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### **RESOLUTION**

No.44/26/05-RE (Vol-II)

### **Rural Electrification Policy**

In compliance with Sections 4 & 5 of the Electricity Act, 2003, the Central Government hereby notifies the Rural Electrification Policy.

#### **Introduction**

- 1.1 Electricity is an essential requirement for all facets of our life and it has been recognized as a basic human need. It is the key to accelerating economic growth, generation of employment, elimination of poverty and human development specially in rural areas.
- 1.2 Under the National Common Minimum Programme, provision of access to electricity for all households is envisaged within five years and in order to achieve this objective the Rajiv Gandhi Grameen Vidyutikaran Yojana has been launched.
- 1.3 India is endowed with a wealth of rich natural resources and sources of energy. The sources of energy for India are fossil fuels like gas, coal, oil etc, nuclear, hydel and, nonconventional energy sources such as solar, wind, biomass, hydro, geo-thermal, tidal etc. small These be can appropriately and optimally utilized to make available reliable supply of electricity to each and every household. Electricity supply at globally competitive rates would also make economic activity in the country competitive in the globalized environment. Consumers, particularly those who are ready to pay a tariff which reflects efficient costs have the right to get uninterrupted 24 hours supply of quality power.

- 1.4 Rural Electrification ("RE") is viewed as the key for accelerating rural development. Provision of electricity is essential to cater for requirements of agriculture and other important activities including small and medium industries, khadi and village industries, cold chains, health care, education and information technology.
- 1.5 The National Electricity Policy states that the key development objective of the power sector is supply of electricity to all areas including rural areas as mandated in section 6 of the Electricity Act. Both the central government and state governments would jointly endeavour to achieve this objective at the earliest. Accordingly, the Central Government has launched in April, 2005 an ambitious scheme 'Rajiv Gandhi Grameen Vidhyutikaran Yojana (RGGVY)' with the goal of electrifying all un-electrified villages/un-electrified hamlets and providing access to electricity to all households in next five years for fulfillment of the NCMP.
- These National Policies for [a] Permitting Stand Alone 1.6 Systems and [b] Rural Electrification and Bulk Power Purchase & Management of Local Distribution in Rural Areas, have been prepared and framed-up through an extensive consultative process undertaken by the Ministry of Power, Government of India, involving not only the State Governments and the State Electricity Regulatory Commissions, but also other stakeholders such as non-Governmental organizations, technology providers, existing utilities etc. Relevant provisions of the Act are at annexure.

### 2. Goals

- 2.1 The Policy aims at :-
  - Provision of access to electricity to all households by year 2009.
  - Quality and reliable power supply at reasonable rates.
  - Minimum lifeline consumption of 1 unit per household per day as a merit good by year 2012.
- 2.2 The progress of Rural Electrification would be reviewed in terms of the achievements vis-à-vis the above Goal.

### 3. Approach to Rural Electrification

- 3.1 Grid connectivity is the normal way of electrification of villages. While this policy covers distribution network upto 33/11 or 66/11 KV level, appropriate development and augmentation of sub-transmission and transmission system at higher voltage levels will also be necessary.
- 3.2 For villages/habitations, where grid connectivity would not be feasible or not cost effective, off-grid solutions based on stand-alone systems may be taken up for supply of electricity so that every household gets access to electricity. Where neither standalone systems nor grid connectivity is feasible and if only alternative is to use isolated lighting technologies like solar photovoltaic, these may be adopted. However such remote villages may not be designated as electrified till the time appropriate solutions are found to provide electricity in these villages to meet the requirements of the definition of village electrification.
- 3.3 Decentralised distributed generation facilities together with local distribution network may be based either on conventional or non-conventional methods of electricity generation whichever is more suitable and economical. Non-conventional sources of energy could be utilized even where grid connectivity exists provided it is found to be cost effective.
- 3.4 The State Governments should, within 6 months prepare and notify a Rural Electrification Plan to achieve the goal of providing access to all households. The Rural Electrification Plan should map and detail the electrification delivery mechanisms (grid or stand alone) considering inter alia the available technologies, environmental norms, fuel availability, number of un-electrified households, distance from the existing grid etc. The Plan may be linked to and integrated with District Development Plans as and when such plans become available. The Plan should also be intimated to the Appropriate Commission.

Under proviso to Section 43 of the Electricity Act 2003 (hereinafter referred to as Act), the Appropriate Commission while giving additional time, if any, for discharge of the universal service obligations would ensure that the national goal of providing access to households by year 2009 is complied with.

3.5 For the purpose of rural electrification, a village would mean a census village.

### 4. Scheme for Rural Electricity Infrastructure & Household Electrification - RGGVY

- 4.1 The Central Government has reviewed the existing schemes of rural electrification recently and has launched a comprehensive programme RGGVY. Under the scheme, projects could be financed with 90% capital subsidy for provision of -
  - Rural Electricity Distribution Backbone (REDB)
    - Provision of 33/11 KV (or 66/11 KV) sub-stations of adequate capacity and lines in blocks where these do not exist.
  - Creation of Village Electrification Infrastructure (VEI)

> Electrification of un-electrified villages.

- Electrification of un-electrified habitations
- Provision of distribution transformers of appropriate capacity in electrified villages/ habitation(s).
- Decentralised Distributed Generation (DDG) and Supply
  - Decentralised generation cum-distribution from conventional sources for villages where arid connectivity is either not feasible or not cost effective provided it is not covered under the programme of Ministry of Non-conventional Energy Sources for providing electricity from non-conventional energy sources under their remote village electrification programme.
- REDB, VEI and DDG would also cater to the requirement of agriculture and other activities including
  - ➢ irrigation pumpsets
  - small and medium industries
  - khadi and village industries

- ➤ cold chains
- ➢ healthcare
- education and IT.

This would facilitate overall rural development, employment generation and poverty alleviation.

 Rural Household Electrification of Below Poverty Line Households :

Electrification of un-electrified Below Poverty Line (BPL) households would be financed with 100% capital subsidy as per norms of Kutir Jyoti Programme in all rural habitations. Households above poverty line would be paying for their connections at prescribed connection charges and no subsidy would be available for this purpose.

A separate programme is being implemented by the Ministry of Non-conventional Energy Resources (MNES) for electrification of remote villages.

- 4.2 Rural Electrification Corporation Limited (REC), a Government of India enterprise under the Ministry of Power, is the nodal agency at Central Government level to implement the rural electrification programme. REC is also providing loan assistance for projects of rural electrification. REC apart from its role as financial institutions has the prime responsibility of coordinating the rural electrification programme with the State Governments, State Utilities and other concerned agencies for effective implementation of schemes.
- 4.3 Ministry of Power will put in place a coordination mechanism between the agencies / Ministries implementing various schemes to ensure that the villages are selected for coverage in different schemes in a manner so as to ensure the attainment of the objectives of this Policy. Ministry of Panchayati Raj would also be associated with this coordination mechanism.

## 5. Definition of Electrified Village

5.1 The definition of an Electrified Village was specified under the Ministry of Power's O.M. No.42/1/2001-D(RE) dated 5th February 2004 as given below.

A village would be classified as electrified based on a Certificate issued by the Gram Panchayat, certifying that –

- a) Basic infrastructure such as Distribution Transformer and Distribution Lines are provided in the inhabited locality as well as a minimum of one Dalit Basti / hamlet where it exists; and
- b) Electricity is provided to public places like Schools, Panchayat Office, Health Centers, Dispensaries, Community Centers etc.; and
- c) The number of households electrified are at least 10% of the total number of households in the village.
- 5.2 The Gram Panchayat/ Village Council or equivalent shall issue the first Certificate at the time of the village becoming eligible for declaration as electrified. Subsequent to the village being declared as 'Electrified', the Gram Panchayat shall certify and confirm the electrified status of the village as on 31st March each year. If the Gram Panchayat unduly delays certification, the State Government may get verified the status of electrification through another appropriate independent agency.
- 5.3 Though the requirement for categorizing a village as electrified is electrification of atleast 10% households, this policy aims at providing access to all the households.

### 6. Involvement of Local Community in Rural Electrification

- 6.1 The State Government should set up a committee at the District level pursuant to Section 166(5) of the Act within three months.
- 6.2 The District Committee should be constituted under the the Zila Chairmanship of the Chairperson of Panchayat/Chairperson of the District Planning Committee/ Collector of the district and should inter alia have representations from various concerned district level

agencies, consumer associations and other important stakeholders.

The maximum burden of the absence of supply of commercial energy, including electrical energy to households falls on women. Therefore, participation of women in meeting rural energy needs, especially electricity, is essential for effective, efficient and sustainable implementation of rural electrification programs. Accordingly, the representation of women in District Committee should be ensured.

6.3 The Act provides that the District Committees would coordinate and review the extension of electrification in the district, review the quality of power supply and consumer satisfaction and promote energy efficiency and conservation.

Panchayati Raj Institutions would have a supervisory/ advisory role in rural electrification and electricity supply. Subject to commercial viability and revenue sustainability of the rural electricity supply business not being affected, the State Governments may assign larger role and responsibilities to Panchayati Raj Institutions.

- 6.4 The District Committee should also facilitate the Rural Electrification projects, both through stand-alone systems and grid extension and local management projects, as may be required.
- 6.5 The State Governments should take steps for bringing awareness on electricity related issues including generation, distribution, energy conservation and energy efficiency and energy-water nexus among elected Panchayat representatives.

### 7. Financial Assistance for Rural Electrification Projects

- 7.1 For attainment of the objective of providing all households with access to electricity by year 2009, it is necessary to seek least cost options after taking into account full life cycle costs and explicit as well as implicit subsidies in different delivery options and mechanisms.
- 7.2 Assistance from public funds to village electrification projects would be one time dispensation. Special efforts should be made to develop load by promoting economic activities with

active involvement of consumers so that not only adequate revenue is generated to cover the cost of power supplied, O&M expenses and loan servicing but also to ensure that the assets can be replaced in future without the requirement of any capital subsidy. The State Governments should facilitate coordination in policy and planning between electricity supply institutions and other sectors such as rural industries, food processing, cold chain, various economic services to promote such economic load development. Supply of electricity at specified voltage also at evening peak hours would be required to achieve this aim.

- 7.3 To ensure the revenue sustainability of the rural electricity supply, RGGVY requires deployment of franchisees for the management of rural distribution in projects financed under the scheme with a stipulation that if conditionalities of the scheme are not implemented satisfactorily, the capital subsidy could be converted into interest bearing loans. It is necessary that system of franchisee is implemented in phased manner by the State Governments in other areas also in order to bring down commercial losses, improve collection efficiency and to provide doorstep services to the consumers.
- 7.4 The Rural Electrification projects seeking financial support should also demonstrate the arrangements proposed for regular maintenance and up-gradation support as also the measures for minimization of Aggregate Technical and Commercial losses.
- 7.5 Realising from the past experience that higher capital subsidy is necessary for successful implementation of rural electrification programmes, RGGVY provides for 90% capital subsidy for creating/ augmenting a basic rural electrification backbone and village electrification infrastructure. Similar capital subsidy is necessary for the distribution networks in the unelectrified remote villages to be covered by stand alone systems.

If the State Government/SERC decides to permit a licensee to use assets created with subsidy, it must be ensured that the benefit of capital subsidy is passed on to the consumers.

7.6 An annuity based approach for provision of capital subsidy is desirable for decentralized generation systems to ensure enforcement of performance guarantees, efficient operation

and maintenance along with repairs and reliable power supply. The extent of such capital subsidy to these systems should be determined to achieve objective of parity, as far as possible, in consumer tariffs between remote villages yet to be electrified and adjoining grid connected villages.

- 7.7 The Government of India would, in consultation with NABARD and Reserve Bank of India, evolve model schemes and related facilitative norms, guidelines and limits for eligible capital costs to encourage widespread participation by the lending community in Rural Electricity Supply initiatives.
- 7.8 In order to maximize benefits from the limited resources available. It is essential that energy efficiency is promoted as a mass campaign in the rural areas.
- 7.9 The use of inefficient and energy intensive equipment by the agricultural sector distorts the consumption pattern and results in non-optimal utilization of tariff subsidies. The Government of India would evolve programs for encouraging use of economically viable energy efficient farm equipment, especially irrigation pump-sets. The Energy Conservation Act 2001 has provided necessary legal framework for this.
- 7.10 The use of information technology for supply of electricity in rural areas through both grid and off-grid measures would lead to efficiency and reduction in costs. Special efforts for widespread use of information technology would be made.
- 7.11 A suitable mass media communication program should be evolved at the earliest to encourage communities take up management of local electricity distribution.

### 8. Policy Provisions for Permitting Stand Alone Systems for Rural Areas

- 8.1 For the purposes of the eighth proviso to section 14 of the Act, rural areas would mean all rural areas as defined / specified pursuant to the Seventy-Third Amendment to the Constitution of India [Article 243 of the Constitution of India].
- 8.2 In connection with Section 14 of the Act, the State Governments, shall notify the rural areas in accordance with the Seventy-Third Amendment to the Constitution of India preferably within 2 months of the date of notification of this Policy.

- 8.3 Notwithstanding the notification of rural areas for the purpose of Section 14 of the Act, the obligations to endeavour to supply electricity to all areas including villages and hamlets under Section 6 of the Act and the universal service obligations of the distribution licensee in his license area under Section 43 shall remain.
- 8.4 A person exempted under eighth proviso to section 14 of the Act would have a choice to enter into a outsourcing arrangement for distribution of power, with the responsibility for generation and distribution of power continuing to be with such person.
- 8.5 Person exempted under eighth proviso to Section 14 from licensing would be free from the licensing obligations and purview of the Appropriate Commissions in matters pertaining to determination of tariffs and universal supply obligations applicable to licensees. However, the provisions of the Act in so far as they pertain to technical standards, safety measures etc. (e.g. Sections 10, 53 etc.) shall continue to be applicable.
- 8.6 The retail tariffs for electricity supply by persons exempt under eighth proviso to Section 14 would be set, based on mutual agreement between such person and the consumers. Since these would be micro enterprises with low capital expenditure, short gestation periods and no entry barriers, competitive market forces would ensure reasonable prices reflecting actual costs.

But the benefit of financial assistance / subsidies by the government (central or state) or other agencies, if any, must be fully passed on to the consumers. The Appropriate Commission would lay down guidelines for this purpose for various types of projects (for different fuels, technology and size) receiving subsidy as opposed to tariff determination on case to case basis. The Appropriate Commission shall have right to intervene by scrutinizing tariff if these guidelines are not implemented in any particular case.

8.7 Potential for local resource based decentralized generation exists in large parts of rural India. For example, in rural areas, biomass based fuels provides 81% of domestic energy. But to use it as modern commercial energy, improvement in efficiency and increasing convenience of using it, for example through gasification, is essential.

Many State Governments have already put in place administrative mechanisms like single window clearance within easy access for giving necessary approvals and clearances in time bound manner to facilitate development of medium and small scale industries. Such dispensation needs to be extended to standalone systems/ decentralized generation projects also to exploit the potential of our local resources.

- 8.8 Special enabling dispensation would be put in place for standalone systems of upto 1 MW which are based on cost effective proven technology and use locally available resource such as biomass. These projects would have automatic approval for
  - land use change for area as per norms
  - pollution clearance if technology is proven to be within laid down norms and
  - safety clearances on the basis of self certification conveyed to concerned authorities (such certification making the developer fully liable for any breach of safety regulations).

Necessary orders shall be issued with respect to relevant laws/rules.

8.9 Institutional arrangements for back-up services and technical support to systems based on non-conventional sources of energy will have to be created by the State Governments. Such services would be provided on cost basis so as to make the arrangements sustainable.

### 9. Policy Provisions for Bulk Power Purchase & Management of Local Distribution in Rural Areas

9.1 Section 5 of the Act primarily aims at extending the coverage of grid-connected (on-grid) power and management of electricity distribution in rural areas by enlisting local level participation. Provisions of Section 5 would also operationalize the scheme of the Eleventh Schedule (Article 243G) of the Constitution of India that has empowered local level institutions to undertake the business of electricity distribution.

- 9.2 Section 5 of the Act finds its facilitative guidelines in Section13, which specifies the facilitative treatment as well as exemptions from licensing under certain conditions.
- 9.3 For the purposes of the Act and applicability of the Policy, rural areas would mean all rural areas as defined / specified pursuant to the Seventy-Third Amendment to the Constitution of India.
- 9.4 In connection with Section 13 of the Act, the State Governments shall, within 6 months of the notification of this Policy, recommend to the Appropriate Commission, for category of cases as considered appropriate, that the provisions of Section 12 shall not be applicable to the persons mentioned in the said Section-13, for a minimum period of 5 years from the date of notification under section 13, subject to periodic review by the State Government in public interest thereafter.

Management of local distribution :-

9.5 Deployment of franchisees for management of local distribution in rural areas is considered necessary in order to ensure revenue sustainability and improve services to the consumers. Franchisee arrangement is not revenue model per se but it is envisaged as a mechanism to ensure that commercial losses reduce, energy supplied is billed and revenue is collected.

Franchisees for the management of rural distribution could be non-governmental organisations (NGOs), users' associations, cooperatives or individual entreprenures. Panchayati Raj institutions will have an important role of overseeing ,in advisory capacity, the delivery of service by the franchisees according to their identified responsibilities.

The State Government could also encourage the Panchayati Raj Institutions to take on responsibility of franchisee as and when such institutions have developed to the extent that they can undertake contractual obligations, raise resources from market and can discharge associated legal responsibilities. In such cases, appropriate mechanisms should be put in place by the state government for independent overseeing the franchisee function of these institutions.

- 9.6 A franchisee would be responsible for distribution of electricity within an identified contiguous area for a prescribed duration and for collecting revenues directly from the consumers. The franchisee arrangement could be for system beyond and including feeders from sub-station or from and including distribution transformer(s).
- 9.7 There can be many variants of franchisee model. But the arrangement must at least entail purchase of bulk power (input based) and routine operation and maintenance of distribution infrastructure. The arrangement may also include grid extension and undertaking of capital expenditure programs and in such cases the distribution system of the existing distribution licensee may be transferred to the franchisee. Assets may be leased to the selected franchisee at a nominal rent in order that consumer tariff is not loaded with additional burden. The margins to be provided for each of these functions should ensure commercial viability of the micro enterprises / local management to be created .
- 9.8 Franchisees would be selected following a transparent process on the basis of clearly laid down criteria. Wherever feasible, the franchisees should be selected on the basis of competitive bidding for the most favourable bulk supply tariff for the distribution licensee. The State Government may adopt alternative basis such as revenue sharing, if considered appropriate.
- 9.9 The contractual arrangement with the franchisee should provide for adequate bankable security, such as bank guarantee, which may be equivalent to the value of energy supplied for a duration of three months. A review of the working of the franchisee should be done without any delay if the franchisee fails to honour the contractual obligations, particularly of collecting the bills from the consumers and paying the cost of the energy supplied. The contract should provide clear stipulations for termination of arrangement in case of failure of either party to honour the agreed commitments and also for taking over the assets, if applicable.

The contractual arrangement must also set norms for various services to be delivered by Franchisee to the consumers.

- 9.10 The concept of undertaking electricity distribution through franchisee is relatively new to the rural population. It would be therefore necessary that the concept is properly explained both to the intending franchisees and also to the consumers.
- 9.11 To ensure the success of franchisee arrangement, it would be necessary that the distribution licencee follows non-discriminatory approach towards the franchisees in case of power supply shortage.
- 9.12 The State Governments should come out with time-bound programs of suitable capacity building of franchisees, consumer associations and Panchayat institutions..

Bulk purchase of power and retail tariffs:-

- 9.13 Persons exempt under Section 13 may procure power from the existing licensee of the area or from any other source.
- 9.14 Where such persons purchase power from the licensee of the area, they would be treated as a separate category by the Appropriate Commission for the determination of the Bulk Purchase Price ("BPP") to be paid by them to the licensees.

In such cases the tariff for retail sale to the consumers in the area of such persons would be as determined for the licensee by the Appropriate Commission.

- 9.15 If not determined competitively, the BPP should be set on a normative basis based on representative consumer mix and should not vary on a case-to-case basis. The BPP set alongwith margins prescribed for the local distribution enterprise should be such that consumers tariff is maintained at the same level. This BPP would be fully factored into the submissions of the State Utilities to the State Electricity Regulatory Commissions for their revenue requirements.
- 9.16 Where the said persons purchase power from a source other than the distribution licensee of the area, the procurement price would be mutually agreed between such persons and the suppliers. In such cases the retail tariff shall be determined in accordance with the guidelines laid down by the SERCs with oversight of the District Committee.

Universal Service Obligation:-

- 9.17 Where local distribution, including activities of grid extension and undertaking of capital expenditure programs, has been handed over to users' association, co-operative society, panchayat Institutions or non-Government organization, such persons will have the universal service obligation for the area of their operation and the supply obligation of the licensee, if any, in that area, would be residual i.e. taking timely action to ensure supply in case franchisee fails to discharge their contractual obligations.
- 9.18 Where the persons exempt under Section 13 build their own distribution systems, the supply obligation of the licensee of the area would continue.

Other issues:-

- 9.19 The Act allows the distribution licensees, non-discriminatory open access to the transmission systems without the requirement of payment of any surcharge. Those exempted under Section 13 for management of local distribution in rural areas also discharge the functions of a distribution licensee and hence would not be liable for payment of any surcharge on wheeling/ transmission charges in case they avail of open access to transmission and distribution networks for procurement of power.
- 9.20 The provisions contained in section 53 of the Act shall continue to be applicable to persons exempt from the provisions of Section 12 pursuant to Section 13. The Appropriate Commissions may stipulate such other conditions and restrictions as deemed necessary in the interest of the rural consumers and for compliance with technical standards and safety measures.

### 10. Review

The Government would review the National Rural Electrification Policies under Sections 4 and 5 of the Act, as and when required.

### Relevant provisions of the Electricity Act 2003

Section 2(63). "stand alone system" means the electricity system set up to generate power and distribute electricity in a specified area without connection to the grid;

Section 4. The Central Government shall, after consultation with the State Governments, prepare and notify a national policy, permitting stand alone systems (including those based on renewable sources of energy and non-conventional sources of energy) for rural areas.

Section 5. The Central Government shall also formulate a national policy, in consultation with the State Governments and the State Commissions, for rural electrification and for bulk purchase of power and management of local distribution in rural areas through Panchayat Institutions, users' associations, co-operative societies, non-Governmental organisations or franchisees.

Section 6. The Appropriate Government shall endeavour to supply electricity to all areas including villages and hamlets.

Commission Section 13. The Appropriate may, on the recommendations, of the Appropriate Government, in accordance with the national policy formulated under section 5 and in public interest, direct, by notification that subject to such conditions and restrictions, if any, and for such period or periods, as may be specified in the notification, the provisions of section 12 shall not authority, Panchayat Institution, apply to any local users' association. co-operative societies. non-governmental organizations, or franchisees:

Section 14. The Appropriate Commission may, on application made to it under section 15, grant any person licence to any person -

- (a) to transmit electricity as a transmission licensee; or
- (b) to distribute electricity as a distribution licensee; or
- (c) to undertake trading in electricity as an electricity trader,

in any area which may be specified in the licence:

.....Provided also that where a person intends to generate and distribute electricity in a rural area to be notified by the State Government, such person shall not require any licence for such generation and distribution of electricity, but he shall comply with the measures which may be specified by the Authority under section 53 .....

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