# **APPENDIX I**

# **QUESTIONNAIRE**

# **Electricity Industry Structure (04 questions)**

- 1. All generating companies should mandatorily sell a part of their generation through the wholesale market for deepening the OA to consumers in the country:
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree
- 2. Onset of OA acted as a major fall out on the retail market negatively impacting the supply costs to the low income consumers:
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree
- 3. Although introduction of competition in retail supply of electricity will result in efficiency gains in supply sector and stabilizing of distribution costs, it will also result in cherry picking of high value consumers by the licensees thereby leaving the low income consumers with Government supply licensees:-
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree

- 4. State Load Dispatch Centre (SLDC) must be made independent in decisions pertaining to monitoring and reducing transmission losses:-
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree

# **Electricity Distribution (04 questions)**

- 5. Distribution companies do not want to overwhelmingly support OA due to anticipated losses in cross subsidy and excessive control by State Governments:-
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree
- 6. Do you think the Franchisee Model of Distribution can actually help to reduce T&D losses in other states, like it did in Bhiwandi, Maharashtra through providing better billing facilities coupled with lower transaction costs:
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree

- 7. Partial OA is the immediate step to be taken in those states where the distribution companies are running exceptionally high losses, thereby incentivizing them to not only supply certain amount of the power to OA consumers under market determined prices but also selling power through the contracts with the distribution company under a regulated tariff:
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree
- 8. Non-payment of subsidies by the Government has been one of the biggest reasons for mounting financial losses of distribution utilities:
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree

# OA (22 questions)

- 9. The cross subsidy surcharges as specified by the appropriate commission are adequate to mitigate the losses projected to be incurred by the distribution companies on account of migration of high value consumers to the fold of OA:
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree

- 10. Adequate measures have been initiated in the proposed amendments to the Electricity Act, 2003 for encouraging OA:
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree
- 11. Prices under OA have been higher for the consumers in comparison to regulated tariff, in quite a few states, which has proved to be an impediment to its implementation:
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree
- 12. High cross subsidies and high AT&C losses are the primary impediments for successful implementation of OA
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree
- 13. Provisions contained in Section 11 of the Electricity Act, 2003 are indiscriminately used by various State Governments against providing the OA to consumers:
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree

- 14. State Electricity Regulatory Commission (SERC) provided adequate regulatory support for OA through notification of regulations:
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree
- 15. Treatment of all consumers with a load of 1MW and above has not yielded any significant impact on total transaction under OA:
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree
- 16. In continuation to the earlier direction for treatment of consumers with a load of 1 MW as OA consumers, further directions should be given by the Government to the Regulators for introduction of OA to the consumers below 1 MW load, gradually in phases
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree
- 17. Further tightening of cross subsidy bandwidth from the present +/- 20% will actually further help OA:
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree

- Strongly disagree
- 18. Lack of specific time line in for elimination of cross subsidies has proved detrimental for success of OA:
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree
- 19. Prices under OA (i.e. high cross subsidy surcharges, applicable wheeling charges) have not been competitive for the consumers in comparison to regulated tariff:-
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree
- 20. The distribution licensee cannot stop an OA consumer who wants to continue the relationship with the licensee by payment of prescribed charge in view of licensee's universal supply obligation:-
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree
- 21. Lack of sufficient transmission capacity is leading to generation capacities getting stranded and thereby restricting the OA
  - Strongly agree
  - Agree
  - Indifferent

- Disagree
- Strongly disagree
- 22. Lack of specific timeline for elimination of cross-subsidies is forcing the OA consumers to continue to source power through distribution licensees
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree
- 23. Captive generation is the most expensive alternative available for OA consumers
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree
- 24. Separation of network business and supply business from the existing structure, would directly facilitate OA consumers as network provider will be impartial towards them.
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree
- 25. Introduction of competition in retail sale of electricity facilitate separation of technical and commercial losses leads to focused efforts on reduction of losses.
  - Strongly agree
  - Agree
  - Indifferent

- Disagree
- Strongly disagree
- 26. Introduction of competition in retail sale of electricity would bring the electricity prices down and OA consumers find it economical to tie up with a supplier.
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree
- 27. Intra state transmission has not been as progressive as inter-state transmission:
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree
- 28. Rationalization of cross subsidy surcharges through amendments to the Electricity Act and Tariff Policy needs to be carried out to facilitate the consumers to choose from "OA", "Captive Generation" or "to continue with distribution licensee".
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree

- 29. Although distribution companies are reluctant to allow OA citing operational constraints, OA can actually ensure reliable supply of power:
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree
- 30. The imposition of Standby Charges to make Standby arrangements in cases of outages of generator supplying to OA customer under OA is justified:
  - Strongly agree
  - Agree
  - Indifferent
  - Disagree
  - Strongly disagree

Sample size – 120, (500 questionnaires were sent)

# **APPENDIX II**

# **OPINION SURVEY**

Opinion Survey employing Delphi Technique – Three rounds of discussion with the domain experts were carried out. First round, consisted of unstructured discussion, question answer session with individual members. Then a set of questions was framed to be used for circulation in Second round any individual responses obtained anonymously. Second round comprised of 06 questions framed on the basis of experience gained in first round. Similarities and dissimilarities were brought forth, unification of opinion lead to framing of a suggestive mechanism. These 06 questions were as under:-

# **Second Round:-**

Question-01 What according to you are the key factors affecting the distribution sector?

Question-02 OA in distribution has not become a reality'. Do you agree? What according to you are the reasons for this?

Question-03 Is it technically possible to implement OA for those consumers who consume a load less than 1 MW? How do you think this will help in promoting a retail power market?

Question-04 What do you think can be the solution to the pan caking of transmission charges under OA? And how helpful do you think cross subsidy surcharges are in addressing the financial health of Distribution Companies?

Question-05 Do you think a national plan for implementation of rationalization of tariff will help in ensuring a cost reflective tariff and thereby reduce consumer subsidy at a national level. If yes, what do you think would be the impact of such a plan on the financial health of the distribution companies?

Question-06 Do you think separation of carriage and content will enable OA in the real sense of the term? What other alternatives do you suggest for making open access a reality?

Third Round:- In the final round questions were refined based on high level inputs obtained from domain experts and the final questions were as under:-

- **Q.-01** What according to you are the key factors affecting the distribution sector?
- **Q-02** 'OA in distribution has not become a reality'. Do you agree? What according to you are the reasons for this?
- **Q-03** Is it technically possible to implement OA for those consumers who consume a load less than 1 MW? How to eliminate such difficulties, in order to help in promoting the retail power market?
- **Q-04** Do you agree that independence of SLDC is key to making OA a success? What should be done to ring fence SLDC?
- **Q-05** How should various OA charges, especially CSS be determined so as to balance the interests of the discoms while at the same time guaranteeing OA to consumers?

**Q-06** Do you think separation of carriage and content will enable OA in the real sense of the term? What other alternatives do you suggest for making OA a reality?

# **APPENDIX III**

# MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

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Maharashtra Electricity Regulatory Commission (Distribution Open Access) Regulations, 2016

&

Maharashtra Electricity Regulatory Commission (Transmission Open Access) Regulations, 2016

### STATEMENT OF REASONS

**Dated: 30 March, 2016** 

# Introduction

After the coming into force of the Electricity Act, 2003, which envisaged Open Access, the Maharashtra Electricity Regulatory Commission ('MERC' or 'the Commission') published its Distribution and Transmission Open Access Regulations in 2004, which were followed by new Regulations in 2005 and thereafter by the MERC (Distribution Open Access (DOA)) Regulations, 2014and the MERC (Transmission Open Access (TOA)) Regulations, 2014.

Following the notification of the DOA and TOA Regulations, 2014 in June, 2014, the Commission received several representations regarding some of their provisions, and the Commission also considered a review to be necessary. Accordingly, the Commission published the draft DOA Regulations, 2015 and TOA Regulations, 2015 on its websites and sought suggestions and objections through a Public Notice (in Marathi and English) in daily newspapers on 16 September, 2015 and 24 September, 2015, respectively, by 8 October, and 16 October, 2015. 91 entities have responded to the Notice.

The main issues raised during the public consultation process, and the Commission's analysis and decisions on them which underlie the Regulations as finally notified are set out below.

- 1. Regulation: Eligibility to seek Open Access
- (a) Contract Demand
- 1.1. DOA Regulations, 2014
- "3.1 Subject to the provisions of these Regulations, a consumer having Contract Demand of 1 MW and above and where the minimum power to be made available for Open Access at any time is 1 MW and above, shall be eligible for seeking Open Access to the distribution system of such Distribution Licensee for obtaining supply of electricity from a Generating Company or Captive Power Plant or from a Licensee other than such Distribution Licensee or through the Power Exchange."

### 1.2. Proposed in Draft DOA Regulations

- "3.1. Subject to the provisions of these Regulations, a Consumer having Contract Demand of 500 kW and above with a particular Distribution Licensee shall be eligible for Open Access for obtaining supply of electricity from one or more
- a) Generating Plants or Stations, including Captive Generating Plants;
- b) Trading Licensees

- c) Power Exchanges
- d) Other Distribution Licensees
- e) any other Sources or a combination thereof, and all collectively called 'Sources'.

Illustration — Say a Consumer having a Contract Demand of 500 kW can source power through Open Access as explained below: Full Open Access

Case - 1: From a single Source supplying entire 500 kW;Case - 2: From multiple Sources totaling 500 kW."

#### 1.3. Comments received

- a) Minimum eligibility limit of 500 KW should be reduced to 250 KW or 200 KW, and 100 KW for Housing Societies.
- b) Distribution Licensee stated that reducing the minimum eligibility limit to 500 KW would result in many more Consumers becoming eligible for Open Access, making it much more complex and difficult to handle their energy accounting. In that case, separate charges should also be allowed to be levied rather than be loaded on other Consumers through tariff. In fact, a path should be provided for cost reflective fixed tariffs to compensate for the capacity charge/ fixed charge of power purchase as Consumers would like to maintain their Contract Demand and Distribution Licensees will have to pay commensurate fixed charges to power suppliers.
- c) Some Consumers suggested that there should not be any limit to opt for Open Access from Renewable Energy (RE) sources.

# 1.4. Analysis and Commission's Decision

The Commission had envisaged reducing the eligible Contract Demand for Open Access to 500 kW to widen the choice available to Consumers and expand the Open Access market. However, to address the concerns of the Distribution Licensees, the Commission has decided to retain the long-standing eligibility requirement of 1 MW.

### 1.5. Provision in final DOA Regulations, 2016

The earlier minimum eligibility limit of 1 MW has been retained.

(b) Power procurement from multiple Sources

# 1.6. DOA Regulations, 2014

"3.1 Subject to the provisions of these Regulations, a consumer having contract demand of 1 MW and above and where the minimum power to be made available for Open Access at any time is 1 MW and above, shall be eligible for seeking Open Access to the distribution system of such Distribution Licensee for obtaining supply of electricity from Generating Company or Captive Power Plant or from a Licensee other than such Distribution Licensee or through the Power Exchange"

### 1.7. Proposed in Draft DOA Regulations

- "3.1. Subject to the provisions of these Regulations, a Consumer having Contract Demand of 500 kW and above with a particular Distribution Licensee shall be eligible for Open Access for obtaining supply of electricity from one or more
- a) Generating Plants or Stations, including Captive Generating Plants;
- b) Trading Licensees
- c) Power Exchanges
- d) Other Distribution Licensees
- e) Any other Sources

or a combination thereof, and all collectively called 'Sources'."

#### 1.8. Comments received

- a) Distribution Licensee submitted that handling transactions of several Open Access Consumers from multiple sources will create many operational difficulties in its monthly billing
- b) Some others welcomed the option to purchase power from Multiple Sources

1.9. Analysis and Commission's Decision

The Commission has decided to allow Open Access from multiple sources as

was the case in the Regulations of 2004 and 2005, considering also that the

concerns of Distribution Licensees can be addressed through upgrading the

billing software.

1.10. Provision in final DOA Regulations, 2016

"3.2. Subject to the provisions of these Regulations, a Consumer having

Contract Demand of 1 MW and above with a Distribution Licensee shall be

eligible for Open Access for obtaining supply of electricity from one or more

a) Generating Plants or Stations, including Captive Generating Plants;b)

**Trading Licensees** 

c) Power Exchanges

d) Other Distribution Licensees

e) any other sources,

or a combination thereof, and all collectively called 'Sources':"

2. Regulation: Banking of RE Generation

2.1. DOA Regulations, 2014

Banking was not allowed.

2.2. Proposed in Draft DOA Regulations

"24.4. Banking of energy shall be permitted during all twelve months of the

year:

Provided that the credit for banked energy shall not be permitted during the

months of October, November and March, and the credit for energy banked in

other months shall be as per the energy injected in respective TOD slots

determined by the Commission in the relevant Orders determining the Tariffs

of the Distribution Licensees;

Provided further that the energy banked during peak TOD slots may also be drawn during off-peak TOD slots, but the energy banked during off-peak TOD slots may not be drawn during peak TOD slots."

- "24.5. Banking charges shall be adjusted in kind @ 2% of the energy delivered at the point of drawal."
- "24.6. The unutilized banked energy at the end of the financial year shall be considered as deemed purchase by the Distribution Licensee at its Pooled Cost of Power Purchase for that year."

### 2.3. Comments received

- a) Drawal from bank should be available throughout the year.b) Drawal from bank in other Time of Day (TOD) slots may be allowed with higher Banking charges.
- c) Distribution Licensee stated that Banking should not be allowed. Instead of Banking, as in Gujarat, the settlement should be on a monthly basis at the tariff determined by the Commission. If Banking is allowed, it should not be allowed in July as it will affect the financial viability of the Licensee as the Consumer will use the energy during peak months. The Distribution Licensee has to pay fixed charges to the Generators with whom it has Power Purchase Agreements (PPA) even after backing down their Units down due to injection by RE Generators.
- d) Small Hydro Power Plants (SHPs) should be exempted from restriction on Banking in the months proposed in draft Regulation 24.4.
- e) Restriction on Banking may be removed for RE Generators.
- f) Mandatory time-lines should be provided in the Regulations for Distribution Licensees to give credit for RE.
- g) With reference to draft Regulation 24.5,
- Distribution Licensee proposed 10% Banking charges
- Clarity on banking charges was sought

- h) With reference to Regulation 24.6,
- Annual settlement was suggested within 30 days by some, and 60 days by others
- Surplus power should not be eligible for claiming RPO to Distribution Licensee and Generator should be free to claim REC
- Compensation for unutilized banked energy should be 85% of Feed-in Tariff (FIT) as in other States.
- Compensation for unutilized banked energy should be at the lowest TOD slab price.
- Clarity may be provided on banking restrictionsDistribution Licensee cannot claim power purchased at Average Pooled Purchase Cost (APPC) rate against Renewable Purchase Obligation (RPO) as it is not allowed in the current MERC RPO Regulations
- No Banking facility should be provided. Else, unutilized banked energy may be limited to 10% and be charged at the variable cost of power purchase.
- A Mumbai Licensee suggested that banked power should not be allowed to be used in April, May, June and October. Moreover, most RE Generators are registered under the Renewable Energy Certificate (REC) framework and, once registered, the energy loses its green attributes and energy purchase from such source cannot be termed as being from a RE source. It suggested that excess energy injected should not be compensated by a Distribution Licensee
- Distribution Licensee has to use the over-injected units of Wind Generators without contracting for it, while it also has to pay fixed charges to its conventional Generators with whom it has long term PPAs. If the Open Access Consumer takes power during peak months, then the Distribution Licensee has to purchase excess expensive power from the market and provide it to them. However, these Consumers do not pay any additional costs to the Licensee due to banked energy, and other Consumers have to bear this cost of additional power purchase in their tariff. Banking should be only for 1 month and only for self-consumption. Banking should not be allowed in July, when

the Distribution Licensee's demand is much lower and wind energy fluctuates a great deal in that month, leading to penalty under the Central Electricity Regulatory Commission (CERC)'s Deviation Settlement Mechanism (DSM) Regulations.

# 2.4. Analysis and Commission's Decision

The position of banking facility in some of the major States is set out in the Table below:

	No Banking	Monthly Banking	Seasonal Banking	Yearly Banking		
States	Gujarat for third party sale	Gujarat for captive consumption     Rajasthan     TN and Karnataka for RECprojects		Karnataka and TN for 1		
Treatment	Settled on real time basis	Excess units injected can be drawn any day within the same month as per TOD slots	Excess units injected during peak wind season cannot be drawn during peak demand season. Additionally, it may not be allowed during peak TOD slots.	Excess units injected can be drawn any day within the same FY as per TOD slots		
TOD slots	Treatment (drawal allowed) for excess energy injected during following time slots  Night off-peak (22 hrs – 06 hrs): Only same timeblock  Off-peak (06 hrs – 09 hrs& 12 hrs – 18 hrs): Same time block and nightoff-peak  Morning peak (09 hrs – 12 hrs): Same time block, off-peak and nightoff-peak  Evening peak (18 hrs – 22 hrs): Same time block, off-peak and nightoff-peak					

The following Table shows the Banking Charges in some of the major States:

	TN	AP	Karnataka	Gujarat	MP	Rajasthan
Charges	Difference between FIT and short term	2%	2%	No charges	2%	2%
Buy back	APPC	APPC	APPC	REC projects:	APP C	60% of HT
Rate for excess power				APPC rate  Non REC projects: 85% of FIT		Industrial energy tariff. Upto 10% of unutilized banked
Surplus power used to meet RPO	No	No	No	No	No	No

The Commission has considered the responses received and has sought to balance the interests of promoting RE and those of DistributionLicensees.

The Commission has also analyzed the trend of demand in Maharashtra for 2015 and 2016 so as to identify peak demand months (based on the monthly System Performance Report of the Maharashtra State Load Despatch Centre (MSLDC)).

The demand analysis shows the following:

Month	Demand		% of peak demand		
	2015	2016	2015	2016	Average
March	19526	20204	94%	94%	94%
April	20534	20204	99%	94%	97%
May	20124	20367	97%	95%	96%
June	19584	19828	94%	93%	93%
July	19345	20141	93%	94%	94%
August	18287	18982	88%	89%	88%
September	20785	19681	100%	92%	96%

October	20795	21414	100%	100%	100%
November	20490	20760	99%	97%	98%
December	19262	19554	93%	91%	92%
January	18967	18647	91%	87%	89%
February	19675	19458	95%	91%	93%



It is seen that the maximum demand is in the months of April, May, October and November. The Commission has decided to re-introduce the provision of Banking for RE Generators, which had been restricted in the DOA Regulations, 2014. Energy generation less consumption in each TOD slot shall be banked, and this banked energy can be utilized as per Regulation 24.4. However, since April, May, October and November are peak demand months for Maharashtra and Licensees have to purchase additional power to meet their peak demand during these months, drawal of banked energy will not be allowed during these months. Banking charges will be 2% of the energy banked.

As regards the surplus power that is to be purchased by the Distribution Licensee, the Commission has decided to restrict the quantum amount of surplus power purchase to 10% of the annual generation of the RE Generator (as was allowed prior to the DOA Regulations, 2014). This will limit any adverse financial impact on the Distribution Licensees and require greater discipline by RE Generators.

Further, since it will be difficult for Distribution Licensees to account the surplus RE in its annual renewable purchase planning to meet their RPO, RE

Generators will be allowed to claim REC benefits on this power and Distribution Licensees will not be able to consider this power purchased against their RPO.

2.5. Provision in final DOA Regulations, 2016

"20.4. Banking of energy shall be permitted during all twelve months of the year:

Provided that the credit for banked energy shall not be permitted during the months of April, May, October and November, and the credit for energy banked in other months shall be as per the energy injected in the respective Time of Day ('TOD') slots determined by the Commission in its Orders determining the Tariffs of the Distribution Licensees;

Provided further that the energy banked during peak TOD slots may also be drawn during off-peak TOD slots, but the energy banked during off-peak TOD slots may not be drawn during peak TOD slots.

Illustration: Energy banked during:

• Night off-peak TOD slot (2200 hrs – 0600 hrs) may only be drawn in the same TOD slotOff-peak TOD slot (0600 hrs – 0900 hrs& 1200 hrs – 1800 hrs) may be drawn in the same TOD slot and also during Night off-peak TOD slot

(However, the energy banked during night off peak and off peak shall not be drawn during morning peak and evening peak)

- Morning peak TOD slot (0900 hrs 1200 hrs) may be drawn in the same TOD slot and also during Off-peak and Night off-peak TOD slots
- Evening peak TOD slot (1800 hrs 2200 hrs) may be drawn in the same TOD slot and also during Off-peak and Night off-peak TOD slots
- 20.5. Banking charges shall be adjusted in kind @ 2% of the energy banked.
- 20.6. The unutilised banked energy at the end of the financial year, limited to 10% of the actual total generation by such Renewable Energy generator in

such financial year, shall be considered as deemed purchase by the Distribution Licensee at its Pooled Cost of Power Purchase for that year:

Provided that such deemed purchase shall not be counted towards the Renewable Purchase Obligation of the Distribution Licensee, and the Generating Station would be entitled to Renewable Energy Certificates to that extent." 3. Regulation: Compulsory Revision/reduction in Contract Demand

# 3.1. DOA Regulations, 2014

# "4.2 Reduction of Contract Demand

4.2.1. Where a consumer eligible under Regulation 3.1, applies for Long-term or Medium-term or Short-term Open Access to the distribution system of a Distribution Licensee so as to obtain supply from a Generating Company or a Licensee or through Power Exchange, the Distribution Licensee (on whose Distribution System the access is being sought) shall reduce the Contract Demand/sanctioned load of the consumer to the extent of quantum of electricity sought to be transferred through Open Access.

Provided that where a consumer of the Distribution Licensee, who is eligible under Regulation 3.1, applies for Long-term or Medium-term or short-term Open Access to the distribution system so as to obtain supply from a Renewable Energy generating plant identified as 'Non firm power' under MERC (Terms and conditions for determination of RE Tariff) Regulations, 2010, as amended from time to time, the Distribution Licensee shall reduce the Contract Demand/sanctioned load to the extent of Capacity Utilization Factor (CUF) (approved by the Commission in latest Renewable Energy Tariff Order) of the installed capacity of Non-firm Renewable Energy Generator. For example, Installed capacity of Wind Energy Generator is 100 MW and approved CUF is say 23%, then the extent of reduction in Contract Demand shall be 23 MW and applicable transmission and wheeling losses shall be deducted from 23 MW to compute the net reduction of Contract Demand at the consumption end."

# 3.2. Proposed in Draft DOA Regulations

"4.2 The Contract Demand of a Consumer availing LTOA [Long-term Open Access] or MTOA [Medium-term Open Access] shall be governed by the provisions of the Electricity Supply Code and the Regulations of the Commission governing Standards of Performance: Provided that a Consumer availing STOA shall not be eligible to revise his Contract Demand with the Distribution Licensee during the tenure of the STOA."

### 3.3. Comments received

- a) Revision of Contract Demand may be allowed within 3 days in Short-term Open Access (STOA)
- b) Add clarification that Contract Demand may be as mutually agreed
- c) Contract Demand should not have to be reduced so that Distribution Licensee always acts as a back-up
- d) There should be an option for change in Contract Demand for STOA.

  Original Contract Demand after expiry of tenure of STOA may be restored automatically
- e) Clarification is needed that reduced Contract Demand of existing OA Consumers will be restored after the end of Open Access tenure
- f) Contract Demand should be reduced to the extent of STOA sanctioned
- g) It should clarified that, as per the Electricity Supply Code (ESC) and Standards of Performance (SOP) Regulations, the reduction of Contract Demand is at the discretion of the Consumer.
- h) The earlier provisions should be retained in order to avoid gaming by Open Access Consumers. Necessary metering protocol, energy accounting and settlement procedures must be prerequisite for Open Access transactions. If a Consumer has applied for Open Access, the Distribution Licensee may be allowed to initiate the reassessment and reinstatement / reduction of Contract Demand. This will help the Distribution Licensee to assess the right energy

requirement. The Distribution Licensee may accordingly surrender the surplus power tie-ups under its long-term arrangements and thus reduce the power purchase cost to its remaining Consumers.

i) Contract Demand should be mandatorily reduced for conventional Open Access, but may be exempted for Consumers purchasing power from non-firm sources. Contract Demand reduction should be mandatory for drawal discipline by the Consumers which can avail stand-by supply to meet forced outage requirements. 3.4. Analysis and Commission's Decision

The Commission has studied the various suggestions received and provided Consumers the freedom to choose its Contract Demand. If the Consumer chooses to reduce his Contract Demand, then any consumption beyond Open Access generation which is in excess of his Contract Demand will be charged at temporary tariff. However, if such excess consumption is within his Contract Demand then he shall be charged at the tariff applicable to the respective tariff category.

It is also clarified that STOA Consumers will be allowed for Contract Demand reduction only during application of Open Access.

3.5. Provision in final DOA Regulations, 2016

### "4.2. Revision of Contract Demand

The Contract Demand of a Consumer availing LTOA or MTOA shall be governed by the provisions of the Electricity Supply Code and the Regulations of the Commission governing Standards of Performance:

Provided that a Consumer availing STOA shall not be eligible to revise his Contract Demand with the Distribution Licensee during the tenure of the STOA, but may do so at the time of applying for Open Access."

4. Regulation: Scheduling, Metering, Revision and Losses

# 4.1. DOA Regulations, 2014

"23.1 In case of Open Access consumer and all generating stations irrespective of their capacity, Special Energy Meters shall be installed by the Distribution Licensee, for and at the cost of the consumer

Provided that such meters may be procured from the Distribution Licensee or from any supplier duly approved by the Distribution Licensee in accordance with specification made in compliance with Central Electricity Authority (Installation and Operation of Meters) Regulation, 2006 and its amendment from time to time...23.12 An Open Access consumer shall have the facilities of telephone/mobile, fax and email. The details of their communication systems shall be provided to the Distribution Licensee and / or SLDC."

# 4.2. Proposed in Draft DOA Regulations

20.2. Intra-State Open Access transactions in respect of full Open Access Consumers and all Generating Stations, irrespective of their capacity, shall be scheduled by MSLDC in accordance with the provisions of the State Grid Code...

21.1. Special Energy Meters ('SEM's) with automated meter reading ('AMR') facilities with at least two communication ports shall be installed by the Distribution Licensee in the case of an Open Access Consumers and Generating Station, irrespective of its capacity, at the cost of such Consumers or Generating Company, as the case may be:

Provided that the Open Access Consumer shall establish and operate a suitable communication channel for exchange of meter data at all times during the period of Open Access...

21.3. All Consumers, Generating Stations or Licensees, as the case may be availing Open Access should install AMR facilities with at least two communication ports within 180 days of publication of this Regulation."

### 4.3. Comments received

- a) It should be clarified that only full Open Access Consumers and Generating Stations connected to Transmission System shall be scheduled by MSLDC, and other Consumers and Generating Stations connected to the Distribution System shall continue to submit their schedule to the Distribution Licensee.
- b) RE Generators be requested to submit their actual previous day's generation as expected generation daily. Further, there should be a penalty for not submitting the schedule on time.
- c) As the metering system of the Consumer is owned / controlled by the Distribution Licensee, it should install the metering system required by a Consumer. d) Since RE projects are at remote locations, AMR metering should be done by Maharashtra Energy Development Agency (MEDA) or Distribution Licensee at cost of RE Generator.
- e) AMR need not be made mandatory for wind power plants as it would entail additional cost and, since most plants are in remote locations where wireless and cable communications are not available, its continuous operation is affected.
- f) There should be a common platform for data collection, metering and energy accounting, hence installation and operation of communication channel should be done by Distribution Licensee at the cost of Consumer.
- g) If Distribution Licensee fails to test and install SEM within 60 days from request, the Distribution Licensee should grant Open Access permission or credit for RE from the date on which Open Access application was submitted even without SEM.
- h) Some comments were received about how data captured by meters should flow to Distribution Licensee and MSDCL, and that the Consumer should have access to this data.
- 4.4. Analysis and Commission's Decision The Commission has made changes to some provisions. To clarify that it is optional for the Consumer to purchase SEM from Distribution Licensee, Regulation 17.1 has been redrafted. After

assessing the readiness of Distribution Licensees to monitor such meter data and the difficulties faced by Consumers in maintaining the AMR communication lines, Regulations 17.1 and 17.2 have been redrafted

To provide more time for existing Consumers to install Remote Terminal Units (RTUs), the period has been increased to from 30 days to within 6 months of the notification of the Regulations. To facilitate the Distribution Licensee to establish a communication interface in the future, the Commission has added a provision. Some of the other suggestions are governed by other Regulations. 4.5. Provision in final DOA Regulations, 2016 "17.1. All Open Access Consumers and Generating Stations shall install Special Energy Meters ('SEM's): Provided that any existing or prospective Consumer who has not sought Open Access but desiring it shall have the option to install such SEM at his premises. 17.2. Such Consumers or Generating Stations may procure the required SEM from any supplier in accordance with the standards and specifications stipulated in the Regulations of the Central Electricity Authority governing the installation and operation of meters. 17.3. The Consumer or Generating Station may also procure the required SEM from the Distribution Licensee; Provided that, upon receipt of such request, the Distribution Licensee shall communicate the lead time for its procurement of such SEM in case it is not available with it so as to enable the Consumer or Generating Station to finalise its option for purchase: Provided further that, if the Consumer or Generating Station chooses to purchase the SEM from it, the Distribution Licensee may require the payment of an advance not exceeding its price. 17.4. The Distribution Licensee shall test and install such SEM within sixty days from the receipt of a request from the Consumer or Generating Station, as the case may be. 17.5. The Distribution Licensee shall be responsible for reading the SEM at least once in every month: Provided that the authorized representative of the Consumer, Generating Station or Licensee, as the case may be, shall be entitled to be present at the time of meter reading. 17.6. The SEM along with associated equipment shall be available for inspection by the Distribution Licensee at any time. 17.7. The metering points for provision of Open Access for the Consumer, Generating

Station or Licensee, as the case may be, shall comply with the provisions of the State Grid Code. 17.8. All Full Open Access Consumers and Generating Stations connected to the Transmission System shall install, at their cost, Remote Terminal Units (RTU)-DC within six months from the notification of these Regulations, in accordance with specifications provided by the STU; and the MSLDC shall verify their installation for real-time monitoring: Provided that the installed RTU-DCs shall be available for inspection by the Distribution Licensee or the MSLDC at any time: Provided further that such Full Open Access Consumers and Generating Stations connected to Transmission Systems shall provide for or bear the cost of communication arrangements, the technical specifications of which shall be stipulated by the Distribution Licensee and/or MSLDC, for the purpose of real-time communication. 17.9. The Distribution Licensee to whom the Consumer, Generating Station or Licensee is connected shall be responsible for providing the energy meter data to the MSLDC for the purpose of energy accounting. 17.10. If the Distribution Licensee establishes a distribution control centre similar to MSLDC, it may install communication and metering infrastructure at its own cost."

5. Regulation: Day-Ahead Open Access

### 5.1. DOA Regulations, 2014

"Provided that power procurement through Power Exchange shall be permissible only on week-ahead basis or higher denomination of days and not on Day-Ahead basis

# 5.2. Proposed in Draft DOA Regulations

### "11.3 Day-Ahead Open Access

Day-Ahead Open Access of Distribution System(s) shall be permitted if surplus capacity is available in the concerned Distribution Licensee's system. 11.4. The Application for grant of Day-Ahead Open Access shall be made to the Nodal Agency between three days prior to the date of scheduling and 10:00 Hours of the day immediately preceding the date of scheduling of the

transaction, and all such Applications shall be treated as having being received at the same time and shall have same priority.

Illustration: An Application for Day-Ahead transaction on 15th August shall be received only between 13th August and 10:00 hours of 14th August.

11.5. The Nodal Agency shall check for congestion and convey grant of approval or otherwise in the format provided in Annexure III [Format-ST2] as provided Regulation 11.2 by 12:00 Hours of the day immediately preceding the date of scheduling of the transaction."

# 5.3. Comments received

- a) Distribution Licensee submitted that Day-Ahead Open Access opens up avenues for gaming by Consumers, based on market rates Consumers buy during low rate period like night time/ weekends and purchase from Licensee when the market rates are high during peak hours. Due to this, Distribution Licensee has to purchase power during peak hours and will be surplus whenever the rates are low. This disturbs the power planning and cost implications will be passed on to other Consumers of Distribution Licensee. Hence, Day-Ahead Open Access should not be allowed.
- b) Provide online data on capacity available in the Distribution System
- c) Deemed Open Access should be provided for Day-Ahead Open Access
- d) Day-Ahead Open Access applications should be allowed to be submitted by 12:00 hrs
- e) Contingency Day-Ahead Open Access should be allowed after 12:00 hrs to meet any emergency requirements

# 5.4. Analysis and Commission's Decision

The Commission has decided to reintroduce the provision of Day-Ahead Open Access (as was allowed prior to the DOA Regulations 2014) as it provides a platform for meeting the diverse needs of Open Access Consumers in the State. This also provides price signals to both Distribution Licensees and

Consumers based on the demand and supply position. Considering some comments, contingency Day-Ahead applications have also been provided for.

# 5.5. Provision in final DOA Regulations, 2016

# "11.3. Day-Ahead Open Access

Day-Ahead Open Access of Distribution System(s) shall be permitted only if surplus capacity is available in the concerned Distribution Licensee's system.

11.4. The Application for grant of Day-Ahead Open Access shall be made to the Nodal Agency only one day prior to the date of scheduling, up to 12:00 Hours, and all such Applications shall be treated as having being received at the same time and shall have the same priority;

Illustration: An Application for Day-Ahead transaction on 15th August shall be received only on 14th August up to 12:00 hours.

Provided that any Application received after 12:00 hours of the day immediately preceding the date of scheduling or on the day of scheduling shall be considered in case of contingency of the Applicant, and the fee for such contingency Applications shall be five times the otherwise applicable Application fees.

11.5. The Nodal Agency shall check for congestion and convey grant of approval or otherwise in the format provided in Annexure III [Format-ST2] by 14:00 Hours of the day preceding the date of scheduling of the transaction."

### 6. Transmission Open Access Regulations

The Commission received several comments from MSLDC, some Transmission Licensees and other Consumers on the draft Transmission Open Access Regulations. The main comments received were with regards to;

1. Clarity required as to who should apply for Transmission Open Access;

2. Eligibility criteria for connectivity should be specified in detail. Traders

cannot apply for connectivity as they do not have control over the equipment

in the Transmission Grid;

3. Allotment priorities need to be defined for Long Term, Medium Term and

Short Term Open Access Applications; 4. Metering data for only Full Open

Access Consumer needs to be provided to MSLDC, and is not required for

Partial Open Access Consumer;

5. All Transmission Utilities/ Nodal Agencies should provide online portal for

application of Transmission Connectivity / Open Access and uploading

documents.

After considering these comments some changes have been incorporated in the

Regulations with regard to eligibility to seek Open Access, grant of

Connectivity, Nodal Agency and Application Procedure.

The relevant changes made in the Distribution Open Access Regulations have

also been reflected in the Transmission Open Access Regulations.

6. Other Regulations The Commission received several comments for

addition or revision of certain definitions and greater for clarity. The

Commission has made changes to some of the definitions and other

clauses.

Sd/-

(Deepak Lad) (Azeez M. Khan)

Member Member