in the state on land as well as 720 km off-shore along the west coast.

- 1) Under this policy, the objective is to set up a new wind power plant with a total capacity of 2500 MW.
- 2) Under this, project holders will be able to register the project with Mahaurja by self declaration till the objective is achieved. In doing so, they will start the project stating that all the applicable provisions of the state government have been complied with.
- 3) Wind power projects can be developed in the state for private use, open access and export of electricity to other states to meet the renewable energy purchase obligation.
- 4) Non-agricultural human status will be applicable for project lands. Current Acts / Rules / Regulations / Code etc. applicable for this purpose. Appropriate changes will be made by the Department of Revenue and Forests.
- 5) If there is a need for projects, registration will be facilitated if it is permissible as an "industry component".
- 6) It will be mandatory for wind energy projects to be established under this policy to get the consent / no objection certificate of Maharashtra Pollution Control Board.

7) If government waste land / forest land is available at the project site and demand is made to the concerned Collector / Forest Department, the Collector / Forest Department will determine the permissibility and other regulatory ancillary matters in terms of planning and can be given on lease / lease agreement / lease using transparent method. . This approval will be automatically revoked if the project is not started within the stipulated time. Make necessary changes in the relevant Acts / Rules / Code etc. as per preference. Detailed procedures in this regard will be decided by the Revenue and Forest Department.

8) The duration of power purchase agreement for wind energy power generation projects under this policy will be subject to the prescribed rules of Maharashtra Electricity Regulatory Commission. In order to make the project financially viable, the period of open access should be at least 10 years and this period will be finalized by the Maharashtra Electricity Regulatory Commission. While developing such projects (Open Access / Captive / Group Captive / Third Party) the producers / consumers have to pay the government tax-cess / charges etc. accordingly. Filing will be required. They will also be required to pay the fees and tax rates applicable to their area-wise distribution company. However, the Open Access period for personal use will continue for the duration of the project. Such projects will be entitled to transmission connections until the objectives under this policy are met.

9) It is necessary to submit "No Objection Certificate" of Geology and Mining Department to the project in the mineral area / district.

10) Priority will be given to hybrid projects constructed by integrating wind energy projects with other non-conventional energy source projects and incorporating storage capacity.

11) Human registration will be applicable to wind / solar / hybrid projects established through competitive tender through distribution companies / SEICs in the State as per the guidelines of Central Government. Such projects will not be able to avail the facilities under this policy.

(3) Co-generation projects based on sugarcane chips / agricultural residues:

1) Excess electricity can be made available in the state from by-products available from sugar factories and agro-industries. This benefits the farmers who depend on the such industry. Therefore, it is necessary to give impetus to such projects. May According to the report of Vasantdada Sugar Institute, there is still capacity of 1374 MW in the state. In view of this, a target of 1350 MW is being set for co-generation projects based on sugarcane chips / agricultural residues.

2) Under this policy, the electricity generated from such projects can be used by the power distribution companies in the state to meet their renewable energy purchase obligation. For projects registered with Mahaurja, basic facilities will be provided by the consent Mahaurja.

3) Power will be procured by MSEDCL at the rate fixed by the Maharashtra Electricity Regulatory Commission and on the terms and conditions laid down by the Maharashtra Electricity Regulatory Commission without any tender process till the power purchase agreement in the joint venture projects is met. After fulfilling the objective, the buyer will be allowed to enter into power purchase agreement through tender process.

(4) Small Water Generation Project: -

1) Non-Conventional Energy Generation Policy - In 2015, a target of 400 MW was set for small scale hydropower projects, out of which only 20 MW has been achieved. In view of this, the policy is setting a target for a new project of 380 MW. Under this policy, once new projects are registered with MEP, basic facilities consent will be required.

2) The power purchase agreement in the small water generation projects will not be done through tender process till the objective is achieved. Electricity will be procured by MSEDCL at the rate fixed by the Maharashtra Electricity Regulatory Commission and on the terms and conditions laid down. After fulfilling the objective, the buyer will be allowed to enter into power purchase agreement through tender process.

(5) Urban solid waste based power generation projects:

1) Organic (degradable) and inorganic substances are being produced in the area of local bodies in the state and its proper disposal is an important and necessary matter from the point of view of environment. Therefore, there is a need to give some impetus to power generation projects from such waste. It is possible to develop a power generation project independent of unknown substances. A target of 200 MW has been set for such projects.

2) The survey of low pressure, high pressure, high pressure substations and transmission and distribution channels required for such projects will be carried out jointly with Mahapareshan or MSEDCL project holders. The work of sub-stations / distribution channels required for the survey will be carried out by the project owner at his own cost under the supervision of the company as per the technical results of the transmission / distribution company and as per the approved budget. In the subsequent period, the removal of substations, transmission and distribution channels will be included in the evacuation system. Apart from this, 11 KV lines will be connected from the project to the substation. Or more channels will be included in the evacuation system.

3) Power will be procured by MSEDCL at the rate fixed by the Maharashtra Electricity Regulatory Commission and on the terms and conditions laid down by the Maharashtra Electricity Regulatory Commission without any tender process till the power purchase agreement from urban solid waste to power generation projects is met. After fulfilling the objective, the buyer will be allowed to enter into power purchase agreement through tender process.

4) The power purchase from the urban solid waste with the power generation project will be done as per the power purchase agreement instead of the tender process of the power distribution company.

5) To implement this scheme, the concerned administrative department will decide to implement the scheme.

In view of the above, the objective of developing power generation projects connected to non-conventional energy sources under this policy and the financial requirement required for it will be as follows: -

Sr. No.	Unconventional energy sources	Objective (MW)	Source of Funds
1	Solar power generation projects	12930	

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Sr. No.	Unconventional energy sources	Objective (MW)	Source of Funds
2	Wind power generation project	2500	Of private developers, central government, institutions, concerned departments
3	Co-generation projects based on sugarcane chips / agricultural residues	1350	
4	Small hydro power generation project	380	
5	Urban solid waste based power generation projects	200	From power generation project investment
	Total	17760	

Part-2

State Integrated Strategy for Non-Transmission Projects for Generation of Power from New and Renewable (Unconventional) Energy Sources – 2020

Under this scheme the objective is being set to install various agricultural schemes in the state for the next 5 years and which includes solar agricultural pumps, rooftop transmission / hybrid solar power plants, solar hot water plants, solar based plants for cooking, decentralized micro transmission projects, rural electrification, solar energy based cold storage:-

Sr. No.	Plan / Plant	Objectives per year (Capacity/No)	Annual financial provision (crore)
1	Roof top and on ground non-transmission / hybrid solar power set	52000 KW	Private developers, central government, respective divisions
2	To install solar agricultural pumps	100,000 No.s	---
3	Establishment of solar pumps for small water and tap water supply	2000 Pumps	Pvt developers, central govt (if available), institutions, respective divisions
4	Rural Electrification Program	10,000 Houses	38
5	Decentralized Micro grid Project	20 villages	40
6	Solar hot water plants and solar powered plants for cooking	55,000 Sqmt	Pvt developers, central govt (if available), institutions, respective divisions
7	Cold storage based on solar energy	800 No.s	Pvt developers, central govt (if available), institutions
	Total		78

General Guidelines: -

- 1) Central Government and General Energy guidelines and technical specifications will be adopted for non-transmission solar power generation projects / plants to be implemented under this policy. In this regard, it will be mandatory to use the most advanced technology issued by the Central Government from time to time and to comply with the guidelines of Super Energy from time to time in this regard.

- 2) Establishment and commissioning of non-transmission projects / plants under this policy will be facilitated separately by the Department of Energy with necessary procedures to facilitate the construction of the project for effective implementation of the policy.
- 3) Mahaurja will have the authority to give technical approval for all projects to be set up under this scheme (including projects of Public Works Department and Maharashtra Jeevan Pradhikaran). For this, it will be necessary to deposit one per cent of the total project cost to the super energy.
- 4) If the project is to be implemented through mega energy, the project management fee (PMC) will be 2% to 5% depending on the nature of the project.
- 5) The benchmark cost for various plants to be set up under this policy will be announced annually by Mahaurja.
- 6) In addition to the plants mentioned in this policy, if new and renewable power plants are to be set up from the funds of other schemes, it will be mandatory to obtain its technical approval and technical measurements through Mahaurja.
- 7) Under this policy, it will be mandatory for the product system integrators to register with Maha Energy.
- 8) It will be mandatory to register non-transmission solar power sets / projects to be set up under this policy. The criteria for this will be decided by Mahaurja.

(1) Installation of rooftop and ground based non-transmission / hybrid solar power set: -

1. Under this policy, offices of Government, Semi-Government, Local Self Government Institutions, Subsidized Educational Institutions, Social Welfare Department / Tribal Department, Ashram Schools and Hostels, Goshalas and Panjarpols, Primary Health Centers under Health Department, Rural Hospitals, Agricultural Produce Market Committees under Marketing Department, Cottage and micro industries as well as non-transmission / hybrid solar power sets will be set up.
2. Of these, the roof of the building (rooftop) and the ground based plants to be installed up to 1 to 100 kW capacity. Non-transmission / hybrid solar power sets up to capacity will be eligible for subsidy.
3. Establishment of rooftop and ground based non-transmission / hybrid solar power plants should be in accordance with the prescribed technical specifications and standards given by the Ministry of New and Renewable Energy and Maharashtra Energy Development Agency (Mahaurja) from time to time. Establishment of this rooftop and ground based non-nutrition / hybrid solar power set as well as maintenance and repair for five years will be the responsibility of the operating system. An on-line portal will be created through Mahaurja to implement this scheme. Prior to the implementation of the scheme, where energy efficient equipments have been installed or proposed by the Public Works Department, the scheme will be implemented by Maha Energy in coordination with the concerned departments.
4. For installation of rooftop or or the ground based non-transmission/ integrated solar energy units, hybrid invertor and lithium phosphate (LiFEPO₄) type battery on the terraces of State Government, Semi-Government, Local Self Government Institutions, Social Welfare Department / Tribal Department, Ashram Schools and Hostels, Primary Health Centers under

Health Department, Rural Hospitals etc. the above spare parts shall be used. The maximum capacity of a solar power set should be 100 kW.

5. A target of 12000 KW per year is being set for this.
6. In order to implement this scheme, the concerned administrative departments will decide to implement the scheme by making necessary provision in their budget.
7. Rooftops and ground based non-transmission / hybrid solar power sets of buildings registered with Co-operative Societies, Co-operative Housing Societies, Registrar Co-operatives, Registered Buildings in Apartment Ownership, Buildings in Registered Townships, Charitable Institutions / Dispensaries, Granted Educational Institutions, Goshalas and Panjarpols; the maximum capacity of a solar power set to be installed should be 50 KW.
8. A target of 40,000 KW per year is being set for this.
9. The criteria and modalities for implementation of projects in this component will be decided by the MEDA in consultation with the Department of Energy.

(2) Installation of Solar Agricultural Pumps: -

Under the Central Government's Kusum Yojana or Mukhyamantri Solar Krishi Pump Yojana, a maximum of 100,000 non-transmission solar agricultural pumps will be installed for the farmers considering the requirement and demand of 3/5 / 7.50 HP capacity for that year. Out of this, distribution of 77500 solar agricultural pumps is planned for the beneficiaries of general group in which the beneficiary share will be 10%. Out of the 10 per cent beneficiary share for SC and ST beneficiaries, 5 per cent beneficiary share will be taken from SC and ST beneficiaries. Accordingly, 13500 solar agricultural pumps will be provided for the beneficiaries of Scheduled Castes and 9000 solar agricultural pumps for the beneficiaries of Scheduled Tribes. Under the Kusum Maha Abhiyan of the Central Government, 30 per cent subsidy will be received from the Central Government. Will be established. It will cost Rs 1,950 crore, of which Rs. 585 crore can be made available in the form of grants from the Center. Beneficiary share Rs. 173 crore and the share of the state government is around Rs. 436 crore and the remaining amount is about Rs. An additional Rs 756 crore is expected to come from electricity sales tax and green energy fund. Accordingly, a plan in this regard will be prepared and approved separately by the Cabinet. Accordingly, solar agricultural pumps will be set up every year for the same. The scheme will be implemented as per the procedure prescribed by the Ministry of New and Renewable Energy (MNRE). Grants will be made available separately. The Chief Minister's Solar Agricultural Pump Scheme of the State Government can be attached to the Kusum Yojana.

(3) Use of non-transmission solar pump for small water and tap water supply: -

The central government has emphasized on water supply through pipelines in rural areas. The use of solar pumps for public water supply schemes is useful for pumping and supplying drinking water to villages / pades / wadas / vastyas / gram panchayats where there is no power supply in rural and remote areas. For this, a scheme for small scale water and tap water supply will be implemented by installing 3, 5 and 7.5 HP based pumps based on available sources like lakes / wells / coupon pipes.

- 1) Under this, it is being decided to install 2,000 non-transmission solar pumps of 3, 5 and 7.5 HP capacity per annum in villages / pades / wadas / vastyas / gram panchayats in the state as per requirement.

- 2) Villages / Pades / Wadyas / Vastyas / Gram Panchayats with population up to 5000 will be eligible as per technical qualification
- 3) Under this, due to geographical conditions, places where power supply is not profitable for public water supply scheme will be eligible.
- 4) Under this, villages which have not yet got power supply, villages which are completely dependent on hand pumps for drinking water and villages which are getting interrupted power supply will be eligible and will be given priority.
- 5) Under this, it will be necessary to install non-transmission solar pumps in accordance with the prescribed technical specifications and prescribed standards given by the Ministry of New and Renewable Energy from time to time. The procedures and criteria for implementation in this regard will be decided by the Department of Energy in consultation with the Department of Energy.
- 6) In order to implement this scheme, the concerned administrative department will decide to implement the scheme.

(4) Rural Electrification Program: -

The Central and State Governments have given importance to electrify the houses in remote villages / wadis / pada where electricity will not reach through conventional energy sources through unconventional energy sources. Accordingly, under this scheme, in the next 5 years, MSEDCL will be able to provide home-made lamps and fans with solar energy as per the technical measurements under Saubhagya Yojana in villages / wadas / pades which will not be electrified in the traditional way.

Beneficiaries: - Houses in remote villages / wadas / pades in the state where electricity will not reach through traditional energy psalms will be eligible.

Scheme: - Solar based home based lamps and fans will be provided on 100 per cent financial assistance to the remote villages / wadis in the state where electricity will not be reached through traditional energy hymns. The plant to be set up under this scheme will be contracted with the installer with a five year warranty / maintenance and repair period.

Objective: - The objective is to have 100,000 solar powered solar home lamps per year. For this, Rs. 38 crore will be provided. The procedures and criteria for implementation in this regard will be decided by the Department of Energy in consultation with the Department of Energy.

(5) Decentralized Micro Grid Project: -

Decentralized Micro Grid Project through solar or other non-conventional energy will be implemented on 100% financial assistance in the remote villages of the state which cannot be electrified by traditional methods. An on-line portal will be used to measure and quantify the electricity / energy generated from the decentralized micro-transmission project. It is expected to cost about Rs. 2.00 crore to set up a project in a village. Under this scheme will be implemented in 20 villages every year. For this, Rs. 40 crore will be provided. The procedure and criteria for implementation will be decided by

the Department of Energy in consultation with the Department of Energy. Funds will be made available for this purpose every year.

(6) Establishment of solar hot water plants and solar based plants for cooking: -

- 1) Solar based plants for solar hot water / cooking with a capacity of at least 250 liters per day and above will be set up at rest houses, hostels, hospitals, dispensaries, prisons and training centers of government, semi-government and local bodies in the state.
- 2) Solar based plants for solar hot water / cooking will be set up in accordance with the prescribed technical specifications and standards given by the Ministry of New and Renewable Energy and Maharashtra Energy Development Agency (Mahaurja) from time to time.
- 3) It will be the responsibility of the concerned manufacturer / system integrator to set up solar based plants for solar hot water / cooking as well as to guarantee and maintain and repair for 5 years.
- 4) To implement this scheme, e-portal will be created on the website of Mahaurja. Registration on this portal will be done on a first come first served basis.
- 5) 50,000 sq.m. per annum for setting up solar hot water plant. So many goals will be set. 51,000 sq.m. per annum for setting up solar based plants for cooking. So many goals will be set.
- 6) In order to implement this scheme, the concerned administrative department will decide to implement the scheme.
- 7) The procedure and criteria for implementation in this regard will be decided by the Department of Energy in consultation with the Department of Energy.

(7) Cold storage based on solar energy: -

State Co-operative Societies, Shahotkari Group, Farmers Producers Company, Self Help Group, Individual Farmers etc. They can save on conventional electricity if they use solar energy to keep their show products fresh for longer periods of time, as well as for cold storage for longer periods of time.

Beneficiaries: - State Co-operative Societies, Farmers Groups, Farmers Producers Company, Self Help Groups, Individual Farmers, etc.

Scheme: - Under this scheme, co-operative societies, farmers 'groups, farmers' production companies, self-help groups, individual shotkari, etc. A scheme will be implemented to set up a solar powered plant for long term storage of their products (006 901896). It is planned to take up 800 projects per year under this scheme. The concerned administrative departments will decide to implement the scheme.

The Central Government provides financial assistance of 30% of the project cost for setting up solar based cold storage plants. For this, help and cooperation will be given to the concerned departments through Mahaurja.

The procedures and criteria for implementation in this regard will be decided by the Department of Energy in consultation with the Department of Energy.

All government / semi-government, government sponsored, government adopted etc. in the state. Regarding making it mandatory to provide information to MahaUrjar for all non-conventional energy programs implemented by departments, offices, institutions: -

Various government / semi-government, government sponsored, government adopted etc. in the state. From various sources of funds for setting up various schemes, projects, plants based on unconventional energy through departments, offices, institutions e.g. District Planning Committee, funds for local schemes etc. Funds are becoming available. While implementing these schemes, projects, plants, the Central Government, State Government, Bureau of Indian Standards etc. Parameters, technical parameters etc. Action needs to be taken accordingly. It is also necessary to implement the project plan, the project, the insurance policy for the next five years after the plants are set up and to repair and maintain them. These are included in all the schemes implemented through Mahaurja.

With this in mind, all schemes, projects, plants etc. based on unconventional energy implemented by all government / semi-government agencies in the state. It is being made mandatory to give information about its implementation to Mahaurja. For this, Mahaurja will provide a web portal.

Provision of funds for schemes under the policy: -

Provision of funds for schemes to be implemented under this policy Central Government Grants / Green Energy Funds / Urban and Local Self Government / State Governments (NRSE) / Special Component Schemes / Tribal Sub Plan / Funds from other Administrative Departments District Development Fund / Central and International Financial Assistance Institutions etc.

Regarding the provision of simple cost of mega energy: -

Under this policy, the Maharashtra Energy Development Agency is allowed to spend 2% of the total provision for the tender process, on-line portal, technical inspection, manpower, vehicles, etc. Will remain. For this, while providing funds for the cost of the government aided scheme, 2% of the cost will be included in the project cost and it will be made available by the government to Maha Urja. In addition, if any local body wants to implement innovative unconventional schemes from their own funds, it will be mandatory to get technical approval from Mahaurja for such schemes.

In case of any interim change in the objectives and financial provision mentioned for the implementation of the above scheme, the approval of the State Government will be mandatory.

This Government Resolution with the consent of the Planning Department and their informal reference number. 160/1461, dt. December 01, 2020 and with the consent of the Finance Department and their unofficial reference number Mambapra-2020 / Q.14, dt. Issued as per the agreement given by December 31, 2020

Also Revenue Department, Forest Department, Water Resources Department, Water Supply and Sanitation Department, Tribal Development Department, Social Justice Department, Agriculture and Padum Department, Industry Department, Environment Department, Co-operation, Textile and

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Marketing Department, Urban Development Department, Rural Development Department, Issued as per the opinion / consent of Water Conservation Department, Public Works Department.

This Government Resolution has been made available on the website of the Government of Maharashtra www.maharashtra.gov.in and its code number is 202012311724507310. This order is being attested with a digital signature.

By order and in the name of the Governor of Maharashtra.

- sd-
Nanasaheb Dhane
Under Secretary, Govt.
of Maharashtra