

Base Paper

On

Implementation of Tariff Policy 2016

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**Central Electricity Authority
Economic & Commercial Wing
Financial & Commercial Appraisal Division**

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List of Abbreviations

ARR	Additional Revenue Requirement
AT&C	Aggregate Technical and Commercial
ATC	Available Transfer Capacity
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CSERC	Chattisgarh State Electricity Regulatory Commission
CSS	Cross Subsidy Surcharge
CTU	Central Transmission Utility
DEEP	Discovery of Efficient Electricity Price
FOR	Forum of Regulators
HPERC	Himachal Pradesh Electricity Regulatory Commission
IEGC	Indian Electricity Grid Code
JERC-M&M	Joint Electricity Regulatory Commission (for the states of Manipur and Mizoram)
JERC-UT	Joint Electricity Regulatory Commission (for the state of Goa and Union Territories)
JKERC	Jammu & Kashmir Electricity Regulatory Commission
JSERC	Jharkhand State Electricity Regulatory Commission
KSERC	Kerala State Electricity Regulatory Commission
KPI	Key Performance Indicator
MERC	Maharashtra Electricity Regulatory Commission
MoU	Memorandum of Understanding
MoUD	Ministry of Urban Development
MoWR	Ministry of Water Resources
MYT	Multi Year Tariff
NEP	National Electricity Policy
NLDC	National Load Despatch Centre
OA	Open Access
PoC	Point of Connection
PPA	Power Purchase Agreement

PSERC	Punjab State Electricity Regulatory Commission
R&M	Renovation and Modernization
REC	Renewable Energy Certificate
RES	Renewable Energy Sources
RLDC	Regional Load Despatch Centre
ROE	Return on Equity
RPO	Renewable Purchase Obligation
SBD	Standard Bidding Document
SERC	State Electricity Regulatory Commission
SLDC	State Load Despatch Centre
STPS	Super Thermal Power Station
STU	State Transmission Utility
ToD	Time of the Day
TSERC	Telangana State Electricity Regulatory Commission
TTC	Total Transfer Capability
UERC	Uttarakhand Electricity Regulatory Commission
UPERC	Uttar Pradesh Electricity Regulatory Commission
WBERC	West Bengal Electricity Regulatory Commission

EXECUTIVE SUMMARY

The revised Tariff Policy was issued on 28th January, 2016. The focus of the Tariff Policy is on 4 Es: **Electricity** for all, **Efficiency** to ensure affordable tariffs, **Environment** for a sustainable future, **Ease of doing business** to attract investments and to ensure financial viability. This paper attempts to review the status of implementation of various important provisions of the Tariff Policy.

2. In order to assess the status of implementation of the Tariff Policy, CEA had sought a feedback from the Regulatory Commissions and State Governments through a detailed format. In spite of a rigorous follow-up, only sixteen (17) SERCs and five (6) state governments / utilities have submitted the desired feedback. It is important to mention that no feedback was received from CERC. However, an attempt has been made to analyze actions taken by CERC based on their regulations available on their website.

3. Implementation status and issues relevant to various important provisions of the Tariff Policy 2016 have been analyzed under five broad areas –

- (i) Electricity forAll,
- (ii) Efficiency Enhancement,
- (iii) Promoting Environment friendly measures,
- (iv) Ease of doing business and
- (v) Tariff Rationalization.

4. In order to achieve inclusive growth, it is essential that all the citizens of the country get access to electricity. Many of the SERCs have not specified a trajectory for achieving 24 hours supply to all categories of consumers by 2021-22 or earlier. Load forecasting, and Standards of performance are useful tools for planning to meet the load and to assess actual execution of these plans. However,

even in states where regulations on these issues have been put in place, there are gaps when it comes to implementation. For example, very few Regulatory Commissions have actually imposed penalties on licensees for not meeting standards of performance.

5. Efficiency enhancement in various activities of the power sector, be it generation, transmission or distribution, results in reduction in cost of the respective utility and therefore should lead to a reduction in tariff. One way of achieving better efficiencies is through competition. In the cost-plus tariff regime, efficiency improvement can be achieved through performance based regulation. The Tariff Policy 2016 has provisions for efficiency enhancement through both these routes. Procurement of power be it short-term, medium-term or long-term through competitive bidding is a major success story. The policy regarding competitive bidding for procurement of transmission service has been fully implemented at inter-state level. Limited number of private players who come forward whenever bids were announced for transmission service, however, is also a cause of concern. Determination of CSS, additional surcharge and standby charges are the key issues which need to be resolved for implementation of OA in a manner fair to all the stakeholders. Performance based cost of service regulations have been implemented by most of the SERCs. KPIs form another mechanism for monitoring performance of licensees. However, they may not serve much purpose unless backed by an effective penalty mechanism. Loss reduction is more of a planning issue and there may be a need to have a separate revenue stream for the functioning of CTU.

6. The Tariff Policy 2016 has many measures to promote renewable and environmentally sustainable sources of power. Most of the SERCs have specified overall RPOs but only a couple of them have provided a trajectory to achieve the target of 8% solar RPO by March 2022. There is not much progress on the provisions like mandating proposed/existing thermal generating station to necessarily procure or establish certain renewable capacity and using energy generated from power stations which have completed their fair life for bundling with renewable energy. There is also not much progress on putting in place a

regulatory framework for use of treated sewage water by thermal power plants, though some progress has been made in feasibility studies and on the logistics front.

7. The Tariff Policy 2016 addresses three aspects of “Ease of doing business”, namely (a) removing obstacles in potential investment and also to address genuine financial problems of existing investors, (b) Uniformity in regulatory approach amongst various electricity regulators and (c) transparency in availability of requisite information. One of the important measures cited in Tariff Policy to promote hydro stations is facilitating long-term financing through regulations. Only UERC has confirmed appropriate regulatory framework for the same. However, CERC and most of the SERCs allow financial restructuring of existing projects. On certain issues, FOR was to evolve guiding principles, which they are yet to do. It appears that none of the SERCs have introduced ancillary services and direction and distance sensitive pricing for transmission service and losses. Major issue in the area of transparency is that very few SLDCs are making available information on ATC and TTC.

8. On the issue of tariff rationalization, one of the important provisions in the Tariff Policy is that tariffs should be brought within $\pm 20\%$ of the average cost of supply. A number of SERCs have informed that a roadmap to achieve the same has been finalized. A lot of progress has been made in specifying two-part tariff for all categories of consumers, while ToD tariff is mainly confined mostly to large consumers. One of the fundamental requirements to achieve tariff rationalization is precise calculation of cost of supply and very few SERCs have taken steps in this direction. Un-requisitioned capacity even at some pit-head stations is a major hurdle in overall optimization. CERC had proposed certain amendments in IEGC to resolve this issue in line with the provision of the Tariff Policy, though, the same are yet to be notified.

Chapter I: Introduction

1.1 Background

- 1.1.1 Sub-section (1) of Section 3 of the Electricity Act 2003, inter-alia, stipulates that the Central Government in consultation with the State Governments and the Authority shall notify a Tariff Policy. Sub-section (3) of this section further stipulates that the Tariff Policy may be reviewed and revised from time to time. Accordingly, the Tariff Policy was issued for the first time on 6th January, 2006. Further amendments to the Tariff Policy were notified on 31st March, 2008, 20th January, 2011 and 8th July, 2011.
- 1.1.2 On 28th January 2016, after a thorough review, a revised Tariff Policy was notified. The focus of the Tariff Policy is on 4 Es: **Electricity** for all, **Efficiency** to ensure affordable tariffs, **Environment** for a sustainable future, **Ease of doing business** to attract investments and ensure financial viability.
- 1.1.3 This paper attempts to review the status of implementation of various important provisions of Tariff Policy.

1.2 Methodology

- 1.2.1 In order to prepare this paper, CEA had prepared a detailed format, which was sent to the Regulatory Commissions and State Governments for soliciting their feedback regarding action taken to implement provisions of Tariff Policy, 2016. A copy of the format is attached at **Annex-I**.
- 1.2.2 Member (E&C), CEA had also taken a meeting with representatives of Regulatory Commissions and State Governments on 07.03.2017. However, in spite of a rigorous follow-up, only fifteen (17) SERCs and five (6) state utilities have submitted the desired feedback. A list of entities, who have submitted a feedback is attached at **Annex-II**.
- 1.2.3 By way of provisions in the Electricity Act, 2003 as well by convention, SERCs generally follow regulations framed by the CERC. The Tariff Policy also mentioned at several places about the uniformity in regulatory approach by following regulations made by CERC or by evolving common principles at the FOR. Therefore, a feedback from CERC and FOR was very important. It is matter of concern that CERC and FOR neither

participated in the meeting nor have submitted their feedback till date. However, an attempt has been made to analyze actions taken by CERC based on their regulations available on their website.

- 1.2.4 A detailed analysis of the various provisions of the Tariff Policy 2016 and the status of implementation thereof based on the limited response, as has been pointed out earlier, has been captured in the subsequent chapters broadly into five focus areas.

Chapter 2: Electricity for All

- 2.1 Electricity is one of the important drivers for economic growth and therefore in order to achieve inclusive growth, it is essential that all the citizens of the country get access to electricity. It is in this context that the Tariff Policy 2016 has string of provisions with the objective of “Electricity for All”.
- 2.2 Para 8 of the Tariff Policy states that 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.

Many of the SERCs have not specified a trajectory for achieving 24 hours supply to all categories of consumers by 2021-22 or earlier.

- 2.3 In order to provide continuous supply, the first important step is to plan for the same by carrying out load forecasting and planning for short, medium and long-term power procurement. Para 8 of the Tariff Policy states that Appropriate Commission should mandate distribution licensees to undertake above mentioned activities. There is a need not only to ensure that load forecasting is undertaken by the distribution licensee, but also to monitor accuracy levels. In this context, it is essential that the distribution licensees are equipped with technological tools to carry out load forecasting in a scientific manner.

forecasting every year and to publish and submit to the Commission their short, medium and long-term power procurement plans to meet the load has been implemented. As against this, HPERC has informed that Discom has been advised by them to conduct load

JKERC has informed that they are yet to put in place a suitable regulatory framework

- 2.4 Para 8 of the Tariff Policy also stipulates that State Commissions should determine and notify the standards of performance of licensees with respect to quality, continuity and reliability of service for all consumers. However, it is desirable that consumers should be made aware of these standards and SERCs should impose penalties on licensees for not meeting these standards.

It appears that most of the SERCs have put in place standards of performance for licensees.

Only MERC and UERC have confirmed that penalties have been imposed on licensees for not meeting standards of performance

- 2.5 Para 7.3(3) of the Tariff Policy, 2016 stipulates that 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. However, in order to implement this provision, CERC will have to amend regulations on transmission access.

CERC has not framed regulations to facilitate higher priority for transmission access for allocation made by the Central Government under extraordinary circumstances.

- 2.6 Another aspect of Electricity for All is affordability. Para 8.3 (1) of the Tariff Policy states that the consumers below poverty line who consume below a specified level, as prescribed in the NEP may receive a special support through cross subsidy. It further states that tariffs for such designated group of consumers will be at least 50% of the average cost of supply.

Only few SERCs such as WBERC, UPERC and HPERC have confirmed that tariff for below poverty line consumers is at least 50% of the average cost of supply.

- 2.7 Same spirit is reflected in para 8.3 (4) of the Tariff Policy, which further adds that the subsidized rates of electricity should be permitted only up to a pre-identified level of consumption and if the State Government wants to reimburse even part of this cost of electricity to poor category of consumers the amount can be paid in cash or any other suitable way. The policy also suggests that use of prepaid meters can also facilitate this transfer of subsidy to such consumers.

Most of the states have a pre-identified level of consumption for subsidized rates

Only HPERC has confirmed subsidized rate in conjunction with prepaid meters.

Chapter 3: Efficiency Enhancement

3.1 Efficiency enhancement in various activities of power sector, be it generation, transmission or distribution, results in reduction in cost of the respective utility and therefore should lead to reduction in tariff. In case of competitive procurement of power or transmission service, the competition itself forces bidders to look for inefficiencies and their elimination in an attempt to be lowest bidder. However, in case of cost-plus tariff regime, regulators have to put in place a framework of performance-based regulations to achieve the same. The Tariff Policy 2016 has suitable provisions for promoting competition as well as efficiency improvement in cost-plus tariff regime.

3.2 Enhancing Efficiency through Competition

3.2.1 The Tariff Policy has provisions mandating procurement of power through competitive bidding (para 5.2) and development of transmission projects through competitive bidding (para 5.3). Further, Tariff Policy contains measures to promote OA (para 8.5.1 and 8.5.6), which acts as a competitive force on the distribution companies.

3.2.2 Procurement of power be it short-term, medium-term or long-term through competitive bidding is a major success story. SBDs for each such procurements have been framed and are revised as and when the need arises. DEEP portal has been created by the Ministry of Power for reverse e-bidding. Presently , short-term procurement of power is being facilitated on this portal.

It appears that all future requirement of power is being procured through competitive bidding.

3.2.3 In so far as development of the transmission system is concerned, there is a defined framework for Tariff Based Competitive Bidding for inter-state transmission system under the supervision of the Empowered Committee. However, the same cannot be said about the

development of intra-state transmission projects. The Tariff policy requires state governments to specify a threshold limit of capital cost, above which the transmission system is to be constructed only through competitive bidding. It appears that none of the states have complied to this requirement. There are, however, limited private players who come forward whenever bids were announced for transmission service and there is a clear need to have more bidders in order to enhance competition.

The policy regarding competitive bidding for procurement of transmission service has been fully implemented at the inter-state level.

Very few states have carried out competitive bidding for procurement of intra-state transmission service.

It appears that none of the states have notified a threshold limit of capital cost, above which the transmission system is to be constructed only through competitive bidding

3.2.4 On the issue of OA, the fairness of determination of CSS, additional surcharge and standby charges are the key issues. Para 8.5.1 of the Tariff Policy stipulates that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking OA. In many of the states, actual level of cross subsidy as well as CSS is more than 20% of the applicable tariff. SERCs need to take immediate action to bring down the cross subsidy and fix CSS accordingly. In some of the states, while actual level of cross subsidy is more than 20%, the value of CSS has been capped to 20%. This obviously results in financial burden on the Discom. The CEA had constituted a Committee to look into the issues affecting OA in the country and the report of the Committee is under discussion.

Some of the SERCs have restricted CSS to 20% of the tariff, while some others have initiated action for the same.

3.3 Efficiency Enhancement under cost-plus tariff regime

3.3.1 One of the major thrust areas of the Tariff Policy, 2016 is to encourage enhancement of efficiencies and sharing of gains of such efficiency improvement with the consumers. Para 5.11 of the Tariff Policy lays down a framework for performance based cost of service regulation in generation, transmission and distribution. Sub-para (f) of this para provides for setting of performance norms with incentives and disincentives with a mechanism for sharing of gains of efficiency improvement with consumers. Similarly, para 8 regarding distribution, also reiterates that gains of efficient operations should be appropriately shared between consumers and licensees.

CERC has adopted performance based cost of service regulation since beginning. Many of the operational norms, particularly in the field of generation have been tightened progressively.

The concept of truing up and sharing of benefits with the consumers was also introduced by CERC in the Tariff Regulations for the period 2009-14.

Most of the regulatory Commissions, except JKERC has confirmed that they have adopted performance based regulations with arrangement for sharing of benefits with the consumers.

3.3.2 This principle of performance based cost of service regulation is also reflected in the Tariff Policy in respect of other area of power sector such as:

(a) Expansion of existing generation projects (para 5.2.9)

- (b) Renovation and Modernization of generation projects {para 5.11(g)}
- (c) Transmission- KPI for CTU and STUs (para 7.3.1) and loss reduction {para 7.2(2)}
- (d) Distribution (para 8) etc.

3.3.3 Implementation aspects in respect of above fields are summarized as under:

(a) Expansion of existing generation projects (para 5.2.9)

Although, there is no specific provision in the CERC's Tariff Regulation for passing benefits of sharing of infrastructure of existing generation projects and efficiency of new technology, the existing regulations may be sufficient to ensure the same. This is because during prudence check on Capital Cost of expansion project, the Commission would take into account sharing of infrastructure of existing generation project. Similarly, the operational norms will be based on new technology used for expansion project.

Existing CERC Regulations may be sufficient to take care of Tariff Policy provisions regarding expansion of existing generation projects.

Most of the SERCs (except JKERC) have confirmed that their regulations take care of the aspect.

(b) Renovation and Modernization of generation projects {para 5.11(g)}

Regulation 15 of CERC's Tariff Regulations for 2014-19 provides for approval of the proposal for R&M based on detailed analysis, which would also cover capital investment to be made. Insofar as sharing the benefits of efficiency improvement on account of R&M is concerned, there is no specific mention in the Regulation. However, it is noted that generally operating norms are tightened by CERC based on expected improvements from R&M.

Existing CERC Regulations may be sufficient to take care of Tariff Policy provisions regarding R&M of generation projects.

Most of the SERCs have confirmed that their regulations take care of Tariff Policy provisions regarding R&M

(c) Transmission- KPI for CTU and STUs (para 7.3.1) and loss reduction {para 7.2(2)}

Para 7.31 of the Policy requires that financial incentives and disincentives to be implemented for CTU and STUs around the KPIs. It further stipulates that KPIs should include efficient network construction, system availability and loss reduction.

CERC has stipulated normative availability of 98% for full recovery of transmission charges and 98.5% for incentives. For actual availability below 98%, there is only a proportionate reduction in transmission charges and no additional penalty. Whereas in the SBD for transmission recommended by a Committee under Member (E&C), CEA, there is additional penalty for availability below 98%.

As far as efficient construction is concerned, CERC Regulations provide for incentive in the form of additional ROE for completing the construction early. However, there is no prescribed disincentive for delay in commissioning. Only possibility is that CERC can disallow IDC corresponding to delay in construction.

There is no commercial mechanism in CERC Regulations for loss reduction, which is more of a planning issue. There may be a need to have separate revenue streams for CTU, which handles the planning function, so that mechanism of financial incentives and disincentives can be built around it.

Existing CERC Regulations contain an incentive mechanism for availability and early construction for transmission assets. However, there is no specific penalty for reduced availability and delay in construction.

CERC Regulations do not provide incentive/disincentive for loss reduction

Most of the SERCs have adopted a framework similar to that of CERC.

However, some Commissions like JKERC, JERC-UT, JERC-M&M and UPERC have specifically informed that such regulations are yet to be formulated.

(d) Distribution (para 8)

Para 8.1(2) of The Policy stipulates that there should be a mechanism for sharing of excess profits and losses with the consumers as part of MYT framework.

Most of the State Regulatory Commissions have confirmed that provisions for sharing of excess profit or loss already exist in the regulations.

JERC-UT, PSERC and HPERC have informed that their regulations do not have provision for sharing of profit and losses.

Para 8.2.1(2) of the Policy prescribes an incentive mechanism for AT&C loss reduction based on defined trajectory.

Most of the SERCs have already implemented an incentive mechanism for AT&C loss reduction based on defined trajectory.

JKERC, JERC-M&M and TSERC have informed that such provisions are not there in their regulations.

Metering is one of the important steps to bring about efficiency in the distribution sector. Para 8.4 (3) of the Tariff Policy provides for incentives to encourage metering and also gives a trajectory for introduction of Smart Meters. High cost of Smart Meters appears to be a constraint. There is perhaps a need to consider a procurement strategy based on a combination of common specifications, large volumes and competition to bring down prices of Smart Meters.

Only MERC has confirmed that all the consumers, except those of agriculture category are metered.

However, none of the SERCs seems to have taken any step towards incentivising consumers to shift from unmetered to metered tariff and for introduction of Smart Meters.

Para 8.1(4) of the Policy prescribes that licensees may have the flexibility of charging lower tariffs than approved by the State Commission if competitive conditions require so without having a claim on additional revenue requirement on this account in accordance with Section 62 of the Act.

Only WBERC, JSERC, and MERC have confirmed that their regulations have a provision enabling a licensee to charge lower than approved by the Commission.

Chapter 4: Environment Friendly Measures

4.1 The Tariff Policy 2016 stipulates many measures to promote renewable and environmentally sustainable sources of power keeping in view the environmental benefits and also India's commitment as stated in the Intended Nationally Determined Contributions (INDC). In addition to this, the Tariff Policy contains couple of other environmental friendly provisions.

4.2 Promotion of Renewable Energy Sources (RES)

4.2.1 One of the most important measures for promotion of RES is fixing of overall RPO and for Solar energy in particular {para 6.4 (1)}. However, merely specifying RPO may not be sufficient. There is need to introduce a mechanism of incentives & disincentives linked to achievement of RPO.

Most of the SERCs have made stipulations about overall RPO, except Telangana SERC, which is stated to be in the process of implementing the same.

However, only a couple of SERCs have confirmed that penalties have been imposed on DISCOMs for not fulfilling RPO.

4.2.2 As regards Solar RPO, the Tariff Policy provides a target of 8% of total energy consumption excluding hydro power by March 2022. There is no significant progress in implementation of this stipulation.

Only JERC-UT & Goa and JERC- M&M have confirmed that trajectory for solar RPO of 8% up to March 2022 has been specified.

4.2.3 Para 6.4(1) (iv) of the Policy provides for promotion of emerging renewable technologies and separate REC multipliers based on technology and vintage basis.

Most of the SERCs have informed that they will follow the regulations made by CERC on RECs.

It is noted that the vintage based multiplier which was there in earlier regulations of CERC, has been omitted in the recent order.

4.2.4 Two issues on which Central government was required to take action were:

- (a) to notify an appropriate bid based tariff framework for Renewable sources {Para 6.4 (4) of the Tariff Policy} and
- (b) to provide a framework mandating a generating company proposing coal/lignite based generating plant to establish or procure certain renewable energy generating capacity for bundling with thermal generation {Para 6.4 (5) of the Tariff Policy}.

It appears that frameworks for bid based tariff for RES and for mandatory bundling of RES with thermal generation are yet to be finalized.

4.2.5 Another issue on which Central as well as State Governments were required to come out with principles was regarding bundling of power from those plants, whose PPAs have expired or plants that have completed their useful life, with power from renewable generating plants {Para 5.11 (c) of the Tariff Policy}. Rajasthan Urja Vikas Nigam has observed that this provision may not be beneficial to the state . They have contended that the price of solar power has come down substantially and it is at par with thermal power generation. Further, the benefit of thermal power station where cost has come down after completion of useful life should be available to the procurer.

Government of NCT of Delhi has also expressed disagreement with this policy provision.

The Ministry of Power had issued orders for bundling of power from RES with power from NTPC's Singarauli STPS. However, this order has not been implemented so far.

Perhaps, no state government has taken action for bundling of RES with power from those plants, whose PPAs have expired or plants have completed their useful life

4.2.6 Para 6.4(5) of the Tariff policy also stipulates that if a coal/lignite generators sets up RES capacity with the concurrence of power procurers under existing PPA, Appropriate Commissions shall allow bundling of additional RES capacity with the existing thermal capacity and tariff for this RES capacity shall be allowed to be pass through. This apparently requires suitable regulatory framework.

CERC or any of the SERCs have not taken any action for preparing a regulatory framework for bundling of RES with the existing thermal generation. Some SERCs have informed that they would follow CERC's framework.

Some SERCs have informed that they have not received any application for such bundling

4.2.7 Exemption from interstate transmission charges and losses for renewable energy sources was another issue {para 6.4(6) of the Tariff Policy} on which central government was to take action. This requirement has already been complied by the Ministry of Power vide order dated 30.9.2016 whereby waiver from transmission charges and losses has been granted to solar and wind projects till 30.6.2017 and 31.3.2019 ,respectively. The matter regarding extension of these dates is under active consideration by the Ministry of Power.

Ministry of Power has granted exemption to wind and solar generating stations from interstate transmission charges and losses.

- 4.2.8 Para 6.4(7) of the policy stipulates that a regulatory framework needs to be provided for generation and sale of electricity from renewable energy sources particularly from roof-top solar systems by any entity including Local authority, Panchayat institution or user institution, Cooperative society, NGOs, Franchisees or Renewable energy service companies.

Except HERC, other SERCs have confirmed that such regulatory framework for generation and sale of electricity from renewable energy sources particularly from roof-top solar systems has been put in place.

4.3 Other environment friendly measures

- 4.3.1 An important provision in the Tariff Policy in the context of Swatchh Bharat Mission is to procure entire power generated from waste-to-energy plants at a tariff to be determined by the appropriate Commission on cost plus basis {Para 6.4 (1) (ii) of the Tariff Policy}. Since waste to energy plants will be of relatively smaller size, these plants are likely to be intra-state in nature and therefore action is required to be taken mainly by SERCs.

CERC's regulations and for that matter, regulations of most of the SERCs on renewable energy cover Municipal Solid Waste projects.

Most of the SERCs have informed that proposal for such plants have been received.

4.3.2 Mandatory use of treated sewage water by thermal power plants located within the radius of 50 km sewage treatment plant has been stipulated in par 6.2 (5) of the Tariff Policy. It further says that associated costs should be included in fixed costs so that it does not affect merit order. It is critically important that CERC comes out with the relevant regulations at an early date so that SERCs can adopt them. On logistic issues, however, some progress has been made. Thermal plants within a distance of 50 Km of sewage treatment plant have been mapped with the help of the Ministry of Urban Development. Further, a committee comprising of representatives of CEA, MoUD, MoWR and NTPC has been formed to suggest/frame/fix (a) an appropriate business model identifying the various responsibilities and risks of each stake holder and a revenue model, (b) chemical parameters of water to be used in power plants (c) Model MoU/contract for purchase of treated sewage water from Municipalities which has since completed all these tasks.

Only UPERC has confirmed that they have framed regulations to facilitate use of sewage water.

Some of the SERCs have stated that they would follow the regulations framed by CERC.

Chapter 5: Ease of doing Business

5.1 One of first and foremost steps to be taken in the direction of “Ease of doing business” in the power sector is to remove obstacles in the way of the potential investment and also to address genuine financial problems of the existing investors. Uniformity in regulatory approach amongst various electricity regulators and transparency in availability of requisite information would also go a long way in this direction. The Tariff Policy 2016 has specific provisions in all the three areas mentioned above.

5.2 Easing financial difficulties of promoters

5.2.1 Hydro generating stations play an important role in the ease with which ramping requirement during peak hours can be met. Hydro generators are also expected to play a prominent role in providing balancing capacity as more and more RES get integrated into the grid. However, a higher capital cost and longer gestation period increases their soft costs leading to higher tariff. In order to promote development of hydro generating stations, para 5.8 of the Tariff Policy mandates Regulatory Commissions to provide suitable regulatory framework for promoting long-term financing instruments to reduce tariff burden in initial years. However, in the cost-plus tariff regime, revenue from depreciation is construed to be used for repayment of loan. Therefore, the intention of this provision seems to be that in case of long-term financing, the rate of depreciation should accordingly be lowered, otherwise long-term financing per se will not have any impact on tariff. From the responses received from SERCs, it appears that this aspect, perhaps, has not been appreciated. Some of the SERCs have mentioned that they would follow regulations framed by CERC.

CERC need to initiate action for preparing a regulatory framework to facilitate long-term financing instruments.

Only UERC has confirmed that such regulations have been framed.

5.2.2 Proviso to Para 5.11 (c) of the Tariff Policy provides that norms of depreciation specified by Regulatory Commission would be the ceiling norms and that the developer can opt a for lower rate of depreciation. However, unless generating companies and licensees under cost-plus regime are subjected to some kind of competition, it appears that none of them would opt for lower depreciation rate.

CERC regulations already have a provision that the rate of depreciation specified in the Tariff Regulations are the ceiling norms.

Some SERC such as KSERC, JKERC, PSERC and UERC have also confirmed such stipulation in their Regulations.

5.2.3 Para 5.11 (d) stipulates that restructuring of debt, including tenure, should be encouraged to reduce tariff.

Existing CERC Regulations allow restructuring of debt with provision for sharing of gains through refinancing.

Some of the SERCs have also confirmed enabling regulatory provisions.

5.2.4 Para 8.2.1 (7) of the Tariff Policy states that Regulatory Commissions should 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. The idea, obviously, is to reduce the time lag between the cost and its recovery to reduce hardship to the generating companies and licensees.

CERC as well as most of the SERCs have a specified price adjustment formula for recovery of the costs, arising on account of the variation in the price of fuel, power purchase etc.

Only JERC-UT has informed that they have not yet complied with this stipulation

5.3 Uniformity in Regulatory Approach

5.3.1 Para 5.11 of the Tariff Policy has several provisions for ensuring uniformity in approach to be followed by various Regulatory Commissions. Para 5.11(a) stipulates that rate of return on equity for generation and transmission projects notified by CERC would be followed by SERCs also. Similarly, para 5.11 (c) deals with rate of depreciation with a specific provision that depreciation rates for distribution may be adopted based on the method evolved by FOR. It is felt that there is need to impress upon FOR to immediately start working on this issue so as to implement the Tariff Policy.

Most of the SERCs except KSERC, HERC and TSERC are following a ROE specified by CERC.

Several SERCs have informed that FOR is yet to evolve an approach on the rate of depreciation for distribution.

5.3.2 As regards operating norms, para 5.11(f) of the Tariff policy states that CERC would notify such norms in consultation with CEA and the same would be adopted by SERCs. It further states that in view of the historical trend, SERC may fix relaxed norms and provide a transition path to achieve the norms notified by CERC.

Most of the SERCs except JKERC and KSERC have confirmed that they have adopted operational norms notified by CERC.

5.3.3 The Tariff Policy also envisages uniformity in respect of generating projects using coal washery rejects.

CERC Regulations have appropriate provisions for generating projects using coal washery rejects and SERCs need to adopt these regulations.

5.3.4 As regards operating norms for distribution networks, the Tariff Policy provides for guidelines to be evolved by FOR.

SERCs have informed that FOR is yet to evolve guidelines on operating norms for distribution.

5.3.5 Para 7.1(viii) and para 7.2(i) of the Tariff Policy stipulate that SERCs should devise direction and distance sensitive charging for transmission services as well as losses.

It appears that none of the SERCs have adopted PoC based methodology of CERC for transmission charges and losses.

MERC has informed that they have directed STU to explore introduction of PoC transmission pricing methodology.

Some of the SERC have said that such methods may not be required in their state.

5.2.6 Ancillary services are expected to play a very important role in the grid operation particularly with the increasing penetration of RES into the grid. CERC has already introduced ancillary services for inter-state grid operation. However, in view of the increasing complexity of grid operation due to progressive penetration of RES into the grid, there may be need to

deepen and widen the ambit of ancillary services. Para 7.42 of the Tariff policy, requires SERCs also to adopt the framework specified by CERC.

CERC has already introduced ancillary services for interstate grid operation.

It appears that none of the SERCs have introduced ancillary services in the intra-state system.

5.4 Transparency

5.4.1 Bringing transparency is one of the important steps towards ease of doing business as well as for empowering the consumers. Para 5.11 (h) (5) of the Tariff Policy stipulates that clear guidelines and regulations on information disclosure may be developed by the Regulatory Commissions.

Most of the SERCs (except UPERC and TSERC) have confirmed that Regulations regarding disclosure of information have been framed.

5.4.2 Availability of information regarding ATC is very important for market participants. Keeping this in view, para 7.3(2) of the Tariff Policy states that all available information should be shared with intending users by the CTU/STU and the load dispatch centres, particularly information on available transmission capacity and load flow studies. The congestion management procedure approved by CERC also states that SLDCs shall assess TTC/ATC/TRM of its inter-State transmission corridor for exchange of power with ISTS.

It is seen that only NLDC/RLDCs and some of the SLDCs are maintaining information about ATC and TTC on their website.

SERCs need to issue appropriate directions to SLDCs to maintain information about ATC/TTC on their website.

Chapter 6: Tariff Rationalization

- 6.1 Para 8.3 (2) of the Tariff Policy states that Appropriate Commission would notify a roadmap such that tariffs are brought within $\pm 20\%$ of the average cost of supply. It is important that all the SERCs finalize this roadmap at an early date and what is more critical is not to deviate from this roadmap.

A number of SERCs such as KSERC, WBERC, HERC, PSERC, JERC-M&M, CSERC. HERC and BERC have finalized the road map for bringing tariff within $\pm 20\%$ of the average cost of supply . Some others are in the process of doing so.

MERC has informed that draft report on roadmap is under consideration of the Government of Maharashtra.

- 6.2 An important provision of Tariff Policy, 2016 {para 8.4(1)} is that two-part tariff 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. It may be pointed out that merely introducing two-part tariff may not be enough; the demand and energy based components of tariff should be reflective of the fixed and variable costs of the Discom.

Most of the SERCs have adopted the two-part tariff for all consumers, while some of them have done so for large consumers only.

ToD Tariff has been adopted in most of the states for large consumers

- 6.3 Para 8.5.1 of the Tariff Policy stipulates that cost of supply of electricity by the distribution licensee to consumers of the applicable class shall be calculated as aggregate of (a) per unit weighted average cost of power purchase including meeting the RPO ; (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..

Only JERC-M&M, CSERC and TSERC have confirmed that they have fully adopted principles for calculation the cost of supply of electricity contained in Tariff Policy

JERC-UT has opined that these principles cannot be adopted due to skewed ratio of LT to HT sales.

On the other hand JSERC has taken a plea that no petition has been filed on these lines.

- 6.4 Para 5.11 (h) (4) of the Tariff Policy, 2016 emphasize that uncontrollable costs should be recovered speedily to ensure that future consumers are not burdened with past costs. Further stipulation is in para 8.3.2 of the Tariff Policy, which states that a regulatory asset should be created only as a very rare exception and that recovery of outstanding Regulatory Assets along with carrying cost of Regulatory Assets should be done in a time bound manner and within a period not exceeding seven years.

Most of the SERCs have confirmed compliance to the stipulation regarding speedy recovery of uncontrollable costs.

Some of the SERCs namely PSERC, JSERC and TSERC have confirmed compliance to the provision in Tariff Policy regarding Regulatory Assets .

- 6.6 Second proviso to para 8.5.1 of the Tariff Policy states that Appropriate Commission, in consultation with the Appropriate Government, shall exempt levy of CSS on the Railways on electricity purchased for its own consumption.

Only HPERC has confirmed compliance to the provision regarding exemption of CSS on the Railways.

MERC has informed that though they have not specifically exempted railways, however, Distribution Licensees are not imposing CSS as per order by CERC.

KSERC has issued draft Regulations for consultations.

- 6.7 Para 6.2 (1) of the Tariff Policy provides that for power stations under cost-plus tariff regime, procurer shall requisition power 24 hours ahead of the day of operation. The un-requisitioned power can be sold by the generator in the market and gains would be shared 50:50 between generator and procurer. This provision is meant to ensure better utilization of un-requisitioned capacity. In order to implement this provision, CERC had proposed certain amendments in the IEGC, including carrying out scheduling exercise on two day ahead basis instead of on day-ahead basis at present. CERC is yet to issue notification on the same.

Proposed amendments in IEGC for better utilization of un-requisitioned capacity are yet to be notified by CERC.

Format for submission of Feedback on implementation of Tariff Policy, 2016

S.No.	Clause No.	Content	Responsibility	Feedback Requested
1	5.2	All future requirement of power should continue to be procured competitively by distribution licensees except in cases of expansion of existing projects.	State Govts	Confirmation that all procurement of power is being done competitively.
2	5.2.9 (First Proviso)	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.	CERC, SERCs	Whether existing Regulations have suitable provisions. If not, status of amendment.
3	5.2 (2nd Proviso)	State Government can notify a policy to encourage investment in the State by allowing setting up of generating plants with maximum of 35% of Installed capacity to be procured by DISCOM of the state under Section 62 of the Act.	State Govts	Whether existing Policies have suitable provisions. If not, status of amendment.
4	5.3 (2nd para)	Intra-state transmission projects shall be developed by State Government through competitive bidding process for projects costing above a threshold limit.	State Govts	Confirmation that intra-state Transmission projects are developed through competitive bidding. Information about threshold limit specified.
5	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.	CERC	Status of Regulations.
6	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.	CERC, SERCs	Status of Regulations or amendment thereof.
7	5.11(a) - 2nd para	The Central Commission would notify, from time to time, the rate of return on equity for generation and transmission projects keeping in view the assessment of overall risk and the prevalent cost of capital which shall be followed by the SERCs also.	SERCs	Confirmation from SERCs that they are following the rates notified by CERC.
8	5.11(a) - 4th para	The State Commission may consider 'distribution and supply margin as basis for allowing returns in distribution business at an appropriate time. The State Commission may also consider price cap regulation based on comprehensive study.	SERCs	Confirmation that SERC have considered these approaches. Also information about approach finally adopted.
9	5.11(c)	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.	FOR, SERCs	Confirmation that FOR has evolved rate of depreciation for distribution. If yes, SERC to confirm that they are complying with it.
10	5.11 (c) - Proviso	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.	CERC, SERCs	Confirmation that the depreciation rates specified act as upper ceiling.

11	5.11(c)	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. 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.	State Govts	Confirmation that principles in the regard have been finalised.
12	5.11(d)	Structuring of debt, including its tenure, with a view to reducing the tariff should be encouraged. Savings in costs on account of subsequent restructuring of debt should be suitably incentivised by the Regulatory Commissions keeping in view the interests of the consumers.	CERC,SERCs	whether existing regulations encourage structuring of debt. If not, status of amendment.
13	5.11(f)	Suitable performance norms of operations together with incentives and disincentives would need to be evolved along with appropriate arrangement for sharing the gains of efficient operations with the consumers.	CERC,SERCs	Confirmation that regulations provide for such an arrangement. If not, status of amendment.
14	5.11(f)	The Central Commission would, in consultation with the Central Electricity Authority, notify operating norms from time to time for generation and transmission. The SERC would adopt these norms. In cases where operations have been much below the norms for many previous years, the SERCs may fix relaxed norms suitably and draw a transition path over the time for achieving the norms notified by the Central Commission, or phase them out in accordance with the norms specified by the Authority in this regard.	CERC, SERCs	Confirmation that such an arrangement exists.
15	5.11(f)	Operating norms for distribution networks would be notified by the concerned SERCs. For uniformity, the Forum of Regulators should evolve model guidelines taking into consideration the state specific distinctive features.	FOR, SERCs	FOR to confirm that guidelines have been evolved. If yes, SERCs to confirm compliance to these guidelines.
16	5.11(g)	A Multi-Year Tariff (MYT) framework may be prescribed which should also cover capital investments necessary for renovation and modernization and an incentive framework to share the benefits of efficiency improvement between the utilities and the beneficiaries with reference to revised and specific performance norms to be fixed by the Appropriate commission.	CERC,SERCs	Confirmation that existing Regulations have such provisions. If not, status of amendment.
17	5.11(h)(4)	Uncontrollable costs should be recovered speedily to ensure that future consumers are not burdened with past costs.	CERC, SERCs	Present status
18	5.11(h)(5)	Clear guidelines and regulations on information disclosure may be developed by the Regulatory Commissions. Section 62 (2) of the Act empowers the Appropriate Commission to require licensees to furnish separate details, as may be specified in respect of generation, transmission and distribution for determination of tariff.	CERC, SERCs	Status of relevant regulations.

19	6.2(1)	A two-part tariff structure should be adopted for all long-term and medium-term contracts to facilitate Merit Order dispatch. According to National Electricity Policy, the Availability Based Tariff (ABT) is also to be introduced at State level. This framework would be extended to generating stations. The Appropriate Commission shall introduce differential rates of fixed charges for peak and off peak hours for better management of load within a period of two years.	CERC,SERCs	Confirmation that two-part tariff is mandatory for long-term and medium terms contracts. SERCs to confirm that billing and payments in the state is being done based on ABT. CERC and SERCs to inform status on peak and off-peak tariffs.
20	6.2(5)	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.	CERC, SERCs	Information about generating stations, which have approached for recovery of costs associated with use of treated sewage water. Confirmation that suitable provision exists in the Regulations for inclusion of such costs in fixed charges.
21	6.3	The prices should be differentiated for peak and off-peak supply and the tariff should include variable cost of generation at actual levels and reasonable compensation for capacity charges. Wheeling charges and other terms and conditions for implementation should be determined in advance by the respective State Commission, duly ensuring that the charges are reasonable and fair.	SERCs	Whether arrangement stipulated in Tariff Policy for harnessing captive generation has been incorporated in the Regulations.
22	6.4(1)	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 renewable energy sources, taking into account availability of such resources and its impact on retail tariffs.	SERCs	Whether RPO has been fixed by SERC? If yes, what action is being taken in case of non-compliance?
23	6.4(1)(i)	SERCs shall also reserve a minimum percentage for purchase of solar energy from the date of notification 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.	SERCs	Whether separate Solar RPO and its trajectory for attaining level of 8% by 2022 has been prescribed?
24	6.4(1)(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.	State Govts	Confirmation that DISCOMs in the state are procuring 100% power produced from Waste-to-Energy plants.
25	6.4(1)(iv)	Appropriate Commission may also provide for a suitable regulatory framework for encouraging such other emerging renewable energy technologies by prescribing separate technology based REC multiplier. (i.e. granting higher or lower number of RECs to such emerging technologies for the same level of generation). Similarly, considering the change in prices of renewable energy technologies with passage of time, the Appropriate Commission may prescribe vintage based REC multiplier (i.e. granting higher or lower number of RECs for the same level of generation based on year of commissioning of plant).	CERC, SERCs	Action taken for prescribing technology based and vintage based REC multiplier.

26	6.4(2)	While determining the tariff from renewable energy 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.	CERC, SERCs	Confirmation that suitable provisions exist in Regulations to account for variation in wind intensity and solar radiation.
27	6.4 (5) Proviso	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.	CERC, SERCs	Status of Regulations in this regard.
28	6.4(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.	SERCs	Confirmation that regulatory framework has been put in place by SERC. If not, status thereof.
29	7.1(8)	CERC has specified Regulation on framework for the inter-State transmission. A similar approach should be implemented by SERCs for the intra-State transmission, duly considering factors like voltage, distance, direction and quantum of flow.	SERCs	Status of Regulations in this regard.
30	7.2(1)	Transactions are being charged on the basis of average losses arrived at after appropriately considering the distance and directional sensitivity, as applicable to relevant voltage level, on the transmission system. Based on the methodology laid down by the CERC in this regard for inter-state transmission, the SERCs may evolve a similar framework for intra-state transmission.	SERCs	Status of Regulations in this regard.
31	7.2(2)	The Appropriate Commission may require necessary studies to be conducted to establish the allowable level of system loss for the network configuration and the capital expenditure required to augment the transmission system and reduce system losses. Since additional flows above a level of line loading lead to significantly higher losses, CTU/STU should ensure upgrading of transmission systems to avoid the situations of overloading. The Appropriate Commission should permit adequate capital investments in new assets for upgrading the transmission system	CERC, SERCs	If studies have been carried out, details thereof. If studies are yet to be conducted, the time frame for completion of such studies.
32	7.3(1)	Financial incentives and disincentives should be implemented for the CTU and the STU around the Key Performance Indicators (KPI) for these organizations. Such KPIs would include efficient network construction, system availability and loss reduction.	CERC, SERCs	Whether such KPIs have been prescribed. If not, status of action being taken.
33	7.3(2)	All available information should be shared with intending users by the CTU/STU and the load dispatch centers, particularly information on available transmission capacity and load flow studies.	State Govts, CTU, NLDC, RLDCs	Status of information sharing. State Govts are requested to furnish information about STU and SLDCs.

34	7.3(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.	CERC	Whether Regulations have suitable provisions.
35	7.4 (1)	The Central Commission may introduce the norms and framework for ancillary services, including the method of sharing the charges, necessary to support the power system or grid operation for maintaining power quality, reliability and security of the grid.	CERC	Already done. However, further action being taken, if any, for extending the scope of ancillary services may be indicated.
36	7.4 (2)	The State Commission shall also adopt the norms and framework for ancillary services as specified by the Central Commission.	SERCs	Whether Regulations regarding Ancillary Services have been framed. If no, status thereof.
37	8	The State Commission should determine and notify the standards of performance of licensees with respect to quality, continuity and reliability of service for all consumers.	SERCs	Whether Standards of Performance have been notified. If yes, details of penalty imposed so far. If not, status of framing such standards.
38	8 (3rd Para)	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.	CERC,SERC	Whether any order has been issued or Regulations have been framed in the matter. If yes, status of its compliance. If no, status thereof.
39	8 (4th Para)	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.	SERCs	Whether such trajectory has been prescribed. If no, status thereof.
40	8 (5th para)	The Appropriate Commission shall notify necessary regulations in the regard of micro-grids within six months.	SERCs	Confirmation that such Regulations have been notified. If not, status thereof.
41	8.1(2)	The State Commissions should introduce mechanisms for sharing of excess profits and losses with the consumers as part of the overall MYT framework.	SERCs	Whether existing regulations have such provision. If not, status of amendment.
42	8.1(4)	Licensees may have the flexibility of charging lower tariffs than approved by the State Commission if competitive conditions require so without having a claim on additional revenue requirement on this account in accordance with Section 62 of the Act.	SERCs	Whether suitable provision exists in the regulation. If not, status of amendment.
43	8.1(7)	Appropriate Commissions should initiate tariff determination and regulatory scrutiny on a suo moto basis in case the licensee does not initiate filings in time. It is desirable that requisite tariff changes come into effect from the date of commencement of each financial year and any gap on account of delay in filing should be on account of licensee.	SERCs	Confirmation that all licensees had filed Tariff Petitions within prescribed time. If not, whether suo motu action was initiated.

44	8.2.1(2)	AT&C loss reduction should be incentivised by linking returns in a MYT framework to an achievable trajectory. The SERCs may also encourage suitable local area based incentive and disincentive scheme for the staff of the utilities linked to reduction in losses.	SERCs	Whether returns in MYT framework have been linked to achievement of AT&C loss reduction trajectory. If not, status of action taken. Action taken to encourage scheme for the staff.
45	8.2.1(3)	Section 65 of the Act provides that no direction of the State Government regarding grant of subsidy to consumers in the tariff determined by the State Commission shall be operative if the payment on account of subsidy as decided by the State Commission is not made to the utilities and the tariff fixed by the State Commission shall be applicable from the date of issue of orders by the Commission in this regard. The State Commissions should ensure compliance of this provision of law to ensure financial viability of the utilities. To ensure implementation of the provision of the law, the State Commission should determine the tariff initially, without considering the subsidy commitment by the State Government and subsidised tariff shall be arrived at thereafter considering the subsidy by the State Government for the respective categories of consumers.	SERCs	Whether this provision is being complied. If not action being taken to implement the same.
46	8.2.1(6)	The contingency reserves should be drawn upon with prior approval of the State Commission only in the event of contingency conditions specified through regulations by the State Commission. The existing practice of providing for development reserves and tariff and dividend control reserves should be discontinued	SERCs	Whether this provision is being complied. If not action being taken to implement the same.
47	8.2.1(7)	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.	CERC, SERCs	Whether this provision is being complied. If not action being taken to implement the same.
48	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.	SERCs	Whether this provision is being complied. If not action being taken to implement the same.
49	8.3(1)	Consumers below poverty line who consume below a specified level, as prescribed in the National Electricity Policy may receive a special support through cross subsidy. Tariffs for such designated group of consumers will be at least 50% of the average cost of supply.	State Govts, SERCs	Whether this provision is being complied. If not action being taken to implement the same.
50	8.3(2)	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.	SERCs	Has such roadmap been notified by SERC? If not status of action taken so far.

51	8.3(4)	The subsidized rates of electricity should be permitted only up to a pre-identified level of consumption beyond which tariffs reflecting efficient cost of service should be charged from consumers. If the State Government wants to reimburse even part of this cost of electricity to poor category of consumers the amount can be paid in cash or any other suitable way. Use of prepaid meters can also facilitate this transfer of subsidy to such consumers.	State Govts, SERCs	Has State Govt or SERC identified level of consumption up to which subsidized rates would be applicable? If yes, details thereof. How State Govt is reimbursing applicable subsidy? Are prepaid meters being used to facilitate transfer of subsidy to consumers?
52	8.4(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.	SERCs	status of implementation of two part tariff for large consumers. Target date for implementation of two part tariff for all consumers.
	8.4(2)	The National Electricity Policy states that existing PPAs with the generating companies would need to be suitably assigned to the successor distribution companies. The State Governments may make such assignments taking care of different load profiles of the distribution companies so that retail tariffs are uniform in the State for different categories of consumers. Thereafter, the retail tariffs would reflect the relative efficiency of distribution companies in procuring power at competitive costs, controlling theft and reducing other distribution losses.	State Govts, SERCs	Whether this provision is being complied. If not action being taken to implement the same.
53	8.4(3)	The Appropriate Commission may provide incentives to encourage metering and billing based on metered tariffs, particularly for consumer categories that are presently unmetered to a large extent. 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.	SERCs	Whether this provision is being complied. If not action being taken to implement the same.
54	8.4(3)	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.	SERCs	Whether Smart meters for energy audit been placed in distribution system as per provision of Tariff Policy. Have SERCs mandated distribution SCADA? Status of implementation of distribution SCADA by DISCOMs.
55	8.5.1	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.	SERCs	Whether this provision is being complied. If not action being taken to implement the same.
56	8.5.1 (1st proviso)	The surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access.	SERCs	Whether this provision is being complied. If not action being taken to implement the same.

57	8.5.1 (2nd proviso)	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.	SERCs	Whether this provision is being complied. If not action being taken to implement the same.
58	8.5.6	In case of outages of generator supplying to a consumer on open access, standby arrangements should be provided by the licensee on the payment of tariff for temporary connection to that consumer category as specified by the Appropriate Commission. Provided that such charges shall not be more than 125 percent of the normal tariff of that category.	SERCs	Confirmation that presently notified standby charges are in conformity with this provision of Tariff Policy. If not, action being taken to implement the same.

Annexure II

The entities who have submitted the information regarding the status of implementation of provisions of revised Tariff Policy, 2016

State Electricity Regulatory Commissions	State Govt./Discoms
1. Jammu & Kashmir Electricity Regulatory Commission	1. Government of Kerala
2. Himachal Pradesh Electricity Reg. Commission	2. Gujarat Urja Vikas Nigam Ltd.
3. Haryana Electricity Regulatory Commission	3. Andaman & Nicobar Electricity Department
4. Punjab State Electricity Regulatory Commission	4. Chandigarh Electricity Department
5. Uttar Pradesh Electricity Regulatory Commission	5. Punjab State Power Corporation Ltd.
6. Uttarakhand Electricity Regulatory Commission	6. Government of NCT of Delhi
7. Rajasthan Electricity Regulatory Commission	
8. Jharkhand State Electricity Regulatory Commission	
9. Maharashtra Electricity Regulatory Commission	
10. Chhattisgarh State Electricity Regulatory Commission	
11. West Bengal Electricity Regulatory Commission	
12. Bihar Electricity Regulatory Commission	
13. Telangana State Electricity Regulatory Commission	
14. Joint Electricity Regulatory Commission (for the state of Goa and Union Territories)	
15. Joint Electricity Regulatory Commission (for the states of Manipur and Mizoram)	
16. Karnataka Electricity Regulatory Commission	
17. Delhi Electricity Regulatory Commission	