

Before the
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
World Trade Centre, Centre No.1, 13th Floor, Cuffe Parade, Mumbai 400005
Tel. 022 22163964/65/69 Fax 22163976
Email: mercindia@merc.gov.in
Website: www.mercindia.org.in / www. merc.gov.in

CASE No. 111 of 2017

In the matter of

Petition of Maharashtra State Electricity Distribution Co. Ltd. for amendment to MYT Regulations with regard to Availability of Generating Units, specifying Standards of Performance for Generators and Transmission Licensees, and including Generators as State Pool Participants

CORAM

Shri Azeez M. Khan, Member
Shri. Deepak Lad, Member

Maharashtra State Distribution Company Limited Petitioner

V/s

Maharashtra State Power Generation Co. Ltd.	: Impleaded Respondent No.1
National Thermal Power Corporation	: Impleaded Respondent No.2
Adani Power Maharashtra Ltd.	: Impleaded Respondent No.3
GMR Energy Limited	: Impleaded Respondent No.4
JSW Energy Ltd.	: Impleaded Respondent No.5
RattanIndia Power Ltd.	: Impleaded Respondent No.6
Brihanmumbai Electric Supply and Transport Undertaking	: Impleaded Respondent No.7
Tata Power Company Ltd.	: Impleaded Respondent No.8
Reliance Infrastructure Ltd.	: Impleaded Respondent No.9
Coastal Gujarat Power Limited	: Impleaded Respondent No. 10

Appearance

Petitioner

....Shri Paresh Bhagwat

Respondent No.1
Respondent No.3
Respondent No.5
Authorized Consumer Representative

....Shri S.B. Soni
...Ms. Deepa Chawan (Adv.)
...Shri Tushar Borse
...Shri Ashok Pendse, TBIA

Date: 2 May, 2018

Order

1. Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) has filed a Petition on 10 July, 2017 under Section 86 (1) (b) of the Electricity Act (EA), 2003 to regulate electricity purchase and procurement process of Distribution Licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the state.

2. *MSEDCL's prayers are as follows:*

- a) *"To admit the Petition as per the provisions of various regulations mentioned in the petitions.*
- b) *To make suitable amendment to Section 44 and 48 of the MERC (Multi Year Tariff) Regulations, 2015 to ensure consistent monthly availability of the Thermal Generating Stations for the purpose of ensuring prudent power supply planning and reliable and quality power supply to consumers in the light of grievances mentioned in this Petition;*
- c) *To make suitable amendment to Intra State ABT Order and FBSM Code to include generators as State Pool Participant in order that any charges/ losses pertaining to deviations by the generator is borne by the generator;*
- d) *To make suitable amendments in MERC (Standards of Performance) Regulations, 2014 or frame separate regulations for standard of performance for generation and transmission companies...."*

3. The Petition states as follows:

1. Maharashtra has the highest base of electricity consumers in India. The Ministry of Power (MoP), Govt. of India (GoI) had projected growth in electricity demand of approximately 8% in Maharashtra in the 16th EPS. In accordance with the EPS projections, MSEDCL had considered approximately 8% annual growth in demand and planned its capacity addition accordingly to supply continuous power to its consumers.

2. On the basis of 16th EPS projected demand data, MSEDCL had planned for capacity addition to meet projected demand. MSEDCL has signed long-term power purchase agreements (PPAs) with Maharashtra State Power Generation Co. Ltd. (MSPGCL) and Central Sector Generating Stations through Memorandum of Understanding (MoU) route. Also, after following the competitive bidding process as per MoP Guidelines for Competitive Bidding, MSEDCL has signed long-PPAs with Independent Power Producers (IPPs). The present status of PPAs with different sources is as under:

Sr. No	Particulars	MSPGCL	Central Sector	IPP	UMPP	Others	Non-Conventional	Total
1	PPA Signed (A)	24,037	5,989	5,465	1,860	991	7,055	45,397
2	Units Withdrawn out of signed PPA (B)	840	0	0	0	0	0	840
3	Effective PPA (C=B-A)	23,197	5,989	5,465	1,860	991	7,055	44,557
4	Effective Available Capacity out of 'C'=D	13,627	4,755	4,785	760	491	5,837	30,255
5	Upcoming Project	0	1,234	0	0	0	1,218	2,452
6	Deferred Project (E=C-D)	9,570	0	680	1100	500	0	11,850

3. As per Regulation 48 of the MERC (Multi Year Tariff) (MYT) Regulations, 2015 regular monthly payments of the contracted capacity charges are being made to MSPGCL Generating Units. With respect to IPPs, MSEDCL has been making regular payments of capacity charges as per the tariff schedule in the PPA. The payment of the contracted capacity charges is done on the basis of the cumulative capacity charges payable from the first day of the contract year and till the respective month in the year.
4. Provisions in Regulations / Order for computation of Availability from contracted generation Capacity: The relevant extracts of Regulation 44 of the MYT Regulations, 2015 is reproduced below:

“44. Norms for operation for Thermal Generating Stations

44.1 Target Availability for full recovery of Annual Fixed Charges shall be 85 per cent for all Thermal Generating Stations, except those covered under Regulation

44.2 Target Availability for full recovery of Annual Fixed Charges for the following Generating Stations of Maharashtra State Power Generation Company Ltd. (MSPGCL) shall be

Particulars	Target Availability (%)
<i>Koradi TPS</i>	<i>72.00</i>
<i>Khaperkheda TPS</i>	<i>85.00</i>
<i>Chandrapur TPS</i>	<i>80.00</i>
<i>Nashik TPS</i>	<i>80.00</i>
<i>Bhusawal TPS excluding Unit No. 4 and 5</i>	<i>80.00</i>
<i>Parli TPS</i>	<i>85.00</i>
<i>Khaperkheda TPS Unit 5</i>	<i>85.00</i>
<i>Bhusawal Unit 4 and 5</i>	<i>85.00</i>
<i>Koradi TPS Unit 8,9,10 (Order 46 of 2016)</i>	<i>85.00</i>
<i>Chandrapur TPS Unit 8,9(Order 46 of 2016)</i>	<i>85.00</i>
<i>Parli Unit 8(Order 46 of 2016)</i>	<i>85.00</i>

Provided that the Commission may revise the Availability norms for these Generating Stations in case any Renovation and Modernization is undertaken.”

...Target Availability for full recovery of Annual Fixed Charges shall be 85 per cent for all Thermal Generating Stations commissioned after April 1, 2016

5. As per Regulation 48, full Annual Fixed Charges shall be recoverable at Target Availability as specified in Regulation 44. In case the Availability is lower than the target Availability, the Annual Fixed Charges shall be reduced proportionately.
6. Introduction of Availability-based Tariff (ABT) regime within Maharashtra and other related issues (Final Balancing and Settlement Mechanism (FBSM)):

3.2.1 As per the Final Balancing and Settlement Code, 2006, Clause 7.1,

“The procedure for the scheduling and despatch to be followed by the generators and the distribution licensees/state pool participants and shall be in accordance to the procedure outlined in the “Scheduling and Despatch Code” of the State Grid Code as would approved by the Commission and any modifications/amendments thereto and any such order issued by the Commission from time to time.”

Clause 7.9

- (iii) *“The net UI charges shall be allocated to the State Pool Participants in proportion to their deviation from the ‘target drawal schedule’ or ‘target despatch schedule’, as the case may be, corresponding to each trading period. For this purpose, of allocation of net UI cost/incentive, the basis for deriving proportionate share shall be ‘aggregate deviation’ of each State Pool Participant from its ‘target schedule’.*
- (iv) *Further, ‘aggregate deviation’ of the in-state generators shall also be captured apart from ‘aggregate deviation’ of State Pool Participants.*
- (v) *Net UI charges shall be divided into two parts (i) Net UI charges-1: corresponding to ‘aggregate deviation’ of State Pool Participants, and (ii) Net UI charges-2: corresponding to ‘aggregate deviations’ of in-state generators.*
- (vi) *Net UI charges-1 shall be allocated amongst the State Pool Participants which have been responsible for the deviations depending on the incidence of the UI cost/incentive i.e. in case, for a particular trading period, if there exists an incidence of UI cost, the same would be allocated amongst the State Pool Participants who have overdrawn compared to their drawal schedule for that trading period. Alternately, for a trading period, if there exists an incidence of UI incentive, the same would be allocated amongst the State Pool Participants who have under-drawn compared to their original drawal schedule for that trading period.*
- (vii) *Net UI charges-2 shall be allocated only between the Pool Participants whose contracted generators have the same deviation sign (positive or negative) as the Gross UI Cost.”*

7. Thus, under the FBSM mechanism, the Unscheduled Interchange (UI) charges have to be borne by the State Pool Participants (SPPs) which includes the Distribution Licensees. In this context, the SPPs as per Paras 3.1 and 3.2 of the intra-State ABT Order dated 17 May, 2007 in Case No 42 of 2006 (‘ABT Order’) reads as follows:

“3.1 Maharashtra State Power Pool Participants

The Maharashtra State Power Pool shall comprise tiered structure for market operations comprising various entities such as Market Participants, State Pool Participants, Market Service Providers and Market Operator as elaborated in the following paragraphs.

Market Participants – The Market Participant shall mean the generating companies, power trading companies, distribution licensees and the open access users and consumers operating within electricity market within Maharashtra. (i.e. Generators, Distribution Licensees, Traders, OA Users)

State Pool Participants - This shall refer to the Market Participants of

Maharashtra Electricity Market who meet the conditions for membership of Pool, subject to fulfilment of qualification criteria or covenants for Pool participation as set out under this Order. Currently, it is envisaged that the distribution licensees and the Transmission open access users (subject to fulfilment of certain qualification criteria or covenants for Pool participation) operating within electricity market of Maharashtra in accordance with the terms and conditions outlined under this Order shall be the State Pool Participants.”

8. MERC Standards of Performance (SoP) Regulations, 2014 and Penalty mechanism:-

8.1. The MERC (Standards of Performance of Distribution Licensees, Period for Giving Supply and Determination of Compensation) Regulations, 2014 provide for compensation to the consumers for the failure of power supply due to various reasons. The Regulations mandate MSEDCL to provide continuous quality and reliable supply to the consumers so as to avoid any burden of compensation payable to consumers.

8.2. Thus, the SoP Regulations are framed for ensuring Distribution Licensee's Standards of Performance. Penal provisions are also included in these Regulations to penalize Distribution Licensees in case of performance failure and in order to ensure reliable quality of supply of power to consumers. However, as per the provision under Regulation 11, MSEDCL is exempted from failure in generation or transmission network.

9. GENERATION AVAILABILTY AND PROBLEM FACED BY MSEDCL:-

9.1. PROBLEMS FACED BY MSEDCL

9.1.1. The average demand for MSEDCL from February, 2017 onwards has increased to approximately 18000 MW and the average peak demand is approximately 18700 MW. On 29th March, 2017, MSEDCL recorded its highest ever demand of 19700 MW due to early and sustained heat wave and rise in Agricultural load because of the availability of water even in April, 2017. Due to this sustained heat wave and rise in Agriculture load, the load demand has rose and remained in between 18000-19000 MW range. However, due to the failure of the Generators to supply power up to the contracted capacities, MSEDCL's total power planning is collapsed in these months.

9.1.2. The problem of lack of adequate power supply from Generators got further worsened in April & May, 2017 when the power demand is at its peak. In spite of having contracted more than adequate capacity and being in a power

surplus situation, MSEDCL had to procure power from outside the contracted PPAs at a higher cost as and when required and also resort to load shedding for few hours during this period on account of lower Availability of thermal power Generating Units.

9.1.3. Due to the shortfall in generation Availability, MSEDCL's commitment to provide 24 x7 Power to all consumers was questioned. MSEDCL had to face massive criticism of the consumers and public representatives risking the credibility and reputation of MSEDCL.

9.2. AVAILABILITY OF IPPs (APRIL-16- MAY-17)

9.2.1. The details of month-wise and PPA wise declared capacity of IPPs are given below:

Month	APML				RIPL		JSW	EMCO	CGP
	1200	125	1320	440	450	750	300	200	796
	% Availability								
Apr-16	99.72%	99.72%	81.02%		98.56%	98.56%	68.28%	52.44%	63.23%
May-16	66.37%	66.37%	21.11%		97.21%	97.21%	93.88%	35.60%	68.72%
Jun-16	44.81%	44.81%	0.64%		97.61%	97.61%	93.75%	98.44%	56.20%
Jul-16	95.64%	95.64%	97.53%		99.85%	99.85%	96.53%	97.60%	58.80%
Aug-16	97.17%	97.17%	92.04%		100%	100%	91.42%	94.65%	99.37%
Sep-16	98.25%	98.25%	99.04%		98.65%	98.65%	91.37%	100%	96.14%
Oct-16	99.46%	99.46%	99.75%		99.28%	99.28%	96.89%	94.52%	83.58%
Nov-16	77.66%	77.66%	94.57%		98.64%	98.64%	50.21%	89.52%	66.70%
Dec-16	81.90%	81.90%	80.71%		100%	100%	0.00%	100%	81.19%
Jan-17	85.77%	85.77%	81.07%		100%	100%	0.00%	100%	94.91%
Feb-17	89.23%	89.23%	99.15%	95.92%	100%	100%	63.47%	85.22%	92.94%
Mar-17	93.52%	93.52%	98.60%	94.02%	99.89%	99.89%	87.84%	91.29%	98.41%
Apr-17	66.74%	66.74%	59.38%	66.01%	60.81%	60.81%	73.07%	83.82%	69.46%
May-17	73.93%	73.93%	71.48%	74.49%	55.32%	55.32%	74.99%	85.44%	58.99%

9.2.2. Thus, from above Table the Availability of the Generating Stations was consistently below 85%, i.e. in the range of 59 to 66 % in April,17 and 55-75 % in May, 2017, which adversely impacted MSEDCL while doing the load generation balance.

9.3. AVAILABILITY FROM MSPGCL'S NEWLY COMMISSIONED UNITS

- 9.3.1. From June 2016 onwards, six new Generating Units of MSPGCL were commissioned, adding about 3230 MW to MSEDCL's contracted capacity.
- 9.3.2. As per Regulation 44 of MYT Regulations, 2015, Target Availability of all the Units commissioned after 1 April, 2016 is 85%. As per Regulation 48, Licensee has to pay 100 % of the annual capacity charges on achievement of the target Availability. However, the Availability of these new Units has not consistently attained to achieve target Availability of 85% due to unreliability.
- 9.3.3. The instances of tripping of these newly commissioned Units were very high, jeopardizing the reliability of power supply to MSEDCL. Apart from this, there have been instances of frequent forced outages. The details of Availability of newly commissioned MSPGCL's Generating Units from CoD and several tripping up to 31 May, 2017 can be easily taken from the Maharashtra State Load Despatch Centre (MSLDC). However, as per data available with MSEDCL, the Availability of new MSPGCL Units is as below:

Availability of newly-commissioned MSPGCL Units up to 31 May, 2017

Unit Name	Capacity (MW)	Date of COD	Total Nos of Days to be available from Date of COD(excluding Zero Schedule and Planned Outages)	Net Availability (No of Days (excluding Zero Schedule and Planned Outages)	% Availability	No of Trippings (excluding Zero Schedule and Planned Outages)
1	2	3	4	5	6=5/4	7
Chandrapur Unit 9	500	22-Nov-16	191.0	154.65	81.0%	27
Chandrapur Unit-8	500	4-Jun-16	362.0	339.88	93.9%	37
Koradi Unit 10	660	17-Jan-17	135.0	46.96	34.8%	16
Koradi Unit 9	660	24-Nov-16	189.0	175.07	92.6%	15
Koradi Unit-8	660	16-Dec-15	375.3	336.62	89.7%	28
Parli Unit 8	250	19-Nov-16	194.0	33.83	17.4%	27

- 9.3.4. The above Table shows that Parli Unit 8 and Koradi Unit 10 are available for a meager ~17% and ~35% of time since the Commercial Operation

Date (COD). Further, during the period when these Units were available on bar, the trippings were very high and power available was of infirm nature. In a specific instance, the Availability from MSPGCL was 7,789 MW on 14.04.2017 and within a span of 4 days i.e. on 18.04.2017, the Availability reduced to 5800 MW which is more than 25% reduction in Availability of Power Station.

9.3.5. Most of the newly commissioned Units are of higher capacity i.e. 500 MW and 660 MW and tripping of such high power Generating Units creates a vacuum in power supply during real time of operations which severely impedes the power supply position of MSEDCL and in such scenarios MSEDCL is left out with the option of excess utilization of Koyna Hydro Generation or to implement emergency load shedding.

10. FOLLOW UP DONE WITH THE GENERATORS BY MSEDCL FOR INCREASING AVAILABILITY:-

10.1. In view of high and rising demand scenario, MSEDCL proactively intimated all the Generators for supplying the power up to 100% of contracted capacity. MSEDCL had written letters to MSPGCL, Adani Power Maharashtra Ltd. (APML) and RattanIndia Power Ltd. (RIPL) for supply of power up to the contracted capacity. The details of such communication are submitted along with this Petition.

10.2. MSEDCL had communicated to MSPGCL vide letters dated 08 September, 2016, 28 September, 2016, 17 November, 2016, 27 December, 2016, 17 January, 2017 and 19 April, 2017 to provide 100% Availability of Generating Stations and to provide stable thermal generation.

10.3. MSEDCL had communicated to APML vide letters dtd:18 January, 2017,13 February, 2017, 5 April, 2017, 19 April,2017, 26 April,2017, 28 April, 2017 to provide 100% Availability of Generating Stations i.e. for total quantum of 3065 MW on account of increase in the demand during the summer season. APML consented to MSEDCL's communication vide letter dated: 12.05.2017. However, from the date of request and till date, APML failed to provide 100 % power to the contracted capacity.

10.4. MSEDCL had communicated to RIPL vide letter dated 15 April, 2017, 19 April,2017, 29 April,2017 and vide several Emails, to provide 100% Availability of Generating Stations i.e. for total quantum of 1200 MW on account of increase in the demand during the summer season. RIPL consented to MSEDCL's

communication vide letter dated: 4 May, 2017. However, RIPL failed to provide 100 % power to the contracted capacity.

- 10.5. In order to address the demand-supply imbalance during April and May 2017 months, MSEDCL has been continuously following up with Generators like MSPGCL, APMIL and RIPL for scheduling the full power against the contracted capacity. In spite of repeated follow up done with the Generators the Availability has not improved. The Generating Stations are not consistently available on the monthly basis to meet the increasing power demand situation in MSEDCL license area.

11. INADEQUATE PROVISIONS IN EXISTING REGULATIONS/ ORDERS

- 11.1. Regulation 48 of the MYT Regulations, 2015 provides for two types of billing elements, namely one which is monthly in nature i.e. energy charges which is based on the price and Gross Calorific Value (GCV) of fuel related to the month and the other being annual in nature i.e. the capacity charges. The capacity charges are yearly in Rs/ year which are adjusted based on annual Availability of the Generating Station. The capacity charges payable for a particular month are determined on the basis of plant Availability achieved cumulatively up to the said month.
- 11.2. As per the above provision for recovery of capacity charges, MSEDCL contends that since the target Availability of 85% is calculated on an annual basis and monthly capacity charges are payable based on cumulative plant Availability up to the month, a Generator has a flexibility to adjust the lower generation in a particular month with excess generation in subsequent months to achieve the annual target generation. This flexibility ensures that Generator can provide for lower Availability than the target Availability of 85% during few months of the year but still can recover annual fixed cost by proportionately increasing the Availability during balance months of the year.
- 11.3. In this context, MSEDCL has provided the details of month-wise and PPA wise declared capacity of IPP Generators. It is easily observable that the declared capacity, i.e. Availability of the generation stations/Units during the off-bar duration is more @100% than the actual when the Units are on bar. Due to seasonal demand variation especially in the 4 months of monsoon, the demand of MSEDCL during the monsoon time is at its lowest. This results in zero schedules for the high variable cost of the Thermal Generating Units. However, as seen above, thermal Generators declare 100 % Availability of zero scheduled Units. As

per Regulation 44 and Regulation 48, the target Availability of 85% is calculated on an annual basis and monthly capacity charges are payable based on cumulative plant Availability up to the month, these 4 months of monsoon season provides a window to the thermal Generator to match the target Availability which was reduced during the rest of the months. This points out to a serious manipulation of the Regulation by the Generators to their own advantage.

- 11.4. MSEDCL submits that such an activity to match the target Availability has severe financial implications on MSEDCL. MSEDCL has to pay full capacity charges as the Unit achieves Target Generation (theoretically). However, in reality MSEDCL doesn't get the power for the actual contracted capacity and furthermore has to procure the additional power to meet out the shortfall in demand.
- 11.5. The current Regulations whereby the Availability is computed on a month-wise cumulative basis is resulting in excess payment of proportionate fixed charges for the months when the Availability of the Generating Stations is below the target Availability. Hence, the Commission may amend the Regulation 48.3 of the MYT Regulation, 2015 in order to arrest the activity of manipulating the Availability of the Generating Station by the Generators. A suitable amendment in Regulation 48.3 and in relevant schedule in the PPA to regulate the Availability of the Generating Station is essential for the purpose of ensuring prudent power supply planning and reliable and quality power supply to consumers.
- 11.6. Also, the introduction of ABT Regime at State level within Maharashtra and other related issues (FBSM Code, 2006), the ABT Order makes a distinction between market participants and SPPs. While SPPs are also market participants, not all market participants are SPPs. The Generators are not included as SPP under the UI mechanism. Thus, any penalties pertaining to the UI mechanism are currently levied upon the Distribution Licensee. Thus, MSEDCL has to pay penalties under the UI mechanism for the lower Availability of the Thermal Generating Stations which is clearly not a fault of MSEDCL. Such unilateral Regulations have financial implications since deviation of one utility is sometime caused due to the actions of other utility/ utilities.
- 11.7. In real time operation as per the power demand scenario, the Generating Units ramp up or ramp down by following the Merit Order Despatch (MOD) as per the instructions of MSLDC. In spite of the specific instructions issued by MSLDC, the Generating Units are not ramping up or down at the declared ramp up/down rates. Due to this, MSEDCL is compelled to overdraw the power from the system. In real time overdrawal/underdrawal attracts the higher charges as well as penalty

only because of non-performance of the Generator/s. There is no such provision in present Regulations to pass on such penalty or additional charges paid to the defaulting Generator.

- 11.8. Thus, the Regulations be amended to include Generators as SPP in the ABT mechanism so that any penalty that accrues on account default by the Generators is not passed on to Distribution Licensee and its consumers. This will also ensure that Generators declare sufficient Availability and follow the generation schedule reducing the deviations.
- 11.9. Hence, the Commission may provide suitable mechanism through Regulations for performance standards for generation and transmission companies.

12. FUNCTIONS OF THE STATE COMMISSION

- 12.1. The Commission has the powers in the matter under the Section 86 (1) in the larger interest of the various stakeholders.
- 12.2. Under Section 86(1)(b) of the EA, 2003, the Commission has the powers to regulate the power purchase and procurement process of the Distribution Licensees. The Commission may provide suitable amendment to the concept of Availability of Thermal Generating Stations in order to ensure that there is consistency in the monthly Availability of Thermal Generating Stations. This will go a long way in ensuring robust power planning procedures and providing reliable quality of power supply.
- 12.3. In its recent Order in Civil Appeal No. 5399-5400, 5347, 5348, 5346, 5364 of 2016 on the Appellate Tribunal for Electricity (APTEL) Judgment dated April 7, 2016, Supreme Court has provided clarification on the adjudicatory powers of the Appropriate Commission as under:

“It is important to note that the regulatory powers of the Central Commission, so far as tariff is concerned, are specifically mentioned in Section 79(1). This regulatory power is a general one, and it is very difficult to state that when the Commission adopts tariff under Section 63, it functions de hors its general regulatory power under Section 79(1)(b). For one thing, such regulation takes place under the Central Government’s guidelines. For another, in a situation where there are no guidelines or in a situation which is not covered by the guidelines, can it be said that the Commission’s power to “regulate” tariff is completely done away with? According to us, this is not a correct way of reading the aforesaid statutory provisions. The first rule of statutory interpretation is that the statute must

be read as a whole. As a concomitant of that rule, it is also clear that all the discordant notes struck by the various Sections must be harmonized. Considering the fact that the non-obstante clause advisedly restricts itself to Section 62, we see no good reason to put Section 79 out of the way altogether. The reason why Section 62 alone has been put out of the way is that determination of tariff can take place in one of two ways – either under Section 62, where the Commission itself determines the tariff in accordance with the provisions of the Act, (after laying down the terms and conditions for determination of tariff mentioned in Section 61) or under Section 63 where the Commission adopts tariff that is already determined by a transparent process of bidding. In either case, the general regulatory power of the Commission under Section 79(1)(b) is the source of the power to regulate, which includes the power to determine or adopt tariff. In fact, Sections 62 and 63 deal with “determination” of tariff, which is part of “regulating” tariff. Whereas “determining” tariff for inter-State transmission of electricity is dealt with by Section 79(1)(d), Section 79(1)(b) is a wider source of power to “regulate” tariff. It is clear that in a situation where the guidelines issued by the Central Government under Section 63 cover the situation, the Central Commission is bound by those guidelines and must exercise its regulatory functions, albeit under Section 79(1)(b), only in accordance with those guidelines. As has been stated above, it is only in a situation where there are no guidelines framed at all or where the guidelines do not deal with a given situation that the Commission’s general regulatory powers under Section 79(1)(b) can then be used.”

- 12.4. Thus, as per Supreme Court clarification, the Regulatory powers of the Central Commission under Section 79(1) being general, adoption of tariff under Section 63 could not be de hors Section 79(1) (b) of EA, 2003. It was held that the non-obstante clause in Section 63 being limited to Section 62, the general powers of the Central Commission to "regulate" tariff under Section 79(1) (b) were not excluded. Thus, with respect to IPPs with whom the PPAs were signed and the tariff were adopted under Section 63 of the EA, 2003, the powers of the Commission under Section 86 of the EA, 2003 are general powers and cannot be excluded. Thus, the Commission may exercise its general power under Section 86 of the EA, 2003 for the purpose of the making suitable amendments in the PPA for Availability of the Generating Stations in order to ensure that there is consistency in the monthly Availability of the Generating Stations and the power planning of MSEDCL is not jeopardized.

13. Powers to Amend:-

The Commission has the powers to issue Regulations in the matter under Sections 101 and 102 of the MYT Regulations, 2015 in the larger interest of the various

stakeholders in the system. The Commission has sufficient powers to deal with the matter and issue orders on any matter as deemed appropriate

14. At the hearing held on 5 October, 2017:

- 14.1. MSEDCL set out the background of the Petition and stated that Generating Companies are declaring lower Availability during peak period months and higher Availability during low peak period months. Regulation 48.3 of the MYT Regulations, 2015 provides for recovery of Annual Fixed Cost (AFC) at Target Availability on monthly basis in proportion to Contracted Capacity and based on the cumulative Availability achieved with respect to the Target Availability, till the respective month in the Year, subject to adjustment at the end of the year. Therefore, due to monthly cumulative adjustment, the Generating Companies are able to get benefits by declaring higher Availability during low peak demand months.
- 14.2. Due to this cumulative adjustment there is a financial impact on MSEDCL, which is ultimately passed on to the consumers. MSEDCL suggested that, instead of cumulative annual adjustment, the Availability may be considered on monthly basis instead of annual cumulative adjustment.
- 14.3. As per the SoP Regulations, 2014, MSEDCL has to pay compensation to consumers for failure of supply due to various reasons. Besides, MSEDCL is also paying penalties under the UI mechanism for lower Availability of Thermal Generating Stations for no fault of MSEDCL. Under the present FBSM, Generating Companies are not covered since they are not SPPs. The entire burden is passed on to consumers. It is, therefore, necessary to evolve a mechanism which will include Generating Companies as SPPs.
- 14.4. The Commission observed that MSEDCL generally does not participate and offer any comments or suggestions during adjudication of various Petitions filed by Generating Companies and Transmission Licensees. MSEDCL stated that it is in the process of filing its views and suggestions on the Petition filed by MSPGCL for Capital Cost for Koradi Units 8, 9 and 10 and Chandrapur Units 8, 9 and Parli Unit 8 in Case No. 59 of 2017.
- 14.5. To a query of the Commission, MSEDCL replied that it has filed the present Petition for amendment to the Regulations and hence not impleaded other contracted Generating Companies as parties.

- 14.6. To the query of the Commission on Availability of IPPs contracted under Section 63 and provision of recovery of AFC in the PPAs, MSEDCL stated that these IPPs are also not declaring 100% Availability in the peak demand period and the PPAs have a similar provision for recovery of AFC, i.e. cumulative adjustment of Availability at the end of the year. MSEDCL further stated that the Commission has powers under the EA, 2003 to regulate or to amend such PPAs even in the absence of any specific provision in the PPAs.
- 14.7. MSEDCL has taken up the issue of lower Availability with the Generating Companies and it is continuously following up with them. However, the Generating Companies have cited low Availability of coal from Coal India Ltd (CIL) and its subsidiaries.
- 14.8. Dr. Ashok Pendse, on behalf of Thane-Belapur Industries Association (TBIA), an authorized Consumer Representative, stated that in one instance, due to high cost of the NTPC Jhajjar Plant, the Beneficiaries did not want power from it. The matter was referred to MoP, which directed the sale of the power to other States. Exploring such other possibilities, the power was sold for two consecutive years to Punjab and Haryana. Similarly, MSEDCL may consider the option of selling power to other Licensees in case it does not require it during the low demand period. Further, MSEDCL may suggest a proposal on paying of AFC linked with Availability.
- 14.9. The Commission informed that it may take appropriate steps, including review of its ABT Order, with regard to Generating Companies to be treated as SPPs in the Settlement Mechanism.
- 14.10. The Commission directed MSEDCL to implead all contracted Generating Companies and Distribution Licensees and serve copies of the Petition to them within a week. They may file their submissions in 3 weeks thereafter.
15. MSPGCL's Reply dated 22 November, 2017 states as follows:
- 15.1. MSPGCL has an installed capacity of 13,427 MWs, of which 10,170 MWs consist of Thermal Power Plants whose generation is based on Coal as fuel. MSPGCL is entirely owned and controlled by GoM and currently accounts for majority of total electricity requirement in the State of Maharashtra.
- 15.2. MSEDCL has submitted the present status of PPAs with different Generation companies. It is stated that MSEDCL has effective PPAs with MSPGCL for a

capacity of 23197 MW of which effective available capacity is 13627 MW. In Para 2.3 of the Petition, it is further submitted that MSEDCL is making regular payment of the contracted capacity charges to MSPGCL, as per Regulation 48 of MYT Regulations, 2015.

- 15.3. The statements made by MSEDCL are completely misleading. From MSEDCL's submission it appears that out of the contracted capacity of 23197 MW, MSPGCL has made available only 13627 MW and the capacity charges are being paid for the total contracted capacity.
- 15.4. Even though MSPGCL has signed PPAs for capacity totalling 23197 MW, this included the proposed new capacity of 9230 MW which was planned to be executed in phased manner. In FY 2015-16 and FY 2016-17, new capacity of 3230 MW has been put into commercial operation and old capacity of 1040 MW has been retired. Also, the capacity addition of 9230 MW is yet to be undertaken. It is either cancelled or deferred. So at present the operational capacity is 13427 MW (10170 MW of coal-based thermal, 672 MW of gas thermal and 2585 MW of hydro capacity) and the capacity charges are approved for this 13427 MW only. MSEDCL is paying these approved capacity charges for this installed contracted capacity and not for the total contracted capacity.
- 15.5. MSEDCL has detailed the issue regarding generation Availability and difficulties faced by it in meeting the rising demand especially during the period March to May 2017. MSEDCL has stated that as the generating companies failed to supply power up to the contracted capacities, the power planning for MSEDCL collapsed and it was required to purchase power from outside the contracted PPAs at a higher cost as and when required and also resort to load shedding for few hours during this period.
- 15.6. In support of the above claim, MSEDCL has submitted information like
 - a. The month-wise Availability factor for contracted IPPs for the period April-2016 to May-2017 showing that the Availability factor for all these Units was below 85% i.e. in the range 59% to 66% for April-2017 and 55% to 75% for May-2017.
 - b. Details regarding non-availability of MSPGCL's newly-commissioned Units.

- 15.7. MSEDCL has submitted that it had done the follow-up with the Generating companies for improving the Availability of generation capacity. The communication is done to all the three Thermal Generating Companies with whom MSEDCL has entered into PPAs, namely MSPGCL, APML and RIPL. On the basis of the communication details and the Availability data for the period, MSEDCL has submitted following

“5.5 In order to address the demand supply imbalance during April and May 2017 months, MSEDCL has been continuously following up with Generators like MSPGCL, APML and RIPL for scheduling the full power against the contracted capacity. In spite of repeated communication and follow up with the Generators the availability has not improved. The Generating Stations are not consistently available on the monthly basis to meet the increasing power demand situation in MSEDCL license area.”

- 15.8. While the concerns of MSEDCL regarding the need for consistent Availability of contracted capacity are not denied, the approach of MSEDCL of presenting the Generating Companies as defaulter, without taking into consideration the practical difficulties faced by the generating companies especially for coal-based thermal Units, is objectionable.
- 15.9. MSEDCL has tried to project as if it was totally unaware of the issues faced by the Generators and shortfall of generation lead cascaded with the sudden rise in demand lead to collapse of power planning, especially during April and May 2017. In those months the main issue faced in coal-based Units was lack of coal supply. Presently the coal stock is being monitored by Central Electricity Authority (CEA) and is publicly available on website of CEA. The stock positions during April and May 2017 were clearly indicating the coal shortages and possible reduction in generation capacity. It would have been prudent for MSEDCL to consider this aspect while carrying power planning, instead of just passing the blame on to the generating companies.
- 15.10. The Hydro Power Stations, mainly Koyna Station, is generally used for summer peak demand. However during FY 2016-17, Koyna Units were hectically used during November to February period (winter season) keeping many coal-based Units under reserve shutdown/backed down and thus the allocated water quantum of 67.5 TMC got exhausted by first week of May 2017. Therefore there were restrictions on usage of this crucial support during April- May peak summer season. Had the Koyna Units been judiciously used during the earlier period, it could have helped MSEDCL at this crucial juncture.

- 15.11. Also from the data submitted by MSEDCL itself it can be seen that the issue regarding Availability exist for all the three major generating companies in the State having contracted capacity with MSEDCL namely MSPGCL, APML and RIPL. Apart from MSPGCL, the other two companies are privately owned IPPs. The Units of APML and RIPL are located in Vidarbha region, the Units of MSPGCL are spread over the whole Maharashtra. The primary input sources i.e. coal and water for these Units are also different. While MSPGCL supplies power under “cost-plus” tariff determined by the Commission under Section 62 of EA, 2003, the APML and RIPL supply power at rate arrived through competitive bidding process under Section 63 of EA, 2003.
- 15.12. So all these indicate that the issue regarding Availability is neither company-specific, nor management specific and not even specific to tariff modalities. Thus even if it is agreed that the Availability of generation capacities was on lower side, especially during April and May, 2017, it will be wrong to see it as an action by design or a deliberate action.
- 15.13. However, assuming that lower Availability is a default by Generating Companies, in Para 6 of the Petition, MSEDCL has complained regarding inadequacy of the existing regulatory provisions. It is stated that the pro-rata reduction of fixed charges on the basis of actual Availability Generating companies vis-a-vis target Availability, being done as per Regulation 48.3 of MYT Regulations, 2015, is not adequate as there is provision for adjustment on annual basis and hence the Generating companies get a chance to make any intermittent shortfall by better Availability in remaining period. Therefore, MSEDCL has requested additional stringent norms under Regulation 48.3 of MYT Regulations, 2015. MSEDCL has also requested for amendment to FBSM Code, 2006 under the State ABT regime to include the generating companies as SPPs so that any penalty that accrues on account of default by the Generator is not passed on to the Distribution Licensee and its consumers.
- 15.14. Thus indirectly MSEDCL is expecting a well-planned and pre-determined Availability forecasting from the generating companies on daily / hourly basis without any deviation. MSPGCL submits that instead of going for quick conclusion regarding failure of generating companies to maintain consistent Availability, the issue needs to be looked more deeply taking into consideration the peculiarity of Operation and Maintenance (O&M) issues of indigenous coal-based Units and prevailing domestic coal supply chain related issues. Practically it is not possible in case of coal-based Generating Units especially domestic coal-based Units to give consistent Availability on a long

term basis unlike a gas based or hydro Generating Unit. There will be obvious deviations in Availability in real time.

- 15.15. For the domestic coal-based thermal Units, there are only two main reasons for the lower plant Availability. One is the O&M issues which are of typical nature for the coal-based thermal power plant and other more predominant is the coal supply related issues due to complete dependency of these Units on coal supplies from the domestic coal companies.

15.15.1. O&M issues:

- a. Loadability of the Unit gets reduced due to reasons like planned outages for routine periodic maintenance (Annual over Haul /Capital over Haul) partial / complete failure of equipments/systems; operational practices; O&M acumen available with the company etc. These O&M issues are generally common and are largely controllable for a generating company. The planned overhauls are generally planned in low demand period like monsoon / winter and are generally carried in co-ordination with the concerned Distribution Licensee.
- b. In fact it has been a regular practice for MSPGCL to share the outage programme with MSEDCL and the AOH/ COH are adjusted as per MSEDCL's demand forecasts. Even in the past at many occasions, MSPGCL has carried last minute reschedule of AOH / COH of Units due to request from MSEDCL on the basis of grid supply situation at that time.
- c. An AOH of @ 1 month duration is generally done for proper maintenance of the BTG set. Similarly a COH of @ 2 months duration is needed in 5 years for refurbishment of critical equipments mainly TG set. Apart from these planned outages, there are obviously few forced outages of total system or part of the system, which lead to lower Availability. So the AOH, COH and forced outages put together, any coal-based thermal Unit is expected to remain out for around 45 days on annual basis. i.e. reduction in availability by 12.5%. These are almost common O&M issues for all Generating Units, whether State owned or from IPPs. So while fixing the target annual Availability norm of 85%, these factors are considered.

15.15.2. Coal related issues:

- a. Apart from the O&M reasons, the coal supply shortages and coal quality issues are also critically affecting the Availability of domestic coal-based Units and particularly for MSPGCL Units. As there is no competition in domestic coal supply market, presently it is almost a monopolistic and seller's market. MSPGCL has to depend on CIL subsidiaries and Singareni Collieries Company Ltd. (SCCL) for coal supply. MSPGCL coal-based Units are not pit-head Units and each station has diversified linkages from a number of coal mines and coal sidings of the two or three coal supply companies. At present no coal company gives a long term coal supply programme based on which MSPGCL can do a long term load forecast. Coal is supplied as per time to time coal Availability at different sidings. Also as there is no fixed coal supply schedule, the coal quality changes as the coal supply mix changes. This again leads to need for re-estimation of possible loadability for the Unit.

- b. Also, coal grade slippages of around 2 to 3 grades are regularly observed. At present no on-line measurement technology is available to precisely measure the GCV of coal being fired. Obviously, on real time basis there are deviations in loadability as anticipated and as actually getting achieved. This leads to need for rescheduling of the declared capacity. Apart from these, there are seasonal variations in coal supplies. During rainy season, there are coal supply disruptions and due to predominant open cast mining, the coal being supplied is wet, muddy and sticky. So this further affects the loadability of Units.

15.16. Putting together all the above aspects, the following are general seasonal Availability trend observed for MSPGCL coal-based Units.

Period	March-May	June-Sept.	Oct. – Dec.	Jan-Feb.
Season	Fair	Rainy	Fair	Winter
Demand	Maximum Peak	Low	Maximum	Low
Expected AVF	Maximum	Low (AOH/COH/RSD period)	Maximum	Low (Back down/RSD period)

- 15.17. Thus it will be wrong to expect a consistent Availability pattern from coal-based Generating Units of MSPGCL. Specifically regarding the new Units of MSPGCL, the difficulties faced regarding the stabilization of the new Units mainly Koradi and Parli Units were communicated to MSEDCL vide letter dated 02.06.2017. This was apart from informal communications.
- 15.18. Also in FY 2017-18, MSPGCL is facing coal supply shortages at all the stations which has adversely affected the loadability and Availability of all the MSPGCL thermal Units. The recent generation shortfall issue is mainly on account of this coal supply shortage.
- 15.19. As regarding the adequacy of regulatory provisions, MSPGCL feels that already there are adequate provisions to monitor plant Availability of Thermal Generating Units and also there are necessary pro-rata reduction / AFC reduction provisions which act as deterrent for generating companies against mis-declaration of Availability / maintaining lower Availability.
- 15.20. Regulation 48.3 of MYT Regulations, 2015 provides that no fixed charge to be paid for zero Availability and there will be reduction in FC in monthly billing based on cumulative Availability achieved vis-a-vis the target availability. These unrecovered fixed charges are ultimately resulting in reduced profitability of the Generation Company. Similarly Regulation 51 of MYT Regulations, 2015 provides for “demonstration of declared capacity” under which first detected mis-declaration is penalised for two days of fixed charges, the second for four days and so on in geometric progression.
- 15.21. Since the above two provisions are resulting in penalty to the Generating company due to reduction in recovery of fixed charges and therefore reduction in profitability for maintaining Availability lower than norms, it will be wrong to say that there are inadequate provisions to ensure sufficient Availability.
- 15.22. As regarding the inclusion of generating companies as SPPs, MSPGCL is not averse to the idea. Presently not being SPPs, the generating companies do not have to share the penalty but at the same time they do not get any share of gains also. As per MSPGCL the issues raised by MSEDCL are mainly co-ordination issues and could be resolved through timely dialogue.
16. Costal Gujarat Power Limited (CGPL), in its Reply dated 17 November, 2017, has stated as follows.

- 16.1. MSEDCL is seeking amendment of Regulations 44 and 48 of MYT Regulations, 2015.
- 16.1.1. MSEDCL has, *inter alia*, submitted that the Generators with whom it has tied up power are declaring lower Availability during peak period months and higher Availability during low peak period months. In terms of Regulation 48.3 of the MYT Regulations, 2015 and the PPAs executed between MSEDCL and the IPPs (including CGPL), recovery of AFC on monthly basis in proportion to the Target Availability is based on cumulative Availability achieved with respect to Target Availability, till the respective month in the Year, subject to adjustment at the end of the Year.
- 16.1.2. Due to this cumulative adjustment, MSEDCL is financially impacted which is eventually passed on to the consumers. Instead of annual cumulative adjustment, Availability may be considered on monthly basis. Additionally, on account of lower Availability being declared by the Generators in the peak demand months, MSEDCL is unable to meet its obligations towards its consumers and has to procure power at higher cost from other sources to meet its obligations.
- 16.1.3. MSEDCL is paying penalties under the UI mechanism on account of lower Availability being declared by the Generators. Even though MSLDC issues instructions to the Generators to ramp up/ ramp down generation as per the MOD to meet the power demand of MSEDCL, the Generators are not ramping up/ ramping down their generation. This results in MSEDCL overdrawing power from the grid which results in levy of UI charges on MSEDCL. Therefore, the Generators may be added to the list of SPPs so that they are made liable to bear the deviation charges.
- 16.1.4. The Supreme Court in *Energy Watchdog vs. CERC & Ors.* (2017 SCC Online SC 378) has upheld the general regulatory powers of the Central Electricity Regulatory Commission (CERC) to regulate tariff. With respect to IPPs with whom PPAs have been signed and the Tariff was adopted under Section 63 of the EA, 2003 there are general powers and cannot be excluded. Therefore, the Commission ought to exercise its general regulatory powers under Section 86 of the EA, 2003 to make suitable amendments in the PPA for Availability of Generating Stations.
- 16.1.5. CGPL is challenging the maintainability of the present Petition on account of the fact that the Commission lacks the jurisdiction to adjudicate upon the issues raised by MSEDCL.

- 16.1.6. It is pertinent to note the following facts: - (a) CGPL is a wholly owned subsidiary of The Tata Power Company Limited (TPC). CGPL is a Special Purpose Vehicle incorporated by the Power Finance Corporation (PFC) to implement the Mundra Ultra Mega Power Project (UMPP).
- 16.1.7. On 19.01.2005, the MoP issued the Competitive Bidding Guidelines (CBG) under Section 63 of the EA, 2003, which were subsequently amended on 30 March and 18 August, 2006.
- 16.1.8. The MoP issued a Development of Large Size UMPP Policy, with the intent of developing five UMPPs having tariffs discovered under competitive bidding route Section 63. One of the UMPP is CGPL. The Policy clearly states that due to the large size of the UMPPs, they would meet the power requirement of multiple States.
- 16.1.9. On 22 April, 2007, CGPL was acquired by TPC, being the successful bidder for Mundra UMPP. Mundra UMPP consists of 5 Units of 800 MW each. All the five Units have achieved commercial operation and CGPL has been generating and supplying electricity to the Procurers as mentioned below.
- 16.1.10. On 22 April, 2007, CGPL entered into a PPA dated 22 April, 2007) with the Procurers, viz.:-
- (I) Gujarat Urja Vikas Nigam Limited;
 - (ii) MSEDCL;
 - (iii) Rajasthan Distribution Licensees;
 - (iv) Punjab State Power Corporation Limited;
 - (v) Haryana Distribution Licensees.
- 16.1.11. The following provisions of the PPA dated 22.04.2007 are noteworthy:-
- C. *“The application for adopting the tariff under Section 63 of the Electricity Act, 2003, has been submitted to the Central Electricity Regulatory Commission (CERC) followed by submission of additional information / clarification as requested by CERC. The Order on the application shall be made available to the Seller by the Lead Procurer upon its issue by CERC....*
- 1. ARTICLE 1: DEFINITIONS AND INTERPRETATION***
- 1.1 Definitions***

... “Availability Based Tariff” or “ABT” *shall mean all the regulations contained in the Central Electricity Regulatory Commission (terms and conditions of Tariff) Regulations, 2004, as amended or revised from time to time, to the extent applied as per the terms of this Agreement;*

"Appropriate Commission" *means the Central Electricity Regulatory Commission constituted under the Electricity Act, 2003 or such other succeeding authority or commission as may be notified by Government of India from time to time;*

... “Normative Availability” *means equal to eighty per cent (80%) Availability at the Delivery Point on Contract Year basis;*

...4.4 *Right to Available Capacity and Scheduled Energy*

4.4.1 *Subject to other provisions of this Agreement, the entire Contracted Capacity of the Power Station and all the Units of the Power Station shall at all times be for the exclusive benefit of the Procurers and the Procurers shall have the exclusive right to purchase the entire Contracted Capacity from the Seller. The Seller shall not grant to any third party or allow any third party to obtain any entitlement to the Available Capacity and/or Scheduled Energy.*

4.4.2 *Notwithstanding Article 4.4.1, the Seller shall be permitted to sell power, being a part of the Available Capacity of the Power Station to third parties if:*

(a) *there is a part of Available Capacity which has not been Dispatched by the Procurer, ordinarily entitled to receive such part ('Concerned Procurer'); and*

(b) *such part has first been offered, at the same Tariff, to the other Procurers (by the RLDC and/or the Seller), who were not ordinarily entitled to receive such part and they have chosen to waive or not to exercise their first right to receive such part of the Available Capacity within two (2) hours of being so offered the opportunity to receive such part.*

4.4.3 *If a Procurer does not avail of power upto the Available Capacity by the Seller corresponding to such Procurer's Allocated Capacity, and the provisions of Article 4.4.2 have been complied with, the Seller shall be entitled to sell such Available Capacity not procured, to any person without losing the right to receive the Capacity Charges from the Concerned Procurer for such un-availed Available Capacity. In such a case, the sale realization in excess of Energy Charges shall be equally*

shared by the Seller with the Concerned Procurer. In the event, the Seller sells such Available Capacity to the shareholders of the Seller or any direct or indirect affiliate of the Seller/shareholders of the Seller without obtaining the prior written consent of the Procurer, the Seller shall be liable to sell such Available Capacity to such entity at tariffs being not less than the Tariff payable by the relevant Procurer whose capacity is being sold pursuant to this Article. If more than one Procurers do not avail fully of their Allocated Contracted Capacity, provisions of this Article shall be applicable to them mutatis mutandis and in such case, fifty percent (50%) of the excess over Energy Charges recovered by the Seller from sale to third party shall be retained by the Seller and the balance fifty percent (50%) shall be provided by the Seller to the Concerned Procurer/s in the ratio of their Available Capacity not dispatched by such Concerned Procurer/s and sold by the Seller to third parties. During this period, the Seller will also continue to receive the Capacity Charges from such Procurers. Upon the Procurers or any Procurer who has not availed of the Available Capacity, as envisaged under this Article, intimating to the Seller of its intention and willingness to avail of the part of the Available Capacity not availed of and therefore sold to the third party, the Seller shall, notwithstanding anything contained in the arrangement between the Seller and said third party, commence supply of such capacity to the Concerned Procurer/s from the later of two (2) hours from receipt of notice in this regard from the Concerned Procurer/s or the time for commencement of supply specified in such notice....

12 ARTICLE 12: FORCE MAJEURE

...12.7 Available Relief for a Force Majeure Event

Subject to this Article 12:

- ...(d) If the average Availability of the Power Station is reduced below sixty (60) percent for over two (2) consecutive months or for any non-consecutive period of four (4) months both within any continuous period of sixty (60) months, as a result of an Indirect Non Natural Force Majeure, then, with effect from the end of that period and for so long as the daily average Availability of the Power Station continues to be reduced below sixty (60) percent as a result of an Indirect Non Natural Force Majeure of any kind, the Procurers shall make payments for Debt Service, relating to such Unit, which are due under the Financing Agreements, subject to a maximum of Capacity Charges based on Normative Availability, and these amounts shall be paid from the date, being the later of a) the date of cessation of such Indirect Non Natural Force Majeure Event and b) the completion of sixty (60) days from the receipt of the Financing Agreements by the Procurer(s) from the Seller, in the form of an increase in Capacity Charge. Provided such Capacity Charge increase shall be determined by CERC on the basis of putting the Seller in the same economic position as the Seller*

would have been in case the Seller had been paid Debt Service in a situation where the Indirect Non Natural Force Majeure had not occurred...

- e) *If the average Availability of the Power Station is reduced below eighty (80) percent for over two (2) consecutive months or for any non-consecutive period of four (4) months both within any continuous period of sixty (60) months, as a result of a Direct Non Natural Force Majeure, then, with effect from the end of that period and for so long as the daily average Availability of the Power Station continues to be reduced below eighty (80) percent as a result of a Direct Non Natural Force Majeure of any kind, the Seller may elect in a written notice to the Procurers, to deem the Availability of the Power Station to be eighty (80) percentage from the end of such period, regardless of its actual Available Capacity. In such a case, the Procurers shall be liable to make payment to the Seller of Capacity Charges calculated on such deemed Normative Availability, after the cessation of the effects of Non-Natural Direct Force Majeure in the form of an increase in Capacity Charge. Provided such Capacity Charge increase shall be determined by CERC on the basis of putting the Seller in the same economic position as the Seller would have been in case the Seller had been paid Capacity Charges in a situation where the Direct Non Natural Force Majeure had not occurred. ...*

13 ARTICLE 13: CHANGE IN LAW

...13.2 Application and Principles for computing impact of Change in Law

While determining the consequence of Change in Law under this Article 13, the Parties shall have due regard to the principle that the purpose of compensating the Party affected by such Change in Law, is to restore through Monthly Tariff Payments, to the extent contemplated in this Article 13, the affected Party to the same economic position as if such Change in Law has not occurred.

...b) Operation Period

As a result of Change in Law, the compensation for any increase/decrease in revenues or cost to the Seller shall be determined and effective from such date, as decided by the Central Electricity Regulatory Commission whose decision shall be final and binding on both the Parties, subject to rights of appeal provided under applicable Law.

Provided that the above mentioned compensation shall be payable only if and for increase/ decrease in revenues or cost to the Seller is in excess of an amount equivalent to 1% of Letter of Credit in aggregate for a Contract Year.

...17 ARTICLE 17: GOVERNING LAW AND DISPUTE RESOLUTION

...17.3 Dispute Resolution

17.3.1 Where any Dispute arises from a claim made by any Party for any change in or determination of the Tariff or any matter related to Tariff or claims made by any Party which partly or wholly relate to any change in the Tariff or determination of any of such claims could result in change in the Tariff or (ii) relates to any matter agreed to be referred to the Appropriate Commission under Articles 4.7.1, 13.2, 18.1 or clause 10.1.3 of Schedule 17 hereof, such Dispute shall be submitted to adjudication by the Appropriate Commission. Appeal against the decisions of the Appropriate Commission shall be made only as per the provisions of the Electricity Act, 2003, as amended from time to time.

The obligations of the Procurers under this Agreement towards the Seller shall not be affected in any manner by reason of inter-se disputes amongst the Procurers.

...18 **ARTICLE 18: MISCELLANEOUS PROVISIONS**

18.1 *Amendment*

This Agreement may only be amended or supplemented by a written agreement between the Parties and after duly obtaining the approval of the Appropriate Commission, where necessary.

...7. **SCHEDULE 7: TARIFF**

1.1 *General*

- i. *The method of determination of Tariff Payments for any Contract Year during the Term of Agreement shall be in accordance with this Schedule.*
- ii. *The Tariff shall be paid in two parts comprising of Capacity and Energy Charge.*
- iii. *For the purpose of payments, the Tariff will be Quoted Tariff, escalated as provided in this Schedule 7 for the applicable Contract Year as per Schedule 11.*
- iv. *The full Capacity Charges shall be payable based on the Contracted Capacity at Normative Availability and Incentive shall be provided for Availability beyond 85% as provided in this Schedule shall be given. In case of Availability being lower than the Normative Availability, the Capacity Charges shall be payable on proportionate basis in addition to the penalty to be paid by Seller as provided in this Schedule.*

1.2 *Monthly Tariff Payment*

1.2.1 *Components of Monthly Tariff Payment*

The Monthly Bill for any Month in a Contract Year shall consist of the following:

- i. *Monthly Capacity Charge Payment in accordance with Article 1.2.2 below;*

- ii. *Monthly Energy Charge for Scheduled Energy in accordance with Article 1.2.3 below;*
- iii. *Incentive Payment determined in accordance with Article 1.2.4 below (applicable on annual basis and included only in the Monthly Tariff Payment for the first month of the next Contract Year);*
- iv. *Penalty Payment determined in accordance with Article 1.2.5 below (applicable on annual basis and included only in the Monthly Tariff Payment for the first month of the next Contract Year);*
- v. *Penalty Payment determined in accordance with Article 1.2.8 below (applicable on annual basis and included only in the Monthly Tariff Payment for the first month of the next Contract Year);*

1.2.2 Monthly Capacity Charge Payment

The Monthly Capacity Charge Payment for any Month m in a Contract Year n shall be calculated as below:

If CAA >= NA, FCm = $\sum_j (NA \times AFCyn \times CC \times L) - \sum FC(m-1)$

Else:

FCm = $\sum_j (AFCyn \times AA \times CC \times L) - \sum FC(m-1)$

where:

\sum_j is the summation of all the relevant values separately for each settlement period from the start of the contract year in which Month “m” occurs upto and including Month “m”

FCm is the Capacity Charge payment for the Month m (in Rupees)

AFCyn is the Capacity Charge and is sum of a) Payable Escalable Capacity Charges AEFCyn and b) Payable Non Escalable Capacity Charges ANEFCyn for the month in which the relevant settlement period occurs in Contract Year n (in Rs per kWh) and computed as mentioned hereunder;

AEFCyn is the Payable Escalable Capacity Charges for month in which the relevant settlement period occurs in the Contract Year “n”, expressed in Rupees/kWh and is equal to the Quoted Escalable Capacity Charges as provided in Schedule 11 for the first Contract Year and for subsequent Contract Years duly escalated by the following formula:

$$AEFCyn = QAEFCyn * p/q$$

Where,

QAEFCyn is the Quoted Escalable Capacity Charges (in Rs./kWh) in the first Contract Year as per Schedule 11

p is the Escalation Index as per Schedule 9 at the beginning of the Month in which the relevant settlement period occurs (expressed as a number)

q is the Escalation Index as per Schedule 9 applicable as at the beginning of the first Contract Year mentioned in Schedule 11 (expressed as a number)

ANFCyn is the Payable Non Escalable Capacity Charges for the month in which the relevant settlement period occurs, expressed in Rupees/kWh and is equal to the Quoted Non Escalable Capacity Charges for the Contract Year in which such month occurs, as provided in Schedule 11

CAA is the cumulative Availability, as per REA, from the first day of the Contract Year “n” in which month “m” occurs upto and including Month “m”;

AA is the Availability, as per REA, in the relevant Settlement Period (expressed as a percentage of Contracted Capacity in such Settlement Period);

CC is the Contracted Capacity in the relevant Settlement Period (expressed in kW);

L is the number of minutes in the relevant Settlement Period, as divided by total number of minutes in one hour, (expressed as hours);

NA Normative Availability;

$\sum FC(m-1)$ is the cumulative Capacity Charge payable from the first day of the Contract Year “n” in which month “m” occurs upto and including Month “m-1” but not including month “m”, (in Rupees);

Provided, no Capacity Charges shall be paid for the Settlement Period during which the RLDC has not allowed the operation of the Power Station due to Sellers failure to operate it as per the provisions of Grid Code.”

16.1.12. On 19 September, 2007, the CERC allowed CGPL’s Petition No. 18/2007 for “Adoption of tariff for supply of electricity from the Mundra Ultra Mega Power Project of Coastal Gujarat Power Ltd.” under Section 63 of the EA, 2003 adopting the tariff quoted by TPC (i.e. successful bidder).

16.1.13. Various disputes between MSEDCL and CGPL qua the PPA dated 22.04.2007 have been adjudicated/ currently being adjudicated upon by CERC, being:-

- (i) Petition No. 159/MP/2012 – *CGPL v. GUVNL and Ors.* [Compensatory Tariff matter];
- (ii) Petition No. 157/MP/2015 – *CGPL v. GUVNL and Ors.* [Change in Law Petition for Operation Period]
- (iii) Petition No. 141/MP/2016 – *CGPL v. GUVNL and Ors.* [Change in Law Petition for Construction Period]
- (iv) Petition No. 121/MP/2017 – *CGPL v. GUVNL and Ors.* [Change in Law Petition for Operation Period]
- (v) Petition No. 13/SM/2017 – *CERC v. GMR Warora and Ors.* [Suo-moto Petition on account of introduction of GST regime];

- (vi) Petition No. 231/MP/2015 – *CGPL v. WRLDC and Ors.* [Petition for effective implementation of PPA provisions]

16.2. CGPL's submissions on the present Petition are as follows:

16.2.1. By the present Petition MSEDCL has, *inter alia*, sought amendment of the PPA dated 22.04.2007, by requesting the Commission to exercise its general regulatory powers under Section 86(1)(b) of the EA, 2003. By exercising such powers, MSEDCL has requested the Commission to suitably amend the PPA dated 22.04.2007 for Availability of CGPL's Generating Station to ensure that MSEDCL does not have to pay Capacity Charges as per Normative/ Target Availability calculated on an annual basis. In this regard, MSEDCL has relied upon Para 19 of the Supreme Court's Judgment in *Energy Watchdog (supra)*. That reliance is misplaced and based on an erroneous and incorrect interpretation of the Judgment. In the *Energy Watchdog (supra)* Judgment, the Supreme Court has upheld the general regulatory powers of the Electricity Regulatory Commission (ERC) for matters pertaining to tariff, and which are not covered under the Standard Bidding Documents or the CBG. In fact, the Supreme Court has held that exercise of general regulatory powers is restricted only in those circumstances where the CBG/ SBD do not contemplate a particular situation. When the situation is covered by the CBG/ SBD (including the PPA), then the ERC is bound to exercise its regulatory functions in accordance with such guidelines/ documents. Since the PPA clearly deals with the issues raised by the parties and the terms and conditions attached thereto, the present issues does not warrant exercise of general regulatory powers of the Commission as proposed by MSEDCL. MSEDCL's reliance on the judgement of the Supreme Court is completely misplaced and based on an incorrect understanding. The rights and obligations of the parties and any dispute qua the issues raised by MSEDCL are to be dealt with in accordance with the terms of the PPA. In fact the Supreme Court has specially held that for projects under the composite scheme (like CGPL) the Appropriate Commission having jurisdiction is CERC.

16.2.2. Regulatory intervention by exercise of general regulatory powers can be done in terms of Section 79(1)(b) and 86(1)(b) of the EA, 2003. This is because, the Commission's power to regulate tariff flows from the said provisions. In terms of the PPA dated 22.04.2007, CGPL is supplying power to Procurers of five States (Gujarat, Maharashtra, Punjab, Rajasthan and Haryana) in accordance with identical/ common PPA and terms and conditions contained therein. Meaning thereby that CGPL is having a composite scheme under Section 79(1)(b) of the EA, 2003 for generation and sale of electricity. The Court in its Judgment in *Energy Watchdog (supra)* has clearly held that when there is inter-State supply

of electricity, CERC would have the jurisdiction. The State Commission's jurisdiction only comes into play when generation and supply takes place within the State. The Supreme Court has further held that the expression "composite scheme" means a scheme for generation and sale of electricity in more than one State:-

"23. The scheme that emerges from these Sections is that whenever there is inter-State generation or supply of electricity, it is the Central Government that is involved, and whenever there is intra-State generation or supply of electricity, the State Government or the State Commission is involved. This is the precise scheme of the entire Act, including Sections 79 and 86. It will be seen that Section 79(1) itself in sub-Sections (c), (d) and (e) speaks of inter-State transmission and inter-State operations. This is to be contrasted with Section 86 which deals with functions of the State Commission which uses the expression "within the State" in sub-clauses (a), (b), and (d), and "intra-state" in sub-clause (c). This being the case, it is clear that the PPA, which deals with generation and supply of electricity, will either have to be governed by the State Commission or the Central Commission. The State Commission's jurisdiction is only where generation and supply takes place within the State. On the other hand, the moment generation and sale takes place in more than one State, the Central Commission becomes the appropriate Commission under the Act. What is important to remember is that if we were to accept the argument on behalf of the appellant, and we were to hold in the Adani case that there is no composite scheme for generation and sale, as argued by the appellant, it would be clear that neither Commission would have jurisdiction, something which would lead to absurdity. Since generation and sale of electricity is in more than one State obviously Section 86 does not get attracted. This being the case, we are constrained to observe that the expression "composite scheme" does not mean anything more than a scheme for generation and sale of electricity in more than one State."

16.2.3. Since CGPL has a composite scheme for generation and sale of electricity, and therefore is generating and supplying electricity inter-State, the CERC under Section 79(1) (b) alone has the jurisdiction to adjudicate/ entertain issues/ disputes related to tariff. Meaning thereby that the Commission lacks the jurisdiction to adjudicate upon the issues raised in the present Petition against CGPL.

16.2.4. The tariff at which CGPL is supplying electricity to the Procurers (including MSEDCL) has been discovered by way of competitive bidding under Section 63 of the EA,2003 and duly approved by the CERC vide its Order dated 19.09.2007. Rule 8 of the Electricity Rules, 2005 states that the tariff determined by the CERC for generating companies under Section 79(1)(a) or (b) shall not be subject to re-determination by the State Commission by exercise of functions/

powers under Section 86(1)(a) and 86(1)(b) of the EA, 2003. By its Judgment dated 06.09.2017 in Appeal No. 251 of 2015 titled as Bhakra-Beas Management Board (BBMB) v. Punjab State Electricity Regulatory Commission and Anr. the Appellate Tribunal for Electricity (APTEL) has interpreted Rule 8 of the Electricity Rules, by holding that on a conjoint reading of Section 79 of the EA, 2003 and Rule 8 of the Electricity Rules it is clear that it is not open to the State Commission to re-determine the tariff of a generating company whose tariff is determined by the CERC. Therefore, since the CERC has already approved/adopted the tariff at which CGPL is selling power to the Procurers, in light of the specific bar under Rule 8 of the Electricity Rules, it is not open to the Commission to pass any order/ direction that would have an impact on CGPL's tariff.

- 16.2.5. Without prejudice to the above, the issue of payment of Capacity Charges and declaration of Availability is already dealt with under the PPA dated 22.04.2007. Clause 4.4 of the CBG issued under Section 63 of the EA, 2003 specifically permits payment of Capacity Charges upto Normative Availability. This is reflected in Schedule 7 of the PPA which provides that the Procurers shall pay full Capacity Charge on Contracted Capacity at Normative Availability for the Contract Year. Meaning thereby that, CGPL is contractually entitled to payment of full Capacity Charges on 3800 MW as long as it declares 80% Availability in a Contract Year.
- 16.2.6. As per the formula provided in Schedule 7 of the PPA dated 22.04.2007 for calculation of Capacity Charge, it is evident that Capacity Charge for a particular month is calculated as the difference between Capacity Charges Payable based on the cumulative Availability during the said month and Capacity Charges Payable already billed/recovered till the previous month. The rationale behind the above Capacity Charges formula is that Capacity Charge is required to be paid for any month to the extent of actual cumulative Availability for that particular month. Therefore, the PPA dated 22.04.2007 envisages variation in monthly Availability for the purpose of computing Capacity Charges. In the event of any shortfall in Availability beyond the threshold, the PPA provides for a penalty to be levied on CGPL.
- 16.2.7. Therefore, since the issue qua payment of Capacity Charges and declaration of Availability is expressly covered/ governed by the PPA dated 22.04.2007, there cannot be any regulatory intervention by the Commission by exercise of general regulatory powers under Section 86(1)(b) of the EA, 2003

- 16.2.8. MSEDCL cannot now seek to change/ modify/ alter the terms and conditions of the PPA dated 22.04.2007, when it has agreed to them of its own volition. In the facts of the present case, there is no occasion to alter/amend the terms of the PPA in exercise of any regulatory powers. Even otherwise the parties have not amended or sought to amend the terms of our PPA. In terms of Article 18 of the PPA dated 22.04.2007, an amendment can only be carried out by way of a written agreement between the parties which is duly approved by CERC, if required.
- 16.2.9. In the *Energy Watchdog (supra)* batch matters, one of the batch appeals was Civil Appeal No. 5351 of 2017 which was filed by MSEDCL. MSEDCL had contended that the terms and conditions of the PPA dated 22.04.2007 cannot be altered on account of the promulgation of the Indonesian Regulations. Meaning thereby that, MSEDCL itself understands that the PPA is a document executed between the parties and cannot be amended/ altered unilaterally.
- 16.2.10. In addition to and without prejudice to the above, from the entire scheme of the PPA dated 22.04.2007, it is evident that the Commission lacks the jurisdiction to deal with issues raised by MSEDCL in the present Petition as regards CGPL is concerned. On a perusal of the PPA, it is seen that:-
- (a) The tariff for the Project has been approved/adopted by the CERC. Further, the Regulations applicable to CGPL and the Procurers in respect of sale and purchase of power under the PPA dated 22.04.2007 are regulations notified by the CERC. For any under-drawal/ over-drawal or under-injection/ over-injection of power, the applicable UI charges are levied, calculated and paid in accordance with Ld. Central Commission's appropriate Regulations.
 - (b) CGPL is entitled to payment of full Capacity Charges based on Contracted Capacity at Normative Availability. Normative Availability is defined under the PPA to mean 80% Availability at the Delivery Point on Contract Year basis.
 - (c) CGPL is entitled to receive Capacity Charges even if the Procurers do not avail/ schedule power upto their individual Allocated Contracted Capacity. [Article 4.4.3]
 - (d) The Delivery Point/ Interconnection Point is at CGPL's bus bar, where it is connected with the central grid. [Article 1.1 read with Schedule 8]

- (e) CERC alone is authorised to modify/ vary the tariff of the Project (including Capacity Charges) on account of Change in Law events or Force Majeure events or otherwise. [Articles 12.7(d), 12.7(e) and 13.2(b)]
- (f) Disputes related to or which has an impact on tariff can be adjudicated upon only by the Appropriate Commission. Under the PPA, Appropriate Commission is defined to mean the CERC [Article 1.1 read with Article 17.3]
- (g) The PPA can be amended by way of a written agreement between CGPL and the Procurers. Such an amendment will have to be approved by the Appropriate Commission i.e. CERC. [Article 18.1]

16.2.11. As is evident from the above, the CERC is the only regulator empowered under the PPA dated 22.04.2007 to deal with/ adjudicate upon issues arising out of or relating to tariff, and to modify/vary the tariff under certain situations. Since the CERC is the regulator having oversight over the PPA dated 22.04.2007, Regulations applicable to CGPL are those notified by the CERC. In terms of Article 1.1 of the PPA, CGPL is required to abide by the Indian Electricity Grid Code (IEGC) which is notified by the CERC. Further, Availability and ABT regime as notified under the CERC Tariff Regulations are also made applicable to CGPL. Therefore, the Regulations notified by this Commission are not applicable to CGPL and the PPA dated 22.04.2017. Meaning thereby that, the MYT Regulations and the ABT regime of Maharashtra State are not applicable to CGPL.

16.2.12. CGPL has been developed under the UMPP Policy issued by GoI. The Policy notes that due to the large size of the UMPP Projects, they shall meet the power requirements of multiple States. This implies that the UMPP scheme was envisaged for supplying power to more than one State. Since CGPL is a UMPP and is supplying power to multiple States (Gujarat, Maharashtra, Punjab, Haryana and Rajasthan), CGPL is an Inter-State Generating Station (“ISGS”) as defined in the IEGC, and is governed by the provisions of the IEGC. Since CGPL is an ISGS, the regulatory entity responsible for scheduling of power and certifying the Availability of power from CGPL is the Western Regional Load Despatch Centre (WRLDC) and not the MSLDC.

16.2.13. In terms of Schedule 7 of the PPA dated 22.04.2007, CGPL is entitled to recovery of full Capacity Charges on Contracted Capacity at Normative Availability. Meaning thereby that, as long as CGPL declares Normative

Availability of 80% in a Contract Year (i.e. by 31st March of the year), the Procurers are liable to pay full Capacity Charges at the Contracted Capacity of 3800 MW. Further, the PPA contemplates payment of full Capacity Charges even when the Procurers are not availing any power (Article 4.4.3).

16.2.14. As regards MSEDCL's submission that it has to pay UI charges on account of under-injection by the Generators and that the Generators ought to be made a part of SPPs so that they are made liable to pay UI charges as well, that submission has no relevance qua CGPL. CGPL's delivery point is at its bus bar which is connected to the Central grid (interconnection point with the Central grid/ PGCIL). In the event of any deviation from schedule (i.e. over-injection/ under-injection), CGPL is liable to pay (and is paying) UI charges in terms of CERC's Deviation Settlement Regulations. Since CGPL is connected to the Central grid, no question arises of CGPL paying UI charges as per the FBSM notified by the Commission for entities in Maharashtra for any alleged deviation from schedule.

16.2.15. In view of the above,

- (a) The present Petition is not maintainable against CGPL, since the Commission lacks the jurisdiction to adjudicate upon the issues raised by MSEDCL.
- (b) Without prejudice to the above, the reliefs sought by MSEDCL against CGPL are untenable and cannot be granted as the transaction between MSEDCL and CGPL is governed in terms of the PPA (Section 63) dated 22.04.2007 and there is no occasion for any regulatory intervention.

17. At the hearing held on 20 December, 2017

17.1. MSEDCL stated that:

- a. MSEDCL reiterates the submission in its Petition to amend Regulations 44 and 48 of MYT Regulations, 2015 and Intra-State ABT Order and FBSM Code. MSEDCL had already raised certain issues with respect to Generating Companies forming a part of State Pool. It was informed that the Commission has separately initiated the process of reviewing its ABT Order.
- b. Presently, the Availability of Generators is cumulatively calculated on annual basis. Therefore, the Distribution Licensees may not be able to get power in peak season if the Generator does not declare its Availability during that period on account of various reasons, which may not be realistic. The Regulations provide for recovery of AFC at

Target Availability on monthly basis in proportion to Contracted Capacity and based on the cumulative Availability achieved with respect to the Target Availability, till the respective month in the Year, subject to adjustment at the end of the year. Therefore, due to monthly cumulative adjustment, the Generating Companies are able to get benefits by declaring higher Availability during low peak demand months. Hence, MSEDCL proposes that Availability of Generators be specified on a monthly instead of annual basis by suitably amending the Regulations. This will not only ensure consistent monthly Availability from the Thermal Generating Stations but will also help in power purchase planning.

17.2. The Commission enquired whether MSEDCL had a system in place to check the coal available with the Generator, the quantity indented both for Generation and for stocking as per the norms; and whether MSEDCL monitors indenting of sufficient coal for stocking during the lean period so as to minimize any shortage of coal during peak periods. In absence of such monitoring system, MSEDCL may end up having to buy power from short term market and still pay capacity charges to the Generators.

17.3. MSPGCL stated as follows:

- a. MSEDCL has submitted the data of new Units for FY 2016-17, which have only recently achieved COD and were under the stabilisation period.
- b. Regulation 51 of the MYT Regulations, 2015 provides a safeguard with regard to demonstration of declared capacity.
- c. Hydro Power Stations, mainly Koyna Station, is generally used for summer peak demand. However, during FY 2016-17, Koyna Units were hectically used during November to February, keeping many coal-based Units under reserve shutdown/backed down, and hence the allotted water quantum of 67.5 TMC got exhausted by the first week of May, 2017. Consequently, there were restrictions on usage of this crucial support during the peak summer period. Had Koyna Hydro Station been judiciously used during the earlier period, it could have helped MSEDCL during the summer peak. During this period, the Chandrapur Station, which is the lowest in MOD, was also backed down while the Koyna Hydro Station was used.

17.4. MSEDCL stated that the Koyna Hydro Station was used during November to February because there were frequent trippings of the new Units of MSPGCL. The capacity of each new Unit is 660 MW, and sudden tripping of 660 MW Unit resulted

in the significant loss of generation. Therefore to compensate such gap within a short span, MSEDCL was forced to use the Koyna Hydro Station.

17.5. APMIL stated that:

- a. MSEDCL vide its letter dated 8 September, 2016 sought 100% Availability of its Units 1 to 5 for next three months to meet its enhanced demand. Accordingly, APMIL provided the entire 1320 MW capacity for September, October and November, 2016, and the Availability was to the extent of 99.04%, 99.75% and 94.57%, much higher than 85%.
- b. Certain essential mandatory annual maintenance activities are to be undertaken by Generators. Therefore, there is a 15% cushion for undertaking such activities to ensure the health of the Plant.
- c. MSEDCL is seeking amendment of the MYT Regulations, which have been recently notified after due public process and MSEDCL would also have given its comments during that process. Hence, there is no propriety in seeking amendment at this stage.

17.6. JSW Energy Ltd. (JSWEL) stated that, although it has not given any written response, it supports APMIL's submission. It is supplying power to MSEDCL as per the PPA. The PPA clearly deals with the issues raised by MSEDCL, and no modification is required.

17.7. Dr. Ashok Pendse, on behalf of Thane Belapur Industries Association (TBIA), an authorized Consumer Representative, stated that the data of coal supplied by CIL is available in the public domain. However, MSEDCL has to monitor the coal stock with the Generating Companies. This will ensure the predictability of the Generation for that particular month. Further, it is observed that Generating Companies have not picked up the coal in months of January, February and March, 2016.

17.8. The Commission observes that it is necessary to put in place a system for monitoring not only the coal stocks available with the Generators and the shortage or otherwise of coal to be supplied by CIL, but also if indenting for coal has been undertaken diligently by the Generators in lean periods so that sufficient stock is available for periods of high power demand and /or when there is a shortfall in coal supply by CIL. MSEDCL should inform the Commission of the actual or proposed monitoring system in 2 weeks.

17.9. The Commission observes that there is certain logic and reason for Generation Availability being calculated on an annual basis, and it is a standard practice. If MSEDCL still feels that this needs to be looked at afresh, it may also take up the issue with the CEA. Further, the Regulations and PPAs provide for demonstration of Availability of Generating Units. This provision can be invoked by MSEDCL whenever it considers necessary.

18. APML's Reply dated 20 December, 2017 states as follows:

18.1. In respect of the amendment to the MYT Regulations and SoP Regulations sought by MSEDCL, the said Regulations are in nature of Subordinate / Delegated legislation and have been framed under the EA, 2003. The EA, 2003 requires the Appropriate Commission to be guided by MYT principles while specifying the Terms and Conditions for determination of tariff.

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

...(f) Multi year tariff principles;

18.2. The MERC (Terms and Conditions of Tariff) Regulations, 2005 were framed by the Commission in view of the mandate in Section 61. On February 04, 2011, the Commission notified MYT Regulations, 2011. These Regulations were in operation for the period April 01, 2011 to March 31, 2016. In course of operation of the 2011 Regulations, the Commission had duly addressed the issue relating to operation of Generating Station in case of fuel shortages and consequential impact of declared capacity and backing down generation. These 2011 Regulations were in force till March 31, 2016.

18.3. In September, 2015, the Commission notified the draft MYT Regulations, 2015. The framing and notifying of Statutory Regulations such as these contemplates a stipulated procedure under the Act. This includes publication of the draft Regulations, consideration of suggestions and objections, then publication as contemplated by the Act including laying of the Regulations before the State Legislature. After having undertaken the entire process the MYT Regulations, 2015 were duly notified.

18.4. These 2015 Regulations came into force on April 01, 2016. In accordance with Regulation 1.3 the Regulations are applicable for the duration April 01, 2016 to March 31, 2020. MSEDCL has participated in the said process. The Regulations have

been framed after giving an opportunity to MSEDCL to make its suggestions and objections on the draft Regulations. Any claim of purported hardship does not confer any power on a Distribution Licensee to seek amendment of Statutory Regulations. The Petition is silent on this vital aspect relating to the Regulations. The Petition is therefore not maintainable on this ground alone.

- 18.5. MSEDCL has erred in law in invoking Regulations 101 and 102 in support of the relief claimed in the present Petition. The "power to remove difficulties" contemplates difficulties in giving effect to the provisions of the Regulations and not a situation wherein a Stakeholder is aggrieved by any Regulations. Also, through the present Petition MSEDCL is seeking review and amendment in FBSM Regulations. Regulations can be challenged only before the High Court. The scheme of the EA, 2003 does not empower Regulatory Commissions to review their own Regulations based on Petition filed by the affected party. Therefore, the Petition filed by MSEDCL is not maintainable on this ground also.
- 18.6. In seeking review of the orders passed by the Commission, MSEDCL would have to justify the invocation of review jurisdiction on the principles for exercise of review jurisdiction enunciated by the Supreme Court in a catena of judgements. Review of the orders passed by the Commission, as sought by MSEDCL cannot be sought under the guise and garb of amendment of orders.
- 18.7. Without prejudice to above, APML has submitted its comments on the issues raised by MSEDCL and seeks dismissal of the Petition.
- 18.8. The contentions raised by MSEDCL in the Petition can be summarized as follows:
 - a. Availability of IPPs are consistently below 85% in Apr 17 and May 17. Owing to declaration of lower capacities than contracted by the Generators, MSEDCL is facing difficulties to meet peak demand during summer especially during April and May and had to purchase costlier power to meet its rising demand in spite of having contracted capacity more than its required capacity. MSEDCL has to bear penalties for over-drawal from the grid on account of declaration of lower Availability.
 - b. Generators are declaring higher Availability during 4 months of monsoon period to make up declaration of lower demand and recovery of 100% of capacity charge. Due to high fluctuation in declaration, MSEDCL is facing difficulties to maintain the deviation within limit and liable to pay penalties as per Final Balancing and Settlement Code 2006 for deviation by Generators since they are not SPPs.

- c. Payment of Capacity Charges based on monthly Availability rather than cumulative Availability.
- d. In spite of MSLDC instructions, the Generators are not following the declared Ramp Up and Ramp down rate following the MOD resulting in overdrawal / underdrawal of power from the system attracting penalties.
- e. Suitable amendment may be carried out in the following:
 - i. In Regulation 48.3 of MYT Regulation 2015 to arrest manipulating Availability by the Generators and payment of Capacity Charges based on monthly Availability rather than cumulative upto the month of billing
 - ii. Intra- State ABT Order and FBSM Code shall be amended to include Generator as SPP so that penalties on account of Generators are not passed on to the Distribution Licensees
 - iii. SoP Regulations 2014 shall be suitably be amended or separate regulation be framed for performance of Generation and Transmission companies
- g. The Commission has general regulatory powers under Section 86 to make suitable amendment in the PPAs to ensure consistency in the monthly availability.

Re: Mis-declaration of availability by the Generators resulting in penalties

- 18.9. As regards contention at paragraph 4 (a) to (d) about declaration of availability, the argument advanced by MSEDCL is completely misplaced and incorrect in view of following:
- a. Declaration of Availability is not guided by Procurer's demand but by Generators' capability to declare. Declaration of Availability depends upon number of factors such as Availability of fuel, water, spares and machine maintenance / annual overhaul etc. During summer, APML has to take into account Availability of water. IEGC / SGC clearly specify describe the parameters to be taken into account while doing so. APML is declaring the Availability accordingly.
 - b. Under the PPAs as well as Regulations, there is no stipulation about uniform declaration of availability.

- c. There is no gain / commercial advantage to Generator for under declaring the capacity. In fact, higher the generation; more is the incentive. In the given circumstances a question arises that why a Generator should lose incentive by declaring lower Availability.
- d. Under the PPA, MSEDCL has exclusive right over entire contracted capacity and APML cannot sell energy from such capacity to third party. Therefore, APML has no benefit in withholding the contracted capacity once all the necessary inputs to generate energy are available.
- e. Under-declaration during month of April and May of any year is also not prudent since it is difficult to predict contingency during rest of year which may impact cumulative Availability.
- f. Contention that APML is not adhering to declared ramp-up/ ramp-down rate, is patently incorrect.
- g. As per EA, 2003/ State Grid Code, SLDC is responsible for optimum scheduling and despatch of electricity within a State in accordance with the contracts from available generation capacity.
- h. Accordingly, SLDC is responsible for ensuring declaration. In case MSEDCL has found any issue of mis-declaration, it has recourse to approach MSLDC.
- i. There is no such instance wherein APML has received any remark/notice for mis-declaration or gaming or non-following of ramp-up/ramp-down instructions

18.10. In view of above, the contention that APML is mis-declaring the Availability is completely misconceived and hence the Petition is not tenable.

18.11. As regards penalty for lower declaration of availability by Generators, MSEDCL has not analysed the issue properly. Penalty will not arise due to lower availability. It has nothing to do with declaration. Penalty relates to deviation between schedule and actual. In case of declaration of lower availability under Long term arrangement, MSEDCL could have planned supply from other sources upfront in order to avoid penalties due to drawal under UI from the grid. Through such baseless arguments, MSEDCL is trying to hide its own default in making arrangement of power required after assessing Availability of all long term PPAs.

18.12. *Re: Amendment to PPA/ Regulations*

MSEDCL has proposed amendment in PPA and Regulations with regard to consideration of Monthly Availability instead of Cumulative Availability for payment of capacity charges, inclusion of Generators as SPPs under FBSM and imposing certain performance standards on Generators. These Prayers have no relation with the objective to achieve uniform Availability and cannot be considered in view of following:

- a. Presently, payment of capacity charge is based on cumulative Availability and proposal to consider monthly availability requires amendment in the PPA. Under the PPA, amendment is possible only with consent of parties to the PPA. MSEDCL has never approached APML with any proposal for amendment in the PPA and directly filed the present Petition without following proper process. In view thereof, the present Petition is not maintainable and ought to be rejected.
- b. MSEDCL could have sought deviation at the time of bidding if cumulative Availability was perceived as an issue. However, MSEDCL chose to keep it as it is. Now, on the alleged grounds of financial loss on account of such provision, MSEDCL is terming it as serious manipulation by Generator and seeking amendment in the PPA. APML strongly objects to such contention. Be it a PPA under Section 62 or 63, reimbursement of capacity charge based on cumulative Availability is not undue advantage. In fact, no SERC/ CERC has considered payment of capacity charge based on monthly Availability. It is noted that off late, petitioner is proposing amendments to PPA and revised mechanisms for various computations without consulting APML or following the process contemplated under PPA. Long term contracts cannot be dealt in such manner without properly analysing the outcome.
- c. MSEDCL was a party to all the Regulations framed by the Commission. It is understood that MSEDCL has never submitted any comments with regard to consideration of Availability on monthly basis for the purpose of payment of Capacity Charge/ making the Generator a SPP.
- d. MSEDCL has stated that since Generators are not SPP, it had to bear penalties in terms of UI charges for deviation. MSEDCL has completely confused the issue of penalty with declaration of Availability. Penalty has nothing to do with declaration, penalty relates to deviation between schedule and actual energies.

- e. As per provisions of the PPAs, the variation between scheduled energy and actual energy shall be accounted for through UI as per provisions of ABT (i.e. Regulations contained in CERC (Terms and Conditions of Tariff) Regulations, 2004) and that present settlement methodology being followed is inconsistent which is carried out as per FBSM mechanism.
- f. As regards proposal for amendment of the SoP Regulations 2014 / framing separate Regulations for performance of Generator and Transmission companies, the contention of MSEDCL is misconceived and denied. For competitively bid PPAs, standard of performance are inbuilt in the quoted tariff.
- g. A perusal of the Petition reveals that MSEDCL is well aware of the factual matrix relating to generation and contentions of MSEDCL relating to a particular Generator and its failure in terms of Availability cannot be applied to the other Generators. MSEDCL has addressed letters to the coal companies relating to provision of adequate coal and is well aware of the situation relating to coal procurement by this Respondent. In view of above, MSEDCL proposal for amendments in the Regulations and PPA is misplaced and ought to be rejected.

Commission's Analysis and Ruling

19. Regulations 44 and 48 of the MYT Regulations, 2015 specify as follows:

“44. Norms of operation for Thermal Generating Stations—

44.1 Target Availability for full recovery of Annual Fixed Charges shall be 85 percent for all Thermal Generating Stations, except those covered under Regulation 44.2....

...48. Computation and Payment of Annual Fixed Charges and Energy Charges for Thermal Generating Stations

A. Annual Fixed Charges

48.1 The total Annual Fixed Charges shall be computed based on the norms specified under these Regulations and recovered on monthly basis.

48.2 The full Annual Fixed Charges shall be recoverable at target availability specified in Regulation 44.1 and 44.2, and recovery of Annual Fixed Charges below the level of Target Availability shall be on pro-rata basis:

Provided that at zero availability, no Annual Fixed Charges shall be payable.

48.3 Computation and billing of Annual Fixed Charges shall be on monthly basis in proportion to Contracted Capacity and based on the cumulative Availability achieved with respect to the Target Availability, till the respective month in the Year, subject to adjustment at the end of the year.”

20. Thus, for recovery of the full Annual Fixed Charges, the Regulations specify the requirement of 85% cumulative Availability for a Generating Unit/ Station to be achieved with respect to the Target Availability, till the respective months in the year, subject to adjustment at the end of the year. In other words, it is essentially entitled to full AFC recovery if the cumulative Availability over the year is not less than 85%, even if the Availability in one or more months is less than 85%.
21. MSEDCL seeks that Regulations 44 and 48 be amended so to require consistent monthly Availability of 85%. MSEDCL has claimed that, even if a Generator declares lower Availability when demand increases in the peak seasons and MSEDCL requires supply the most, the Generator is still able to recover the full Fixed Charges by declaring higher Availability at other times of low demand and thereby achieving 85% Availability over the year. MSEDCL has stated this has obvious implications for Distribution Licensees and their consumers.
22. The Commission notes in passing that, in the public consultation process leading to the MYT Regulations, 2015, MSEDCL had not commented on these provisions when they were proposed. Moreover, earlier Regulations also had essentially similar provisions.
23. The declaration of Availability depends upon various factors such as availability of fuel, water and machine capability to deliver depending upon annual overhauls and other requirements. Considering such factors, 85% Availability has been specified for entitlement to the full Annual Fixed Charges. The entire capacity of MSPGCL's Generating Units is tied up with MSEDCL. Hence, under-declaring Availability during peak periods and higher Availability during slack period may not benefit MSPGCL. Similarly, the entire or most of the capacity of the IPPs is tied up under PPAs with MSEDCL, and hence the question of selling power outside during the peak period does not arise or can easily be noticed. Moreover, in the case of PPAs under Section 63 of the EA, 2003, in case an IPP had bid a tariff whose underlying basis is higher recovery of variable costs and lower recovery of fixed costs, it would have an incentive to maximise the supply and off-take of power. The Commission also notes that the PPAs entered into under Section 63 of the EA, 2003 on the basis of the CBG notified by GoI would not be subject to amendments, if any, in the MYT Regulations in this regard without the consent of the Generators. Such arrangements with CGPL would, in any case,

concern the CERC.

24. **Regulation 51 of the MYT Regulations, 2015 empowers MSLDC to require Generators to demonstrate their declared Capacity:**

“51. Demonstration of declared capacity—

51.1 The Generating Company may be required to demonstrate the declared capacity of its Generating Station as and when asked by the MSLDC.

51.2 In the event of the Generating Company failing to demonstrate the declared capacity, the Annual Fixed Charges due to the Generating Company shall be reduced as a measure of penalty.

51.3 The quantum of penalty for the first mis-declaration for any duration/block in a day shall be the charges corresponding to two days fixed charges.

51.4 For the second mis-declaration, the penalty shall be equivalent to fixed charges for four days and for subsequent mis-declarations in the year, the penalty shall be multiplied in the geometrical progression.

51.5 The operating log books of the Generating Station shall be available for scrutiny by the MSLDC, and these books shall keep record of machine operation and maintenance.”

Thus, MSEDCL can request MSLDC to ask for demonstration of the declared capacity of the relevant Generating Stations or Units. A monitoring system for periodical assessment of declared capacity could also be put in place. If the Generator fails to demonstrate the declared capacity, the Regulations provide for the consequences.

25. **As suggested during these proceedings, MSEDCL may also approach the CEA, which is the apex technical body, for its inputs and views with regard to its contention for monthly instead of annual normative Availability of 85% in the context of overhauling and maintenance and other technical requirements of Thermal Generating Units.**
26. **Shortfalls in coal supply by CIL have also been cited by some Generators for their inability to meet MSEDCL’s full requirements in certain months. As the Commission has observed in these proceedings (and also in other earlier Cases), MSEDCL should put in place a system for monitoring not only the coal stocks available with the contracted Generators and shortfall or otherwise in coal supply**

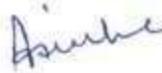
by CIL, but also if indenting of coal has been undertaken diligently by the Generators in lean periods so that sufficient stock is available for periods of high power demand and /or when there is a shortfall in coal supply. In neither these nor other proceedings has MSEDCL informed the Commission of the details of the actual or proposed monitoring system.

27. In view of the foregoing, the Commission is not inclined to initiate the amendment of Regulations 44 and 48 of the MYT Regulations, 2015 as proposed by MSEDCL. The Commission also does not agree that separate SoP Regulations are required for Generators inasmuch as these are, in effect, contained in the MYT and other Regulations such as the Grid Code, the PPAs and various Orders of the Commission along with the consequences for default.
28. As regards MSEDCL's proposal to include Generators as SPPs for the sharing of charges and losses pertaining to their deviations, the Commission has separately initiated the process of reviewing its ABT Order and the FBSM applicable in Maharashtra.

The Petition of MSEDCL in Case No. 111 of 2017 stands disposed of accordingly.

Sd/-
Deepak Lad
(Member)

Sd/-
Azeez M. Khan
(Member)


(Ashwani Kumar Sinha)
Secretary

