

# REVISED TARIFF POLICY

NOTIFIED ON  
28<sup>TH</sup> JAN 2016



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Former Technical Member APTEL  
Former Chairman UERC

## SECTION 3 OF THE ACT EMPOWERING THE CENTRAL GOVERNMENT TO NOTIFY TARIFF POLICY

3. (1) The Central Government shall, from time to time, prepare the national electricity policy and tariff policy, in consultation with the State Governments and the Authority **for development of the power system based on optimal utilisation of resources such as coal, natural gas, nuclear substances or materials, hydro and renewable sources of energy.**
- (2) The Central Government shall publish National Electricity Policy and tariff policy from time to time.
- (3) The Central Government may, from time to time, in consultation with the State Governments and the Authority, review or revise, the National Electricity Policy and tariff policy referred to in sub-section (1) .

# TARIFF POLICY – A DELEGATED LEGISLATION

Tariff Policy and National Electricity Policy framed under Section 3 of the Act are delegated legislations.

Consistent with their sovereign character, Parliament have been held to possess wide powers of delegation. This power is, however, subject to one important limitation. The legislature cannot delegate essential legislative function which consists in the determination or choosing the legislative function.

The legislature cannot delegate “uncanalised and uncontrolled power”. The power delegated must not be unconfined and vagrant but must be canalised within banks that keeps it from overflowing.

So the delegation is valid only when the legislative policy and guidelines are adequately laid down. And delegate is only empowered to carryout the policy within the guidelines laid down by the legislature.

What is permitted is delegation of ancillary or subordinate legislative functions. i.e. to fill up the details.

# REFERENCE OF TARIFF POLICY IN THE ACT

61 The Appropriate Commission shall, subject to the provisions of this Act, specify the terms and conditions for the determination of tariff, and in doing so, **shall be guided** by the following, namely:-

(i) the National Electricity Policy and tariff policy

79. (4) In discharge of its functions, the Central Commission **shall be guided by** the National Electricity Policy, National Electricity Plan and tariff policy published under section 3.

86. (4) In discharge of its functions the State Commission **shall be guided by** the National Electricity Policy, National Electricity Plan and tariff policy published under section 3.

# Whether Provisions of Tariff Policy are Binding

# APPEAL NO. 169 OF 2006

- Appellant: RVK Energy Limited
- Respondent: Andhra Pradesh Commission
- Date of Judgment: 5.7.2007
- Bench:       Anil Dev Singh, Chairperson  
                  A A Khan, Technical Member  
                  H L Bajaj, Technical Member
- Issue: Whether the State Commissions can deviate from the formula given in the Tariff Policy.
- **Ratio: Tariff Policy formula is Mandatory**

# OBSERVATIONS AND DIRECTIONS

- We direct the APERC to compute the cross subsidy surcharge, which consumers are required to pay for use of open access in accordance with the Surcharge Formula given in para 8.5 of the Tariff Policy, for the year 2006-07 and for subsequent years.
- In future all the Regulatory Commissions while fixing wheeling charges, cross subsidy surcharge and additional surcharge, if any, shall have regard to the spirit of the Act as manifested by its Preamble. The charges shall be reasonable as would result in promoting competition. They shall be worked out in the light of the above observations made by us. This direction shall also apply to the APERC for computing the cross subsidy surcharge for the year 2005-06 as well.

# APPEAL NO. 200 OF 2011

- Appellant: Maruti Suzuki India Limited
- Respondent: Haryana Commission
- Date of Judgment: 4.10.2012
- Bench: P S Datta, Judicial Member  
V J Talwar, Technical Member
- Issue: Whether the State Commissions can deviate from the formula given in the Tariff Policy.
- **Ratio: Commissions are to be guided by the provisions of Tariff Policy. Determination of CSS is statutory function of the Commission and tariff policy formula cannot interfere with the statutory functions of the the Commission**

# APPEAL NO. 103 OF 2012

Appellant: Maruti Suzuki India Limited

Respondent: Haryana Commission

Date of Judgment: 24.3.2015

Bench: Mrs Justice Ranjana Desai, Chairperson  
Mr Rakesh Nath, Technical Member  
Mr Surendra Kumar, Judicial Member

**Issue: Whether the term “shall be guided” used in Sections 61, 79 & 86 means appropriate Commission has to mandatorily follow Tariff Policy & National Policy ignoring Regulations framed by it.**

**Held: Tariff Policy and National Electricity Policy are mentioned in Sections 61, 79 & 86 merely as guiding factors. They do not control or limit the jurisdiction of the Appropriate Commission.**

# SUPREME COURT CIVIL APPEAL NOS. 2926 OF 2009 AND BATCH

**Appellants:** A.P. Transco.

**Respondent:** Sai Renewable Power Pvt. Ltd. and Ors. etc. etc..

**Coram:** Balbir Singh Chauhan and Swatanter Kumar, JJ

**Date:** 8.7.2010

**Issue:** Whether Policy Directions issued by the Government are binding on the Commission.

**Held:** Thus the scheme of these provisions is to grant supremacy to the Regulatory Commission and the State is not expected to take any policy decision or planning which would adversely affect the functioning of the Regulatory Commission or interfere with its functions. This provision also clearly implies that fixation of tariff is the function of the Regulatory Commission and the State Govt. has a minimum role in that regard.

# APPEAL NOS. 41 OF 2010 AND BATCH

**Appellants:** Polyplex Corporation

**Respondents:** Uttarakhand ERC

**Bench:** Mr. Justice Karpaga Vinayagam, Chairperson

Mr. Rakesh Nath, Technical Member

Mr. P S Datta, Judicial Member

**Date:** 31.1.2011

**Issues:** Whether Policy Directions issued by the Government are binding on the Commission.

**Held:** The State Commission is independent statutory body. Therefore the policy directions issued by the State Government are not binding on the State Commission, **as those directions cannot curtail the power of the State Government in the matter of determination of tariff.**

**While determining tariff the State Commission may take those directions or suggestions for consideration but it is for the State Commission which has statutory duty to perform either to accept the suggestion or reject those directions taking note of the various circumstances.**

It is purely discretionary on the part of the State Commission on acceptability of the directions issued by the State Government in the matter of determination of tariff.

**WITH THIS BACKGROUND, LET  
US NOW DISCUSS VARIOUS  
PROVISIONS OF REVISED  
TARIFF POLICY**

# CHAPTERS IN TARIFF POLICY

1. Introduction
2. Legal Position
3. Evolution of the Policy
4. Objective of the Policy
5. General Approach to Tariff
6. Generation
7. Transmission
8. Distribution
9. Trading Margin

Major changes have been made in chapters underlined above.

Portions deleted in existing clauses have been marked as **strikethrough in blue** and portions added have been shown as **underlined in Red**

Existing provisions are shown in Black

New provisions have been shown in RED

# 1. INTRODUCTION

Notwithstanding anything done or any action taken or purported to have been done or taken under the provisions of the Tariff Policy notified on 6th January, 2006 and amendments made there under, shall, in so far as it is not inconsistent with this Policy, be deemed to have been done or taken under provisions of this revised policy.

1.2 The National Electricity Policy has set the goal of adding new generation capacity ~~of more than one lakh MW during the 10th and 11th Plan periods to have~~ and enhancing per capita availability of ~~over 1000 units~~ of electricity per year and to not only eliminate energy and peaking shortages but to also have a spinning reserve ~~of 5% in the system~~ as specified by the Central Electricity Authority. Development of the power sector has also to meet the challenge of providing access for affordable electricity to all households in next five years.

# 1. INTRODUCTION

1.3 It is therefore essential to attract adequate investments in the power sector by providing appropriate return on investment as budgetary resources of the Central and State Governments are incapable of providing the requisite funds. It is equally necessary to ensure availability of electricity to different categories of consumers at reasonable rates for achieving the objectives of rapid economic development of the country and improvement in the living standards of the people.

## 4. OBJECTIVES OF THE POLICY (EXISTING)

- (a) Ensure availability of electricity to consumers at reasonable and competitive rates;
- (b) Ensure financial viability of the sector and attract investments;
- (c) Promote transparency, consistency and predictability in regulatory approaches across jurisdictions and minimise perceptions of regulatory risks;
- (d) Promote competition, efficiency in operations and improvement in quality of supply.

Moot question arises are the above mentioned objectives are consistent with Objective of Policy as laid down in Section 3 of the Act i.e. 'for development of power systems for optimal use of resources such as . . . .

## 4. OBJECTIVES OF THE POLICY (ADDED)

- (e) Promote generation of electricity from Renewable sources;
- (f) Promote Hydroelectric Power generation including Pumped Storage Projects (PSP) to provide adequate peaking reserves, reliable grid operation and integration of variable renewable energy sources;
- (g) Evolve a dynamic and robust electricity infrastructure for better consumer services;
- (h) Facilitate supply of adequate and uninterrupted power to all categories of consumers;
- (i) Ensure creation of adequate capacity including reserves in generation, transmission and distribution in advance, for reliability of supply of electricity to consumers.

This expansion of objectives is consistent with the statutory and policy objectives of promoting renewable energy, hydroelectric power and securing reliable supply.

# 5. GENERAL APPROACH TO TARIFF

5.2 All future requirement of power should **continue to** be procured competitively<sup>1</sup> by distribution licensees except in cases of expansion of existing projects or where there is a **State—company owned or controlled /owned—company by the State Government** as an identified developer and where regulators will need to resort to tariff determination based on norms<sup>2</sup> provided that expansion of generating capacity by private developers for this purpose would be restricted to one time addition of not more than **50–100%** of the existing capacity.

1 The revised policy is in direct conflict with the judgment of APTEL holding that Para 5.1 of the Tariff Policy ultra vires to Section 62 of the Electricity act such that procurement could be done either by bilateral regulated PPA or competitive bidding: 2010 ELR (APTEL) 404 @ Paras 17-23, 31-32.

2 Carve out and differential treatment qua State Government Gencos which own around 34.5% of total installed capacity in the country.

## 5. GENERAL APPROACH TO TARIFF

Provided further that the Appropriate Commission, as defined in the Electricity Act, 2003, shall ensure that in case of expansion of such projects, the benefit of sharing of infrastructure of existing project and efficiency of new technology is passed on to consumers through tariff<sup>1</sup>.

Provided also that the State Government can notify a policy to encourage investment in the State by allowing setting up of generating plants, including from renewable energy sources out of which a maximum of 35% of the installed capacity can be procured by the Distribution Licensees of that State for which the tariff may be determined under Section 62 of the Electricity Act, 2003<sup>2</sup>.

1 Consistent with Section 51 of Electricity Act. It is important to ensure that sharing of the benefit is NET of cost of the infrastructure and new technology.

2 Further exception from procurement based on competitive bidding only.

## 5. GENERAL APPROACH TO TARIFF

Provided that notwithstanding the provision contained in para 5.11(j)<sup>1</sup> of the policy, the tariff for such 35% of the installed capacity shall be determined by SERC. However, the 15% of power outside long term PPAs allowed under para 5.7.1 of National Electricity Policy shall not be included in 35% allowed to be procured by Distribution Licensees of the State<sup>2</sup>.

1 As such, even for Composite Scheme PPAs, this 35% power will be subject to locational SERC jurisdiction - taking it out of CERC jurisdiction and effectively extending the fiat of Section 64(5) from an “election” to a “mandate” beyond the express language of the statute.

2 Those PPAs are outside long term procurement.

# 5. GENERAL APPROACH TO TARIFF

5.3 The tariff of all new generation and transmission projects of company owned or controlled by the Central Government shall continue to be determined on the basis of competitive bidding as per the Tariff Policy notified on 6th January, 2006 unless otherwise specified by the Central Government on case to case basis<sup>1</sup>.

Further, intra-state transmission projects shall be developed by State Government through competitive bidding process for projects costing above a threshold limit which shall be decided by the SERCs<sup>2</sup>.

1 This change enshrines in policy a discriminatory treatment in favour of Central Government owned Generation and Transmission Projects – even new ones. The ambiguous wording is likely to result in claim of extension of sunset clause of 5 years in Tariff Policy and untrammelled discretion in the hands of the Central Government to be exercised on a case-to-case basis to sanctify such discrimination.

2 Thus SERC can define/change limits re. competitive bidding for intra-state transmission projects with no sunset clause

# 5. GENERAL APPROACH TO TARIFF

5.4 The Central Electricity Regulatory Commission in consultation with Central Electricity Authority and other stakeholders shall frame within six months, regulations for determination of tariff for generation of electricity from projects using coal washery rejects. These regulations shall also be followed by State Electricity Regulatory Commissions<sup>1</sup>.

Provided that procurement of power from coal washery rejects based projects developed by Central/State PSUs, Joint Venture between Government Company and Company other than Government Company in which shareholding of company other than Government Company either directly or through any of its subsidiary company or associate company shall not be more than 26% of the paid up share capital, can be done under Section 62 of the Act<sup>2</sup>.

1 An important action item for CERC/CEA to evolve regulations for tariff determination for power generated from coal washery rejects.

2 Another instance of discrimination against private sector.

# 5. GENERAL APPROACH TO TARIFF

5.5 The developer, of a hydroelectric project, **including Pumped Storage Plant (PSP)**, would have the option of getting the tariff determined by the appropriate Appropriate Commission **for the power to be sold through long term Power Purchase Agreements (PPAs)** on the basis of performance based cost of service regulations if the following conditions are fulfilled:

(c) Long term PPA is firmed up for 60% or more of the total saleable design energy, balance being allowed for merchant sale.<sup>1</sup>

Provided that distribution licensees can extend the duration of long term PPA beyond 35 years for a further period of 15 years at the existing terms and conditions subject to the approval of Appropriate Commission<sup>2</sup>.

Provided further that nothing contained in this clause shall apply to Pumped Storage Plants (PSP).

1 There is a need to reconcile amongst the 35% in the 2nd proviso to para 5.2 above, 15% in para 5.7.1 of NEP and 60% mentioned here, specifically for circumstance where conflicts or ambiguity may arise.

2 The provision is progressive in encouraging merchant sale. However, it is unclear as to how this factors in CEA approval under Section 8(2), particularly on technical and safety aspects

# 5. GENERAL APPROACH TO TARIFF

- (d) The time period for commissioning of all the units of the project shall be **fixed at** four years from the date of approval of the commissioning schedule by the Appropriate Commission<sup>1</sup>. However, the Appropriate Commission may, after recording reasons in writing, fix longer time period for **large storage hydro electric** projects **(reservoir as well as run-of-the river projects)** of more than **500100** MW capacity. ~~Adherence to the agreed~~ **Agreed** timelines to achieve the fixed commissioning schedule ~~shall be verified through independent third party verification.~~ **alongwith penalty for delay shall be decided by the Appropriate Commission in consultation with the Central Electricity Authority. The Appropriate Commission shall allow pass through the Interest During Construction (IDC) and Financing Cost (FC) only upto the period of delay not attributable to the developer, as approved by the CEA<sup>2</sup>.**
- 1 This constitutes an additional element of regulation of generation by ERCs which must be borne in mind by developers, lenders, borrowers, suppliers, and regulators.
- 2 This is an important facet where a new role of CEA is envisaged re. Extension of CoD and Implications, which if implemented diligently can be an important facilitator to resolve issues.

# 5. GENERAL APPROACH TO TARIFF

5.6 Notwithstanding anything contained in Para 5.5 above, the developers of hydro electric projects of more than 100 MW design capacity for which sites have been awarded would have the option of getting the tariff determined by the Appropriate Commission for the power to be sold through long term PPA on the basis of cost plus under Section 62 of the Act<sup>1</sup>

5.7 In case of projects covered under Para 5.5 and 5.6, the Appropriate Commission shall determine tariff ensuring the following <sup>2</sup>:

Any expenditure incurred or committed to be incurred by the project developer for getting project site allotted (except free power as notified) would neither be included in the project cost, nor any such expenditure shall be passed through in tariff.

The project cost shall include the cost of the approved R&R plan of the Project which shall be in conformity with the following:

- 1 Thus a differentiated track is envisaged for hydro, even in competitively bid procurement.
- 2 This provision would have a significant bearing on the bid and tariff assumptions/basis of bids.

# 5. GENERAL APPROACH TO TARIFF

5.8 The Appropriate Commission shall provide for suitable regulatory framework for incentivizing the developers of Hydro Electric Projects (HEPs) for using long-term financial instruments in order to reduce the tariff burden in the initial years.

5.10 Consumer interest is best served in ensuring viability and sustainability of the entire value chain viz., generation, transmission and distribution of electricity, while at the same time facilitating power supply at reasonable rate to consumers. The financial turnaround/ restructuring plans are approved by the Appropriate Government from time to time to achieve this objective. The Appropriate Government as well as the Appropriate Commission while implementing such plans shall ensure viability of the generation, transmission and distribution in terms of recovery of all prudent costs<sup>1</sup>.

1. Para 5.10 is an important reaffirmation of Section 61(b), (c) & (d) principles for ERCs and stakeholders to build upon and enforce both qua financial restructuring/refinancing plans; liquidation of regulatory assets; prudence of tariff et.al.

## 5.11 (C) DEPRECIATION

The Central Commission may notify the rates of depreciation in respect of generation and transmission assets. **The depreciation rates so notified would also be applicable** for distribution assets with appropriate modification as may be evolved by the Forum of Regulators.

Provided that the Appropriate Commission shall specify, for the purpose of tariff determination, a upper ceiling of the rate of depreciation to be applicable during the useful life of the project and the developer shall have the option of indicating, while seeking approval for tariff, lower rate of depreciation subject to the aforesaid ceiling.

The rates of depreciation so notified would be applicable for the purpose of tariffs as well as accounting.

There should be no need for any advance against depreciation

## 5.11 (C) DEPRECIATION

Notwithstanding the above, power from those plants of a generating company, where either whose PPAs have expired or plants have completed their useful life, may be bundled with power from renewable generating plants to be set up through the process of bidding or for which the equipment for setting up such plant is procured through competitive bidding. In such cases, power from such plants can be reallocated to beneficiaries purchasing power from renewable energy generating plants on the principles to be decided by Appropriate Government. The Obligated Entities which finally buy such power shall account towards their renewable purchase obligation to the extent of power bought from renewable energy generating plants.

The scheduling and despatch of such conventional and renewable generating plants shall be done separately.

## 5.11(J) COMPOSITE SCHEME

Sub-section (b) of Section 79(1) of the Act provides that Central Commission shall regulate the tariff of generating company, if such generating company enters into or otherwise have a composite scheme for generation and sale of electricity in more than one State.

Explanation: The composite scheme as specified under section 79(1) of the Act shall mean a scheme by a generating company for generation and sale of electricity in more than one State, having signed long-term or medium-term PPA prior to the date of commercial operation of the project (the COD of the last unit of the project will be deemed to be the date of commercial operation of the project) for sale of atleast 10% of the capacity of the project to a distribution licensee outside the State in which such project is located.

# 6.1 PROCUREMENT OF POWER

- ...

However, some of the competitively bid projects as per the guidelines dated 19th January, 2005 have experienced difficulties in getting the required quantity of coal from Coal India Limited (CIL). In case of reduced quantity of domestic coal supplied by CIL, vis-à-vis the assured quantity or quantity indicated in Letter of Assurance/FSA the cost of imported/market based e-auction coal procured for making up the shortfall, shall be considered for being made a pass through by Appropriate Commission on a case to case basis<sup>1</sup>, as per advisory issued by Ministry of Power vide OM No. FU-12/2011-IPC (Vol-III) dated 31.7.2013.

1 This clause seeks to address the domestic coal shortages alone on a case-to-case basis but fails to deal with imported coal issues. However, if seen in context of genesis of port based imported coal projects, this should provide support to regulatory resolution of issues on a case-to-case basis. (CCEA decision dated 21.06.2013).

## 6.2 TARIFF STRUCTURING AND ASSOCIATED ISSUES

- ... The Appropriate Commission ~~may also~~ **shall** introduce differential rates of fixed charges for peak and off peak hours for better management of load **within a period of two years**.
- Power stations are required to be available and ready to dispatch at all times. Notwithstanding any provision contained in the Power Purchase Agreement (PPA), in order to ensure better utilization of un-requisitioned **generating capacity of generating stations, based on regulated tariff under Section 62 of the Electricity Act 2003, the procurer shall communicate**, at least twenty four hours before 00.00 hours of the day **when the power and quantum thereof is not requisitioned by it enabling the generating stations to sell the same in the market** in consonance with laid down policy of Central Government in this regard. The developer and the procurers signing the PPA would share the gains realized from sale, if any, of such un-requisitioned power in market in the ratio of 50:50, if not already provided in the PPA.

## 6.2 TARIFF STRUCTURING AND ASSOCIATED ISSUES

- Such gains will be calculated as the difference between selling price of such power and fuel charge. It should, however, be ensured that such merchant sale does not result in adverse impact on the original beneficiary(ies) including in the form of higher average energy charge vis-à-vis the energy charge payable without the merchant sale. **For the projects under section 63 of the Act, the methodology for such sale may be decided by the Appropriate Commission on mutually agreed terms between procurer and generator or unless already specified in the PPA.**
- After the award of bids, if there is any change in domestic duties, levies, cess and taxes imposed by Central Government, State Governments/Union Territories or by any Government instrumentality leading to corresponding changes in the cost, the same may be treated as “Change in Law” and may unless provided otherwise in the PPA, be allowed as pass through subject to approval of Appropriate Commission.

- The thermal power plant(s) including the existing plants located within 50 km radius of sewage treatment plant of Municipality/local bodies/similar organization shall in the order of their closeness to the sewage treatment plant, mandatorily use treated sewage water produced by these bodies and the associated cost on this account be allowed as a pass through in the tariff. Such thermal plants may also ensure back-up source of water to meet their requirement in the event of shortage of supply by the sewage treatment plant. The associated cost on this account shall be factored into the fixed cost so as not to disturb the merit order of such thermal plant. The shutdown of the sewage treatment plant will be taken in consultation with the developer of the power plant

## 6.4 RENEWABLE SOURCES OF ENERGY

- 6.4 ~~Non-conventional and renewable~~ Renewable sources of energy generation including Co-generation from renewable energy sources:
- Pursuant to provisions of section 86(1 )(e) of the Act, the Appropriate Commission shall fix a minimum percentage of the total consumption of electricity in the area of a distribution licensee for purchase of energy from ~~such~~ renewable energy sources, taking into account availability of such resources ~~in the region~~ and its impact on retail tariffs. ~~Such percentage for purchase of energy should be made applicable for the tariffs to be determined by the SERCs latest by April 1, 2006.~~ Cost of purchase of renewable energy shall be taken into account while determining tariff by SERCs. Long term growth trajectory of Renewable Purchase Obligations (RPOs) will be prescribed by the Ministry of Power in consultation with MNRE
- ~~Provided that cogeneration from sources other than renewable sources shall not be excluded from the applicability of RPOs.~~

## 6.4 RENEWABLE SOURCES OF ENERGY

- (i) Within the percentage so made applicable, to start with, the SERCs shall also reserve a minimum percentage for purchase of solar energy from the date of notification ~~in the Official Gazette which will go up to 0.25% by the end of 2012-2013 and further up to 3% by 2022.~~ of this policy which shall be such that it reaches 8% of total consumption of energy, excluding Hydro Power, by March 2022 or as notified by the Central Government from time to time.
- (ii) Distribution Licensee(s) shall compulsorily procure 100% power produced from all the Waste-to-Energy plants in the State, in the ratio of their procurement of power from all sources including their own, at the tariff determined by the Appropriate Commission under Section 62 of the Act.

## 6.4 RENEWABLE SOURCES OF ENERGY

- (2) States shall endeavor to procure power from renewable energy sources through competitive bidding to keep the tariff low, except from the waste to energy plants. Procurement of power by Distribution Licensee from renewable energy sources from projects above the notified capacity, shall be done from the date to be notified by the Central Government
- However, till such notification, any such procurement of power from renewable energy sources projects, may be done under Section 62 of the Electricity Act, 2003. While determining the tariff from such sources, the Appropriate Commission shall take into account the solar radiation and wind intensity which may differ from area to area to ensure that the benefits are passed on to the consumers.

## 6.4 RENEWABLE SOURCES OF ENERGY

- (4) In order to incentivize the Distribution Companies to procure power from renewable sources of energy, the Central Government may notify, from time to time, an appropriate bid-based tariff framework for renewable energy, allowing the tariff to be increased progressively in a back-loaded or any other manner in the public interest during the period of PPA, over the life cycle of such a generating plant. Correspondingly, the procurer of such bid-based renewable energy shall comply with the obligations for payment of tariff so determined

## 6.4 RENEWABLE SOURCES OF ENERGY

- (5) In order to promote renewable energy sources, any generating company proposing to establish a coal/lignite based thermal generating station after a specified date shall be required to establish such renewable energy generating capacity or procure and supply renewable energy equivalent to such capacity, as may be prescribed by the Central Government from time to time after due consultation with stakeholders. The renewable energy produced by each generator may be bundled with its thermal generation for the purpose of sale. In case an obligated entity procures this renewable power, then the SERCs will consider the obligated entity to have met the Renewable Purchase Obligation (RPO) to the extent of power bought from such renewable energy generating stations.
- Provided further that in case any existing coal and lignite based thermal power generating station, with the concurrence of power procurers under the existing Power Purchase Agreements, chooses to set up additional renewable energy generating capacity, the power from such plant shall be allowed to be bundled and tariff of such renewable energy shall be allowed to be pass through by the Appropriate Commission. The Obligated Entities who finally buy such power shall account towards their renewable purchase obligations.

## 6.4 RENEWABLE SOURCES OF ENERGY

- (6) In order to further encourage renewable sources of energy, no inter-State transmission charges and losses may be levied till such period as may be notified by the Central Government on transmission of the electricity generated from solar and wind sources of energy through the inter-state transmission system for sale.
- (7) Appropriate Commission may provide regulatory framework to facilitate generation and sale of electricity from renewable energy sources particularly from roof-top solar system by any entity including local authority, Panchayat Institution, user institution, cooperative society, Non-Governmental Organization, franchisee or by Renewable Energy Service Company. The Appropriate Government may also provide complementary policy support for this purpose.
- Explanation: “Renewable Energy Service Company” means an energy service company which provides renewable energy to the consumers in the form of electricity.

# 7. TRANSMISSION

- The Tariff Policy in so far as transmission is concerned, seeks to achieve following objectives:
  - i. Ensuring optimal development of the transmission network **ahead of generation with adequate margin for reliability and** to promote efficient utilization of generation and transmission assets in the country;
- 7.1(3) The ~~overall tariff framework~~ **'utilization' factor should duly capture the advantage of reliability reaped by all. The spread between minimum and maximum transmission rates** should be such as not to inhibit planned development/augmentation of the transmission system, but should discourage non-optimal transmission investment.
- 7.1(7) While all future inter-state transmission projects shall, ordinarily, be developed through competitive bidding process, the Central Government may give exemption from competitive bidding for (a) specific category of projects of strategic importance, technical upgradation etc. or (b) works required to be done to cater to an urgent situation on a case to case basis.

## 7.3 OTHER ISSUES OF TRANSMISSION

- (3) In extraordinary circumstances including threat to security to the State, public order or natural calamity, if the Central Government allocates power out of the unallocated share of the Central Generating Stations or otherwise, such allocation of power will have priority over short-term, medium-term and long-term access in this order.
- There is need to evolve a suitable framework to implement this provision for genuinely extraordinary circumstances, and to suitable retribute The assets rendered stranded for periods which may impair the investment.

## 8. DISTRIBUTION

- Appropriate Commission should mandate Distribution Licensee to undertake load forecasting every year and to publish and submit to the Commission their short, medium and long-term power procurement plans to meet the load.
- The State Regulatory Commission will devise a specific trajectory so that 24 hours supply of adequate and uninterrupted power can be ensured to all categories of consumers by 2021-22 or earlier depending upon the prevailing situation in the State.

## 8.0 DISTRIBUTION

- Micro-grids supplying renewable energy are being set up in such areas where the grid has not reached or where adequate power is not available in the grid. Investment involved in setting up of such microgrids is substantial. One of the risks of investment is grid reaching the area before the completion of the project life and thereby making power from micro grids costly and unviable. In order to mitigate such risk and incentivize investment in microgrids, there is a need to put in place an appropriate regulatory framework to mandate compulsory purchase of power into the grid from such micro grids at a tariff to be determined under section 62 of the Act considering depreciated cost of investments and keeping in view industry benchmark and with a cap if necessary, as approved by the Appropriate Commission The Appropriate Commission shall notify necessary regulations in this regard within six months.

## 8.2 FRAMEWORK FOR REVENUE REQUIREMENTS AND COSTS

- 8.2.1(7) Section 61 of the Act mandates that the Appropriate Commission, while determining tariff, shall not only ensure safeguarding of consumer's interests but also the recovery of the cost of electricity in a reasonable manner. Section 62 of the Act further provides for periodic tariff adjustment during a year to take care of the variation in fuel price, as may be specified.
- Therefore, the Appropriate Commission shall specify an appropriate price adjustment formula for recovery of the costs, arising on account of the variation in the price of fuel, power purchase etc. on monthly/quarterly basis for recovery of all prudent costs of the generating company and the licensee
- A positive provision which must be pressed into action to resolve issues of liquidating long standing and ballooning regulatory assets and ineffective FPPCA implementation.

# REGULATORY ASSETS

- 8.2.2 The facility of a regulatory asset has been adopted by some Regulatory Commissions in the past to limit tariff impact in a particular year. This should be done only as a very rare exception in case of natural calamity or force majeure conditions and subject to the following:
  - a. Under business as usual conditions, no creation of Regulatory Assets shall be allowed;
  - b. Recovery of outstanding Regulatory Assets **along with carrying cost of Regulatory Assets should be** time bound and within a period not exceeding seven years. The State Commission may specify the trajectory for the same.

## 8.3.2 CROSS SUBSIDY

- For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the Appropriate Commission would notify a roadmap such that tariffs are brought within  $\pm 20\%$  of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy.
- ~~• For example if the average cost of service is Rs 3 per unit, at the end of year 2010-2011 the tariff for the cross subsidised categories excluding those referred to in para 1 above should not be lower than Rs 2.40 per unit and that for any of the crosssubsidising categories should not go beyond Rs 3.60 per unit.~~

## §.4 DEFINITION OF TARIFF COMPONENTS AND THEIR APPLICABILITY

- 1. Two-part tariffs featuring separate fixed and variable charges and Time differentiated tariff shall be introduced on priority for large consumers (say, consumers with demand exceeding 1 MW) within one year **and subsequently for all consumers within a period of five years or such period as may be specified.** This would also help in flattening the peak and implementing various energy conservation measures.
- Two part tariff for all the categories (except Agriculture and BPL) has been adopted by most of the Commissions. ToD tariff for industry is practical. But imposing the same on domestic or commercial categories may not give the desired result of flattening the load curve.

## §.4 DEFINITION OF TARIFF COMPONENTS AND THEIR APPLICABILITY

3. The Appropriate Commission may provide incentives<sup>65</sup> to encourage metering and billing based on metered tariffs, particularly for consumer categories that are presently unmetered to a large extent. The metered tariffs and the incentives should be given wide publicity. Smart meters have the advantages of remote metering and billing, implementation of peak and off-peak tariff and demand side management through demand response. These would become essential in future for load-generation balancing due to increasing penetration of intermittent type of generation like wind and solar power.

Appropriate Commission shall, therefore, mandate smart meters for:

- (a) Consumers with monthly consumption of 500 units and more at the earliest but not later than 31.12.2017;
- (b) Consumers with monthly consumption above 200 units by 31.12.2019.

Further, two way smart meters shall be provided to all **prosumers**, who also sell back electricity to the grid as and when they require.

## §.4 DEFINITION OF TARIFF COMPONENTS AND THEIR APPLICABILITY

- In order to enable energy audit in the distribution system, all distribution companies shall ensure smart meters in their electricity system throughout the chain from transformers at 132kV level right down to distribution transformer level at 11kV and further down to each consumer. Further, in order to reduce theft of power, the distribution companies should have enabling feature like distribution SCADA with distribution management system and energy audit functions. SERCs shall mandate these to be in place within two years.

## 8.5 CROSS-SUBSIDY SURCHARGE AND ADDITIONAL SURCHARGE FOR OPEN ACCESS

SERCs may calculate the cost of supply of electricity by the distribution licensee to consumers of the applicable class as aggregate of (a) per unit weighted average cost of power purchase including meeting the Renewable Purchase Obligation; (b) transmission and distribution losses applicable to the relevant voltage level and commercial losses allowed by the SERC; (c) transmission, distribution and wheeling charges up to the relevant voltage level; and (d) per unit cost of carrying regulatory assets, if applicable.

### Surcharge formula:

$$S = T - [C / (1 - L/100) + D + R]$$

Above formula may not work for all distribution licensees, particularly for those having power deficit, the State Regulatory Commissions, while keeping the overall objectives of the Electricity Act in view, may review and vary the same taking into consideration the different circumstances prevailing in the area of distribution licensee.

Provided that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access.

Provided further that the Appropriate Commission, in consultation with the Appropriate Government, shall exempt levy of cross subsidy charge on the Railways, as defined in Indian Railways Act, 1989 being a deemed licensee, on electricity purchased for its own consumption.

# Thankyou