# 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. 114 of 2016

#### In the matter of

# Petition of Maharashtra State Electricity Distribution Co. Ltd for a mechanism for recovery of charges on account of over-drawal by Indian Railways

#### <u>Coram</u>

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

Maharashtra State Electricity Distribution Co. Ltd. ... Petitioner

V/s

1. Maharashtra State Load Despatch Centre

2. Maharashtra State Electricity Transmission Co. Ltd.

3. Indian Railways (Central Railway), Govt. of India

Appearance:

For the Petitioner

For Respondent 1 For Respondent 2 For Respondent 3

For Authorised Consumer Representative

...Impleaded Respondents

: Shri Ashok Chavan : Shri Paresh Bhagwat

: Shri E.T. Dhengle

: Shri S. N. Bhopale

: Shri R. K. Goyal

: Shri R. P. Ojha (Adv.)

: Dr. Ashok Pendse, TBIA

# <u>ORDER</u>

# Date: 19 March, 2018

Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) has filed a Petition, citing Regulations 92 and 94 of the MERC (Conduct of Business) Regulations, 2004, on 19 August, 2016 with regard to issues arising from over-drawal by Indian Railways from the Grid and the need for an arrangement for stand-by supply.

- 2. MSEDCL's prayers are as follows:
  - a. "To admit the Petition as per the provisions of the Regulation;
  - b. To consider the concern submitted by the Petitioner in respect of arranging the standby power by Indian Railway;
  - c. To consider the concerns submitted by the Petitioner in providing a mechanism for recovery of transmission charges and losses thereof;
  - d. To provide a suitable mechanism for recovery of penalties on account of DSM Regulations due to over-drawl of power by Railways from the grid;..."
- 3. The Petition states as follows:
  - 3.1 Indian Railways is a Department of the Ministry of Railways, Government of India (GoI) which operates the rail systems in India as per the provisions of the Railways Act, 1989. Section 2(31) of the Railways Act defines the term 'railways' as a railway, or any portion of a railway, for the public carriage of passengers or goods, and includes among others all electric traction equipment, power supply and distribution installation used for the purposes of, or in connection with, a railway.
  - 3.2 Under the third proviso to Section 14 of the Electricity Act (EA), 2003, if the Central Government or a State Government transmits or distributes electricity or undertakes trading in electricity, such Government shall be deemed to be a Licensee and shall not be required to obtain a Licence under the EA, 2003.
  - 3.3 The Ministry of Power (MoP), Government of India, in letter dated 6 May, 2014, has clarified the position/status of Indian Railways as a "Deemed Licensee" under the EA, 2003. As a Deemed Licensee, Indian Railways is entitled to procure electricity from any source of its choice including a Generating Company, a Captive Generating Plant, a Trader or through a Power Exchange to meet the electricity requirements. In terms of the authority vested under Section 11 of the Railways Act, it can also lay down transmission lines from the place of generation or the place of interconnection of any network to the facilities where the electricity procured is to be injected.
  - 3.4 As per the Central Electricity Regulatory Commission (CERC)'s Order in Petition No. 197/MP/2015, all the concerned Regional and State Load Despatch Centres (RLDCs and SLDCs) and State Transmission Utilities (STUs) are directed to facilitate Long Term

Access and Medium Term Access in terms of the Connectivity Regulations from the Generating Stations or other sources to the facilities and networks of Indian Railways.

- 3.5 As per the Final Balancing and Settlement Mechanism (FBSM) Code, 'State Pool Participant' (SPP) refers to the Market Participants of the Maharashtra electricity market who meet the conditions for membership of the Pool, subject to fulfillment of qualification criteria or covenants for Pool participation as set out in the Commission's Order. Currently, it is envisaged that the Distribution Licensees, the Transmission Open Access Users and the Merchant Generators selling power outside the State (subject to fulfillment of qualification criteria or covenants for Pool participation) operating within the electricity market of Maharashtra in accordance with the terms and conditions of the Commission's Order and under this Code shall be the SPPs.
- 3.6 Indian Railways is a SPP under the FBSM by virtue of its status of Deemed Distribution Licensee.
- 3.7 As per Clause 4.3 of the FBSM Code, Covenants of State Pool Participation,

"The State Pool Participants need to follow some covenants in order to fulfill an objective of an effective operationalization of the market. The list of such covenants is as follows:

...(d) The State Pool Participants shall operate their equipment / loads in a manner that is consistent with the provisions of the Indian Electricity Grid Code and the State Grid Code.

(e) The State Pool Participants shall enter into BPTA (Bulk Power Transmission Agreement) and Connection Agreement with the concerned transmission licensee (MSETCL or TPC-T or RInfra-T or any other transmission licensee in the state, as case may be), which shall specify the physical and operational requirements for a reliable operation and gain physical access and connection to the intra-State transmission system (InSTS).

(f) The MSLDC-OD shall publish all such information as required for all other State Pool participants to be aware of the energy exchanges taking place within the pool as well as exigency conditions, if any. Such information shall include, but not limited to, scheduling data, Ex-Ante price on a day-ahead basis, frequency of updation of any such information published on the site, etc."

3.8 The MoP has notified a Scheme for utilization of Gas-based power generation capacity on 27 March, 2015 for FY 2015-16 and FY 2016-17. Around 14,305 MW of capacity has been classified as 'stranded gas-based Plants' due to non-availability of domestic gas. The Scheme envisages financial support to buy imported gas for the stranded Gas Plants under the Power System Development Fund (PSDF).

- 3.9 Under this Scheme, Ratnagiri Gas and Power Pvt. Ltd. (RGPPL) has secured gas and has tied up to supply of power to the Indian Railways for 620 MW. Indian Railways is utilizing this power in the States of Maharashtra, Gujarat, Madhya Pradesh and Jharkhand.
- 3.10 CERC has amended the sharing of Inter-State Transmission Charges vide the CERC (Sharing of Inter-State Transmission Charges and Losses) (Fourth Amendment) Regulations, 2015 from 01<sup>st</sup> June, 2015 as below:

# "2. Amendment to Regulation 7 of the Principal Regulations:

The following sub-Clauses shall be added after sub-Clause (v) of Clause (1) of Regulation 7 of the Principal Regulations:

...(w) No transmission charges for the use of ISTS network shall be payable which is attributed to incremental gas-based generation from e-bid RLNG for the years 2015-16 and 2016-17 in accordance with the scheme notified by the Government of India vide Office Memorandum No. 4/2/2015.Th.1 dated 27.3.2015.

(x) No transmission losses for the use of ISTS network shall be payable which is attributed to incremental gas-based generation from e-bid RLNG for the year 2015-16 and 2016-17 in accordance with the scheme notified by the Government of India vide Office Memorandum No. 4/2/2015.Th.1 dated 27.3.2015."

- 3.11 The Commission has notified the MERC (Implementation of Scheme for utilization of Gas-based power generation capacity) Regulations, 2016 ('Gas-based Power Utilization Scheme Regulations') on 20 January, 2016 with effect from 21<sup>st</sup> November, 2015. They stipulate that no Transmission Charges for the use of the Intra-State Transmission System (InSTS) network shall be levied on incremental gas-based generation from e-bid Regasified Liquefied Natural Gas (RLNG) for FY 2015-16 and 2016-17 in accordance with the Scheme.
- 3.12 There have been several instances of tripping of the RGPPL Plant. Since Indian Railways has not made any arrangement of for stand-by power, this has resulted in over-drawal of power from the Grid by Indian Railways. Such events occurring frequently affect the Grid of the State as well as financially impact the Utilities, including MSEDCL, under the CERC (Deviation Settlement Mechanism (DSM) and related matters) Regulations, 2014 ('CERC DSM Regulations'). Further, and more seriously, such over-drawal may lead to power deficit situation for the existing consumers of MSEDCL.
- 3.13 Railways, being a SPP, through such over-drawal has not fulfilled its obligations towards maintaining Grid stability. Thus, the Commission may take suitable measures to ensure that such instances of over-drawal by Railways do not occur frequently. They may result in Grid instability and increase in voltage level losses. Hence, the Commission may devise a suitable structure whereby the impact of over-drawal of power on the Utilities,

including MSEDCL, can be controlled and such impact completely passed on to the Indian Railways itself.

3.14 As per the CERC DSM Regulations, the Charges are as below:

Table 1: Cl	ERC DSM Charges
When 12% of Sched	ule is less than or equal to 150 MW
For over-drawal of electricity by any buyer in excess of 12% and up to 15% of the schedule in a time block	Equivalent to 20% of the Charge for Deviation corresponding to average grid frequency of the time block.
For over-drawal of electricity by any buyer in excess of 15 % and up to 20% of the schedule in a time block	Equivalent to 40% of the Charge for Deviation corresponding to average grid frequency of the time block.
For over-drawal of electricity by any buyer in excess of 20 % of the schedule in a time block	Equivalent to 100% of the Charge for Deviation corresponding to average grid frequency of the time block.
When 12% of Sche	dule is more than 150 MW
For over-drawal of electricity by any buyer is above 150 MW and up to 200 MW in a time block	Equivalent to 20% of the Charge for Deviation corresponding to average grid frequency of the time block.
For over-drawal of electricity by any buyer is above 200 MW and up to 250 MW in a time block	Equivalent to 40% of the Charge for Deviation corresponding to average grid frequency of the time block.
For over-drawal of electricity by any buyer is above 250 MW in a time block	Equivalent to 100% of the Charge for Deviation corresponding to average grid frequency of the time block.

3.15 The above deviation is allowed to take care of slight variations in demand-supply and not for meeting the entire demand by over-drawing from the Grid. Subsequently, on 06<sup>th</sup> May, 2016, CERC has notified the Third Amendment to the DSM Regulations. As per the amendment, a new term 'Renewable Rich State' has been introduced and defined as follows, and Maharashtra has been declared as a Renewable Rich State as per the definition:

"(*m-i*) "Renewable Rich State" means a State whose minimum combined installed capacity of wind and solar power is 1000 MW or more.

3.16 The deviation charges have also been amended for Renewable Rich States and the limit has been increased to 250 MW for States with a combined installed capacity of wind and solar projects > 3000 MW.

#### Table 2: Deviation Charges for Renewable Rich States

(i)	For over-drawal/under-injection of	Equivalent to 20% of the Charge for
	electricity above L MW and up to	Deviation corresponding to average grid
	L+50 MW in a time block	frequency of the time block.
(ii)	For over-drawal / under-injection	Equivalent to 40% of the Charge for
	of electricity above L+50 MW and	Deviation corresponding to average grid
	up to L+100 MW in a time block	frequency of the time block.
(iii)	For over-drawal / under-injection	Equivalent to 100% of the Charge for
	of electricity above L+100 MW in	Deviation corresponding to average grid
	a time	frequency of the time block.
	Block	

*Note: "L" shall be as specified in Annexure-III of the Regulations.* 

# Annexure-III

# Deviation Limits for Renewable Rich States

<u>Sr.</u>	States having combined installed	Deviation Limits (MW)-
<u>No.</u>	capacity of Wind and Solar projects	<u>"L"</u>
1.	1000-3000MW	200
2.	>3000MW	250

- 3.17 Every Utility shall maintain Grid discipline by matching its demand-supply. In respect of Railways, during tripping of RGPPL, the entire power is being over-drawn by it from the Grid to meet its demand without arranging any stand-by power or procurement of power from other sources. This results in over-drawal by the State by more than 250 MW. As a result, any marginal over-drawal by another Utility also attracts a huge penalty under the DSM mechanism due to the large over-drawal quantum. There are many incidences of tripping of RGPPL units from February, 2016 onwards. The Maharashtra SLDC (MSLDC) is issuing bills towards the over-drawal quantum calculated as per FBSM. Only the provisional bills against FBSM for July, 2015 and final bills for February, 2013 have been issued. At present, the calculation of over-drawal quantum and deviation penalty towards DSM mechanism beyond July, 2015 is not readily available.
- 3.18 On 28 March, 2016, MSLDC wrote to Indian Railways stating that there were three incidences of tripping of RGPPL Plant on 18 February, 12 March and 27 March, 2016 and Railways had drawn power from the Grid in absence of stand-by or back-up power. Such unscheduled drawal is a matter of serious concern, and MSLDC requested Indian Railways to make stand-by power supply arrangements with immediate effect.
- 3.19 On 9 June, 2016, MSEDCL wrote to MSLDC stating that RGPPL power generated from e-bid RLNG does not attract Transmission Charges and Losses as per the Commission's Gas-based Power Utilization Scheme Regulations. MSEDCL further stated that over-

drawal quantum of power by Indian Railways is not from e-bid RLNG and hence shall attract Transmission Charges and Losses. The over-drawal quantum by Indian Railways during April 2015 to May 2016 was 60.62 MUs. Hence MSLDC was requested to recover the Transmission Charges from the Indian Railways and to pass on the applicable Transmission losses on the over-drawal quantum.

- 3.20 Regulation 61.2 of the MERC (Multi Year Tariff) Regulations ('MYT Regulations'), 2015 specifies that the Commission shall approve the Base Transmission Capacity Rights (TCR) as the average of Co-Incident Peak Demand (CPD) and Non-Coincident Peak Demand (NCPD) for Transmission System Users (TSUs) as projected for 12 monthly period of each year of the Control Period.
- 3.21 Accordingly, the Base TCR of Distribution Licensees has been re-determined for FY 2015-16, based on the average of CPD and NCPD of Distribution Licensees in FY 2014-15, as shown in the Table below:

TSU -	FY 201	5-16
Distribution	Transmission Capacity	Sharing Proportion for
Licensees	<u>Rights (MW)</u>	<u>TTSC (%)</u>
MSEDCL	15,404	83.05%
TPC-D	930	5.01%
RInfra-D	1,366	7.36%
BEST	847	4.57%
TOTAL	18,547	100.00%

Table 3: Base TCR for FY 2015-16

- 3.22 The InSTS Charges for FY 2015-16 shall be shared by Distribution Licensees in accordance with their respective contributions to the average of CPD and NCPD.
- 3.23 As per Regulation 3 of the Gas-based Power Utilization Scheme Regulations, the Central Railways is exempted from paying Transmission Charges for the gas-based power sourced from RGPPL. However, Indian Railways being in the MSEDCL area, for the over-drawal by Railways, the Transmission Charges are already loaded on MSEDCL in accordance with its contribution to the average of CPD and NCPD. Thus, MSEDCL is being burdened with the Transmission Charges and Losses pertaining to the quantum of power being drawn and over-drawn by Indian Railways.
- 3.24 Currently, under the PSDF Scheme, the power generated from gas-based power projects is exempted from Transmission Charges and Losses. However, to the extent of power over-drawal from the Grid by Indian Railways, MSEDCL is paying Transmission Charges and Losses which are borne by its consumers.
- 3.25 There have been many instances of tripping of RGPPL's Power Plan whereby Indian Railways has over-drawn from the Grid despite arranging power from other sources.

Indian Railways is over-drawing power on regular basis. All such over-drawals from the Grid attract Transmission Charges and Losses for which MSEDCL is paying Maharashtra State Electricity Transmission Co. Ltd. (MSETCL) through its Aggregate Revenue Requirement (ARR). The details of tripping events of RGPPL Units are as below:

Sr No	Tripped	Date and Time of tripping	Installed Capacity
<u>51 NO</u>	<u>RGPPL unit No</u>	(mm/dd/yy time)	<u>(MW)</u>
1	2B	2/18/2016 4:25	210
2	2A	2/18/2016 4:25	210
3	2A	3/12/2016 1:39	210
4	2A	3/27/2016 8:33	210
5	2B	3/27/2016 8:59	210
6	2A	3/27/2016 19:25	210
7	3X	5/7/2016 18:40	240
8	2A	6/1/2016 17:50	210
9	2B	6/1/2016 17:50	210
10	2A	6/12/2016 19:58	210
11	2X	6/12/2016 19:59	240

**Table 4: Tripping of RGPPL Units** 

3.26 In addition to above tripping, RGPPL also overdraws power during changeover of the Units. On some occasions of tripping, RGPPL is revising its generation schedule up to the actual generation and thereby the drawal schedule of Indian Railways is being revised. However, Indian Railways is continuously over-drawing additional power from the Grid and such over-drawal attracts penalty through the DSM on other Utilities also who are marginally over-drawing power from the Grid. The incidences of tripping of RGPPL's Units and over-drawal from the Grid by Indian Railways which attracted penalty through the DSM are as below:

# Table 5: Tripping of RGPPL Units and over-drawal from the Grid by IndianRailways

<u>Sr</u> <u>No</u>	<u>Tripped</u> <u>RGPPL</u> <u>Unit</u> <u>No</u>	Date and Time of tripping	<u>Generatio</u> <u>n before</u> <u>Tripping</u> (MW)	<u>Generatio</u> <u>n after</u> <u>Tripping</u> (MW)	<u>Sync</u> <u>RGPP</u> <u>L unit</u> <u>No</u>	Date and <u>Time of</u> synchroniz <u>ation</u>	<u>No of</u> <u>hours</u> <u>of</u> <u>Trippin</u> <u>g</u>	<u>Over-</u> drawal by <u>Indian</u> <u>Railways</u> ( <u>Mus)</u>
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1	2A	3/12/201 6 1:39	457	295	2A	3/12/2016 15:22	13.72	0.9
	2A	3/27/201 6 8:33	500		2A	3/27/2016 14:19	5.77	
2	2B	3/27/201 6 8:59	500	0	2B	3/27/2016 10:54	1.92	0.765
	2A	3/27/201 6 19:25	500		2A	3/27/2016 20:54	1.48	
3	3X	5/7/2016 18:40	513	295	2B	5/8/2016 0:58	6.30	1.401
4	2A	6/1/2016 17:50	507	281	2B	6/1/2016 19:27	1.62	0.143
5	2A	6/12/201 6 19:58	504	299	2X	6/13/2016 0:54	4.93	0.292
							Total	3.501

3.27 Indian Railways is regularly over-drawing power from the Grid in normal situations as well as during tripping of RGPPL Units and this over-drawn power is accounted on MSEDCL for payment of Transmission Charges through ARR of MSETCL. Thus, Indian Railways should reimburse the Transmission Charges to MSEDCL at the rate applicable to Short Term power. The month-wise over-drawal in MUs by Indian Railways is as below.

Table 6: Over-drawal (Provisional) by Railways during December, 2015 to May, 2016

Month	<u>Dec-15</u>	<u>Jan-16</u>	<u>Feb-16</u>	<u>Mar-</u> <u>16</u>	<u>Apr-</u> <u>16</u>	<u>May-16</u>	<u>Total</u>
Over-drawal by Railways for Dec-15 to May-16 (MUs)	4.74	8.79	9.39	13.45	13.16	11.13	60.66

- 3.28 The Transmission Charges and Losses and penalty towards DSM mechanism on overdrawal quantum from the Grid by Indian Railways are presently accounted on MSEDCL. Hence, a suitable mechanism may be devised by which MSEDCL can recover Transmission Charges, Transmission Losses, Charges and Penalties if any, on account of the CERC DSM Regulations from Indian Railways for over-drawal of power from the Grid.
- 3.29 As per the Commission's Tariff Order dated 20 October, 2006 for MSEDCL for 2006-07, MSEDCL recovers Stand-by Charges from Tata Power Co. Ltd. (Distribution) (TPC-D), Reliance Infrastructure Ltd. (Distribution) (RInfra-D) and Brihanmumbai Electric Supply and Transport Undertaking (BEST) for providing back-up facilities in emergency situations. Further, there are penalty charges in case of over-drawal of power from the Grid. A similar kind of arrangement may be devised between MSEDCL and Indian

Railways such that, in future instances of power requirement, MSEDCL can supply to Railways a suitable quantum against the recovery of Stand-by Charges.

- 4. In its submission dated 1 December, 2016, Indian Railways stated that:
  - 4.1 The over-drawal quantum of 60.62 MUs as submitted by MSEDCL does not match the actual drawal details available with the Railways.
  - 4.2 The actual drawal calculated by Indian Railways is based on Availability-based Tariff (ABT) meter received from MSLDC and as per actual drawal details.
  - 4.3 Railways has not overdrawn power from the Grid intentionally during normal situations, except during RGPPL tripping. Actual quantum overdrawn by Railways is 19.89 MUs.
- 5. In its Reply dated 2 January, 2017, MSLDC stated that:
  - 5.1 Its submission is made on the following four issues:
    - (A)Background of Open Access to Indian Railways (IR) as Deemed Distribution Licensee
    - (B) Stand-by requirement for Indian Railways in the event of tripping of contracted source.
    - (C) Scheduling of Indian Railways' drawal from RGPPL source
    - (D) Treatment of deviation and loss in Intra-state ABT mechanism FBSM
    - (A) <u>Background of Open Access to Indian Railways as Deemed Distribution Licensee:</u>
      - a) Central Railways on behalf of Indian Railways applied for Open Access at its 37 Traction Sub-Station (TSS) points in Maharashtra, being a Deemed Distribution Licensee as per MoP letter dated 6 May, 2014.
      - b) CERC issued its Order dated 5 November, 2015 in Petition No. 197/MP/2015 and directed as under:

"52.(d) All concerned RLDCs, State Transmission Utilities and SLDCs are directed to facilitate long term access and medium term access in terms of Connectivity Regulations from the generating stations or other sources to the facilities and network of Indian Railways."

c) MoP vide letter dated 6 May, 2014 has allocated 620 MW power from RGPPL to Indian Railways. Accordingly, Indian Railways has entered into a Power Purchase Agreement (PPA) with RGPPL for power supply of 620 MW, out of which 300 MW was tied up for 37 TSS in Maharashtra and the balance power for Gujarat, Madhya Pradesh and Jharkhand.

- d) MSEDCL vide letter 20 November, 2015 disconnected supply to 36 Railways TSS points in its area and TPC-D disconnected one point at Chola (Thakurli).
- e) In accordance with the CERC directives, STU has granted Grid connectivity and Long-Term Open Access (LTOA) to Indian Railways as a Deemed Distribution Licensee at the 37 TSS points for 300 MW vide its letter dated 25 November, 2015. Accordingly, MSLDC has commenced the scheduling of RGPPL power to Central Railways for 36 TSS points in Maharashtra and one point (Chola) in the Mumbai system.
- (B) <u>Stand-by requirement for Indian Railways in the event of tripping of contracted</u> source:
  - a) At the time of approval of Full Open Access status to Indian Railways, vide letter dated 25 November, 2015 MSLDC stated that Indian Railways has not made any specific arrangement for alternative stand-by power in case of non-availability of power from RGPPL and commitment for managing its load in the absence of such arrangement.
  - b) Vide Letter dated 18 November, 2015, MSLDC pointed out as follows:

"6. Alternate standby power arrangement by Railways in case of non-availability of source generator (i.e. RGPPL). Non-availability of source generator will lead to over drawl from the state grid and continued over drawl is not permitted under DSM regime as unscheduled interchange."

- c) MSLDC commenced the scheduling of LTOA to Indian Railways from 26 November, 2015. Further, as per the Deemed Distribution Licensee status of Indian Railways granted by CERC and Indian Railways being a SPP of Maharashtra Power Pool, it needs to be in a position to control its load as per requirement of covenants of SPP vide Clause 4.3(d) of the Commission's ABT Order in Case No 42 of 2007. Indian Railways has no arrangement for load management and continues to draw its entire requirement of power from the InSTS, resulting in over-drawal of the State in the event of tripping of RGPPL Units.
- d) On the instances of tripping of RGPPL Plant, MSLDC vide letter dated 20 February, 2016 communicated to Indian Railways about the stand-by arrangement and telemetry requirement. The matter was also reported to WRLDC and the Western Region Power Committee (WRPC). WRPC in its 482<sup>nd</sup> and 483<sup>rd</sup> OCC meeting and subsequently in the 32<sup>nd</sup> WRPC/TCC meeting deliberated on the issue of stand-by arrangement for Indian Railways.

e) As an outcome, WRPC vide letter dated 11 November, 2016 has instructed Indian Railways to make arrangement for stand-by supply in the event of tripping of RGPPL.

### (C) <u>Scheduling of Indian Railways' drawal from RGPPL:</u>

RGPPL power to Indian Railways in Maharashtra and other States is scheduled by WRLDC on Day Ahead basis depending on 15 minutes drawal requirement submitted by it through the respective SLDCs. The transaction is scheduled at State periphery. The schedule of Indian Railways from RGPPL is added in the Maharashtra Schedule and Indian Railways is entitled to draw only as per the schedule finalised by WRLDC on 15 minutes basis.

#### (D) <u>Treatment of deviation and loss in Intra-State ABT mechanism FBSM</u>:

As per CERC DSM Regulations, the State has to abide by Grid discipline by maintaining State drawal deviation within the allowed limit as per the Indian Electricity Grid Code (IEGC). In this particular transaction between RGPPL and Indian Railways, there are two kinds of deviations:

- Injection Deviation:

RGPPL being an Inter-State Transmission System (ISTS) entity and under the area jurisdiction of WRLDC, the injection deviations are addressed through the DSM at Regional level and WRPC issues DSM weekly bills for the same.

- Drawal Deviation :

The drawal points of Indian Railways are located in the control area jurisdiction of MSLDC, and hence drawal deviations are to be settled as per FBSM. Also, the treatment of transmission loss is different from that of other SPPs.

- 5.2 The power scheduled by Indian Railways from RGPPPL up to its scheduled quantum is exempted from Transmission Charges and Transmission Losses both in the Central Transmission Utility (CTU) network and the STU network. Since Indian Railways is unable to match its drawal as per the schedule, the deviation over and above the scheduled power attracts both Transmission Charges and Losses.
- 5.3 The methodology for treatment of Loss in FBSM in case of Indian Railways for e-bid RLNG quantum shall be as under:

- (i) Indian Railways, being a Deemed Distribution Licensee, is treated at par with other SPPs in the intra-State FBSM. The drawal deviation by Indian Railways with reference to schedule has to be settled under the FBSM mechanism at par with other Distribution Licensees and Full Open Access Consumers.
- (ii) For initial running of FBSM bills, Indian Railways will be treated as Distribution Licensee and its T D drawal shall be grossed up to transmission bus, similar to other SPPs.
- (iii)After generation of bill for a particular block, the charges on account of energy equivalent to losses corresponding to the RGPPL schedule shall be credited to Indian Railways at the Weighted Average System Marginal Price (WASMP) rate for the respective time blocks.
- (iv)The charges worked out as per (iii) shall be apportioned to all SPPs (except Indian Railways) in the ratio of their loss-adjusted drawal.
- (v) In this methodology, the initial bill is generated along with application of losses for entire drawal of Indian Railways and credit is given to Indian Railways for energy corresponding to losses on RGPPL schedule. Thus, the losses shall be automatically applied to the quantum of over-drawal over and above the schedule.
- 5.4 A stand-by arrangement for Indian Railways is necessary to take care of the impact of tripping of its source, preferably with the State Distribution Licensee as suggested by WRPC. The deviation in Indian Railways' drawal shall be addressed through existing Intra-State ABT mechanism. The treatment of exemption of losses in line with the Gasbased Power Utilisation Scheme Regulations shall be applicable to IR.
- 6. At the hearing held on 5 January, 2017,
  - 6.1 Indian Railways requested an adjournment as its substantive Reply was not ready. The Commission proceeded with the matter as no request was made earlier. Other Parties were present for the hearing, and any adjournment time would inconvenience them. Indian Railways circulated an unaffirmed Reply.
  - 6.2 MSEDCL stated that:
    - (i) The MoP, GoI and CERC have clarified the status of Indian Railways as a "Deemed Licensee" under the EA, 2003.
    - (ii) MoP has notified a scheme on 27 March, 2015 for utilization of Gas-based Power Generation Capacity for FY 2015-16 and 2016-17. The scheme envisages financial support for utilization of the stranded Gas Power Plants by importing gas under the PSDF.

- (iii) Under the scheme, RGPPL has tied up for supply of power to the Indian Railways for 620 MW. Indian Railways is utilizing RGPPL power for its TSS in Maharashtra, Gujarat, Madhya Pradesh and Jharkhand.
- (iv) The Commission has notified the Gas-based Capacity Utilisation Scheme Regulations, 2016 on 20 January, 2016. As per Regulation 3, no Transmission Charges and Losses for the use of the InSTS network shall be levied for sourcing power from RGPPL, which is based on e-bid RLNG, for FY 2015-16 and 2016-17.
- (v) There have been instances of tripping of the RGPPL Plant which is supplying power to Indian Railways. Since Indian Railways has not made any arrangement for standby power, this has resulted in over-drawal of power from the Grid by Railways. Such events, which are occurring frequently, are affecting the State Grid as well as financially impacting other Utilities connected to the State Grid, which includes MSEDCL. Further, more seriously, such over-drawal by Indian Railways may lead to a power deficit situation for the consumers of MSEDCL. Hence, the Indian Railways should be directed to arrange for stand-by power for mitigating the overdrawal from the State Grid in case of tripping of its supplier (i.e. RGPPL).
- (vi) The Indian Railways is regularly over-drawing power from the State Grid in normal situations as well as during tripping of RGPPL's Generating Units and this overdrawal is not accounted for payment of Transmission Charges. All such overdrawals from the State Grid attract Transmission Charges and Losses, which Indian Railways is liable to pay.
- 6.3 MSLDC stated that:
  - (i) RGPPL power to Indian Railways in Maharashtra and other States is scheduled by WRLDC on day-ahead basis depending on 15 minute drawal requirements submitted by Indian Railways through the respective SLDCs. The schedule of Indian Railways from RGPPL is added in the Maharashtra Schedule, and Indian Railways is entitled to draw only as per the schedule finalized by WRLDC.
  - (ii) In the particular transaction between RGPPL and Indian Railways, there are two types of deviations, (i) Injection Deviations and (ii) Drawal Deviations.
  - (iii) Injection deviation is in the control area of WRLDC, and the drawal points of Indian Railways are located in the control area of MSLDC. Hence, drawal deviations are to be settled as per the FBSM.
  - (iv) Since Indian Railways is unable to match its drawal as per the schedule, the deviation over and above the scheduled power of RGPPL attracts both Transmission Charges and Losses.

- (v) The methodology for treatment of Losses in FBSM in case of Indian Railways for ebid RLNG quantum is as under:
  - (b) The Indian Railways is a deemed Distribution Licensee, and treated at par with SPPs in the Intra-State FBSM. The drawal deviation by Indian Railways with reference to the schedule has to be settled in the FBSM mechanism at par with other Distribution Licensees, and its drawal shall be grossed upto the transmission bus, as in the case of other SPPs.
  - (c) After generation of the bill for a particular block, the charges on account of energy equivalent to losses corresponding to actual ex-bus generation of RGPPL shall be credited to the Indian Railways at the WASMP rate for the respective time blocks.
  - (d) The above charges shall be apportioned to all SPPs (except Indian Railways) in the ratio of their loss- adjusted drawal
  - (e) In this methodology, the initial bill is generated along with application of losses for the entire drawal of Indian Railways and credit is given to it for the energy corresponding to losses on RGPPL actual ex-bus generation. Thus, the losses would be automatically applied to the quantum of over- drawal over and above the injected ex-bus generation.
- (vi) The Transmission Charges for the over-drawn units by the Indian Railways, as sought by MSEDCL, shall be billed by the STU.
- (vii) MSLDC has written to the Indian Railways for arrangement of stand-by supply in the event of tripping of RGPPL power, and its response is awaited.
- 6.4 The Commission asked MSLDC whether the present mechanism provided by the Commission through its Orders/Regulations addresses the issues raised by MSEDCL in its Petition. MSLDC replied that the present mechanism does address these issues.
- 6.5 Indian Railways stated that :
  - (i) It is ready to pay the Transmission Charges for the over-drawal of power in the event of tripping of RGPPL power. However, the over-drawal quantum as submitted by MSEDCL does not match the actual drawal details available with Railways.
  - (ii) Indian Railways operate the sourcing of power into their TSS in two areas, one in the Maharashtra area and the second in the Mumbai area (i.e. Thakurli to CST Traction Sub-stations). In addition to RGPPL, Indian Railways has tied up for 100 MW with TPC-D for Mumbai area. Railways proposes to combine the schedule of

TPC-D, which supplies in Mumbai area, and the schedule of RGPPL power, which supplies in the Maharashtra area. This will facilitate stand-by in case of tripping of the RGPPL Plant.

- (iii) The Commission asked MSLDC whether the schedule of sourcing power from TPC-D and RGPPL can be combined. MSLDC replied that the Indian Railways are exempted from paying Transmission Charges and Losses for sourcing power from RGPPL. However, if it sources power from TPC-D, it has to pay Transmission Charges and Losses. Hence, combining both the schedules will be unworkable.
- (iv) Indian Railways further stated that sourcing of power from TPC-D will act a standby source to some extent depending on availability of power from RGPPL. On being asked if RGPPL power is totally absent or the TPC-D tie up is not available, whether TPC-D would still act as a stand-by, Indian Railways replied in the negative.
- 6.6 Dr. Ashok Pendse of Thane-Belapur Industries Association (TBIA), an Authorised Consumer Representative, stated that Indian Railways should be restricted from overdrawal of power from the State Grid because, if it continues to overdraw power in the absence of RGPPL, consumers of MSEDCL may have to suffer load shedding in a power deficit scenario.
- 6.7 The Commission directed MSEDCL, MSLDC, Railways and the STU to sit together to resolve the issues of stand-by supply arrangements of Indian Railways, and the calculations and levy of Transmission Charges and Losses for over-drawal of power over and above the injected ex-bus generation on account of tripping of RGPPL or any other reasons. They were also directed to discuss any other connected issue.
- 6.8 The Commission directed MSEDCL to submit the outcome of the above discussion within ten days, and the Central Railways, STU and MSLDC to file their Rejoinders within a week thereafter.
- 7. In its submission dated 5 January, 2017, Indian Railways stated that:
  - 7.1 The Petition filed by MSEDCL is not maintainable as there is no any cause of action. Therefore, it is liable to be dismissed with costs.
  - 7.2 As per Clause 6.2.2 of the PPA between Railways and RGPPL, RGPPL will arrange to supply power to Railways from alternate sources if it is not able to supply power from its own Plant.
  - 7.3 Further, Indian Railways has tied up for 100 MW with TPC-D for the Mumbai area. Railways propose to combine the schedule of TPC-D, which supplies in Mumbai area, and the schedule of RGPPL power, which supplies in the Maharashtra area. This will facilitate stand-by in case of tripping of the RGPPL Plant.

- 7.4 All other provisions of the Transmission Open Access (TOA) Regulations shall be applicable for use of the InSTS network for transmission of incremental Gas-based power generation from e-bid RLNG. Therefore, no Transmission Losses and Charges are applicable to Indian Railways on the power purchase from RGPPL during normal situations. Further, the settlement of Transmission Charges and Transmission Losses on the power over/ under drawal by Railways during the tripping period should be done as per the Regulations.
- 7.5 Based on ABT meter data from MSLDC, it is clear that there is no over-drawal of 60.66 MUs by Railways as mentioned in the Petition, rather there is under drawal of 62.02 MUs for the period December, 2015 to May, 2016. Details of over-drawal during the tripping period of RGPPL has also been demanded from MSLDC vide letter dated 20 September and 24 October, 2016. Reply on these letters is awaited.
- 7.6 The details of over-drawal by Indian Railways during RGPPL tripping is as below

<u>Sr.</u> <u>No.</u>	Date	Units consumed by Rail of RGPPL (Mus)	ways during the tripping
		As per Railways	As per MSEDCL
			Petition
1	12.03.2016	0.766	0.9
2	27.03.2016	0.773	0.765
3	07.05.2016 and	0.494	1.405
	08.05.2016		
4	01.06.2016	0.198	0.143
5	12.06.2016	0.262	0.292
Total		2.493	3.501

- 7.7 The settlement for over / under drawal by Railways during normal situations should be done as per the CERC DSM Regulations, 2014.
- 8. In its submission dated 31 January, 2017, MSEDCL stated that:
  - 8.1 As per the directives of the Commission, a meeting was held on 19 January, 2017. The minutes of the meeting (MoM) are recorded as below:

<u>Sr.</u>	Particulars	Submission
<u>No.</u>		
1	To make Stand-	MSEDCL: There is a requirement of Stand-by Power to
	by arrangement	Indian Railways up to the highest Generating capacity of
	by Railways	single Unit to meet its demand in case of tripping of RGPPL

		Unit.
		Indian Railways: There is a short fall of approximately 50 - 60 MW in rest of Maharashtra in case of tripping of one Unit of RGPPL. Indian Railways insisted that this requirement can be met from Tata Power available in Mumbai area if all the points of drawal are clubbed tighter. <u>MSLDC</u> : Indian Railways contract with TPC for Mumbai is
		of 100 MW and during peak period their demand of Mumbai is around 90-98 MW. So there is no power available during the peak period.
		RGPPL does not attract Transmission Losses and Charges as per the MERC Regulations. However, transaction with TPC- D is a normal Short Term bilateral contract and it is treated at par with other STOA transactions.
		Deviation in Indian Railways drawal in Maharashtra over and above RGPPL attracts Transmission Losses and Charges. Hence due to different treatment of losses, these two contracts cannot be clubbed together.
2	Decide a suitable mechanism for recovery of penalties on account of DSM Regulations due to over-drawal of power by Railways from the Grid.	Maharashtra Demand, however during the tripping of RGPPL Units their over-drawal is about 50-60 MW which is about 25% of the over-drawal limit under DSM Regulations. In the event State over-drawing 200 MW, if Indian Railways over drew the power due to tripping of RGPPL, it becomes more than 250 MW which attracts deviation penalties on other Utilities also. Therefore, such entire penalties shall be
		<u>MSLDC:</u> As per FBSM, deviation of the State is settled in first part of the bill at Centre sector pool rate and balance charges on account of deviation including additional charges are apportioned in Net UI-I to the defaulting State pool participant.
		Indian Railways: All the settlements have to be as per the FBSM mechanism only.
3	To decide a mechanism for recovery of Transmission	<u>Indian Railways</u> : It has agreed to pay the Transmission Charges and the losses whenever it over draw the power from the Grid.
	Chargesandlosses in case oftripping/shutdown/break	

down of RGPPL
Plant as well as
over-drawal from
the State Grid

- 9. In its further submission dated 8 March, 2017, MSEDCL stated that:
  - 9.1 MSEDCL has pointed out the following further developments:
    - (a) In view of the recommendations of 33<sup>rd</sup> WRPC, a special meeting was held at WRPC on 22 February, 2017 to deliberate the details of arrangement of alternate power supply to Indian Railways with all stakeholders. It was agreed in the meeting that:
      - (i) Indian Railways is required toenter into agreements /MoU's with Gujarat, Maharashtra and Madhya Pradesh for scheduling power at Temporary category tariff whenever Indian Railways schedules under outages of RGPPL or lower schedule at RGPPL, etc.
      - (ii) Indian Railways, in the event of tripping of RGPPL/reduced generation or otherwise, shall schedule power at the Temporary tariff with State SLDCs such that Indian Railways is able to meet its load with scheduled power from two sources (a) RGPPL schedule (b) Balance Shortfall schedule from States under Temporary tariff. Further, the revised schedule shall be applicable after 4 time blocks from tripping /outage as per IEGC and shall also depend upon availability of the power requirement under Temporary tariff
      - (iii) The power scheduled by Indian Railways shall be billed by the States to Indian Railways as per Temporary tariff as notified by their respective State Electricity Regulatory Commissions (SERCs), and Indian Railways shall settle the same with States.
      - (iv) The above arrangement between Indian Railways and States is being made under Temporary tariff and shall be treated as a special case.
- 10. In its additional submission dated 9 March, 2017, Indian Railways stated that:
  - 10.1 Indian Railways has filed its submission on 4 January, 2017. However, there some corrections in the over-drawal data. The correct data is as under:

Month	<u>Dec-15</u>	<u>Jan-</u> <u>16</u>	<u>Feb-</u> <u>16</u>	<u>Mar-16</u>	<u>Apr-16</u>	<u>May-16</u>	<u>Total</u>
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#### Table 6: Over-drawal by Indian Railways

Over-drawal /under Drawal by Railways	-50.15	-14.2	-2.82	8.36	3.12	8.14	- 47.37	
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- 10.2 From the above Table, which is based on ABT meter data as received from MSLDC, it is clear that there is no over-drawal of 6.66 MUs as mentioned by MSEDCL in its Petition, rather there is under drawal of -47.37 MUs in Dec-15 to May-16.
- 10.3 As per the directives of the Commission, a meeting was held on 19 January, 2017 to discuss various issues of Central Railways.
- 10.4 Further a special meeting was held at WRPC on 22 February, 2017 to discuss the alternate arrangement of power to Indian Railways in the event of RGPPL supply failure.
- 11. At the hearing held on 9 March, 2017:
  - 11.1 MSEDCL stated that:
    - (i) As per the directives of the Commission, a meeting was held on 19 January, 2017 between MSEDCL, MSLDC, Indian Railways and the STU, which discussed the issues of stand-by supply arrangements of Indian Railways, and the calculations and levy of Transmission Charges and Losses for over-drawal of power during the tripping of RGPPL or for any other reason.
    - (ii)There is a requirement of stand-by power to Railways to meet its demand in case of tripping of RGPPL. MSEDCL is in the process of executing an Agreement with Indian Railways.
    - (iii) As regards the over-drawal quantum calculated by Indian Railways, Indian Railways has netted off over-drawal and under-drawal for the month, whereas MSEDCL considered only over-drawal in 15 minutes time blocks. Hence, there is a mismatch between the over-drawal quantum calculations of MSEDCL and Railways.
  - 11.2 Indian Railways stated that :
    - (i) It is ready to pay the Transmission Charges and Losses for the over-drawal of power in the event of tripping of RGPPL.
    - (ii) For stand-by power, at the WRPC meeting, it has agreed to sign an Agreement with MSEDCL for supply of power in the event of RGPPL tripping. This stand-bypower will be scheduled after four time blocks after the occurrence of the event. Accordingly, Indian Railways will give its revised schedule to MSLDC.
  - 11.3 Dr. Ashok Pendse of TBIA stated it should be ensured that MSEDCL does not make

the stand-by arrangement for Indian Railways by shedding the load of MSEDCL's consumers.

- 12. In its additional submission dated 18 September, 2017, MSEDCL stated that :
  - 12.1 The Commission, vide Daily Order dated 9 March, 2017, had noted the progress on the issue. Accordingly, a draft Stand-by Power Supply Agreement has been sent to Indian Railways for scheduling power at Temporary tariff whenever Indian Railways schedules under outage of RGPPL or lower schedule at RGPPL, etc.
  - 12.2 In response, Central Railways, vide letter dated 27 June, 2017, has submitted corrections/suggestions on the Draft Stand-by Power Supply Agreement.
  - 12.3 In the 34th WRPC meeting held on 28 July 2017, the matter was discussed. In this meeting, the following options were suggested to resolve the issue:
    - (i) Maharashtra may explore other types of tariff category other than the existing Temporary Tariff, which is on monthly basis, so that the requirement of four to five hours of Temporary supply to Railways may be charged at reasonable rates.
    - (ii) Maharashtra may approach MERC for approval of similar methodology followed by Madhya Pradesh and Gujarat.
    - (iii)MSEDCL can approach its management for other than monthly Temporary tariff as desired by Railways and revert within 15 days.
    - (iv)First, Maharashtra and Railways may reach a mutual agreed arrangement and then approach MERC for approval of the modified tariff scheme for temporary daily basis.
  - 12.4 Further, a meeting was held on 05 August, 2017 at MSEDCL. In this meeting, MSEDCL has proposed the following options to Indian Railways for stand-by power supply:-
    - (i) Temporary Tariff as determined by the Commission and agreed by Indian Railways in the Special Meeting on 2 February, 2017 at WRPC, Mumbai.
    - (ii) In line with present stand-by power support by MSEDCL to Mumbai Distribution Utilities.

MSEDCL, vide email dated 14 August, 2017, has sent the MoM to the Indian Railways.

12.5 Inspite of directives of this Commission and the commitment from the Indian Railways for stand-by power arrangements, Indian Railways has not signed a stand-by power agreement with MSEDCL.

- 12.6 There was a recent occurrence of over-drawal of power from the State Grid by Indian Railways on 08 August, 2017 due to tripping of BRBCL units. MSLDC, vide letter 09 August, 2017, has requested Indian Railways to arrange for the necessary agreement with MSEDCL for stand-by support on priority so as to avoid any such default. However, till date, there is no response from Indian Railways.
- 12.7 MSEDCL, vide letter dated 1 September, 2017, has also requested Indian Railways to make a suitable stand-by power supply arrangement. However, there is no response from Indian Railways.

#### **Commission's Analysis and Ruling**

13. The Commission has addressed below the following issues raised in these proceedings:

Issue I: Recovery of Transmission Charges and Losses; Issue II: Arrangement for stand-by power by Indian Railways; and Issue III: Mechanism for recovery of penalties from Indian Railways for overdrawal of power from the Grid.

- 14. ISSUE I: Recovery of Transmission Charges and Losses
  - 14.1 In its letter dated 6 May, 2014, the MoP, GoI had opined that Indian Railways is a Deemed Distribution Licensee under the 3<sup>rd</sup> proviso of Section 14 of the EA, 2003. Vide its Order dated 5 November, 2015 in Petition No. 197/MP/2015, the CERC has also recognized Indian Railways as a Deemed Distribution Licensee under the 3rd proviso of Section 14:

"52.(b) The petitioner is a deemed licensee under third proviso to Section 14 of the Electricity Act and no separate declaration to that effect is required from the Appropriate Commission. The petitioner as a deemed licensee shall be bound by the terms and conditions of licence specified or to be specified by the Appropriate Commission under proviso to Section 16 of the Electricity Act."

- 14.2 In this context, the Commission notes that Indian Railways has not approached the Commission for the Specific Conditions of its Licence, nor has it sought the Commission's approval for the quantum and rate at which it procures power. However, that is not the issue at hand.
- 14.3 Indian Railways has a PPA with RGPPL for procurement of 620 MW power, out of which 300 MW is tied up for 37 TSS in Maharashtra (36 TSS points in the MSEDCL area and one point, i.e. Chola, in the Mumbai System), and the remaining for Gujarat, Madhya Pradesh and Jharkhand. Accordingly, Central Railways, on behalf of Indian Railways, applied for Open Access for 300 MW

at its 37 TSS points in Maharashtra. This was granted on 25 November, 2015 pursuant to the Grid connectivity given by the STU.

- 14.4 The Commission notified its Gas-based Generation Utilisation Scheme Regulations, 2016 on 20 January, 2016. As per Regulation 3, no Transmission Charges and Losses for the use of the InSTS network were to be levied in FY 2015-16 and FY 2016-17 for sourcing power from RGPPL since its Plant is based on e-bid RLNG. That waiver has lapsed thereafter, and is not applicable from FY 2017-18 onwards.
- 14.5 Although the sourcing of 300 MW power from RGPPL in FY 2015-16 and FY 2016-17 qualified for such waiver under the 2016 Regulations, Indian Railways is required to pay the Transmission Charges and Losses for the use of the InSTS network for power sourced in those years from any other Generators not exempted under those Regulations; and for the power sourced from any Generator, including RGPPL, from FY 2017-18 onwards.
- 14.6 In these proceedings, Indian Railways has stated that it is ready to pay the Transmission Charges and Losses for the over-drawal of power in the event of tripping of RGPPL. It is not clear why it did not do so at the relevant times.
- 14.7 In view of the above, the STU shall recover, with applicable interest, the Transmission Charges and Losses for the over-drawal of power by Indian Railways in FY 2015-16 and FY 2016-17 from the State Grid because of tripping of RGPPL's contracted Units or for any other reason.
- 15. ISSUE II: Arrangement for stand-by power by Indian Railways
  - 15.1 There have been several instances of tripping of the RGPPL Plant supplying power to Indian Railways. Since Indian Railways has not made any arrangement for stand-by power, it has over-drawn power from the Grid. Such events, which are occurring frequently, affect the State Grid. They also financially impact the Licensees connected to the State Grid, including MSEDCL, and can also affect power supply to their consumers.
  - 15.2 At the hearing held on 9 March, 2017, Indian Railways stated that, at the WRPC meeting, it had agreed to sign an Agreement with MSEDCL for supply of power in the event of RGPPL tripping. This stand-by power will be scheduled after four time blocks from the occurrence of the event. Accordingly, Indian Railways would give its revised schedule to MSLDC.
  - 15.3 However, vide its submission dated 18 September, 2017, MSEDCL has pointed out that Indian Railways has still not signed a Stand-by Agreement with it. At the WRPC meeting, it had been decided that Indian Railways would enter into

such an Agreement with MSEDCL at the Tariff applicable to the Temporary category. The Commission-approved tariff for the Temporary category has two parts, viz. Demand Charge and Variable Charge. Indian Railways has sought that MSEDCL waive or reduce the Demand Charge component of the Temporary category tariff.

- 15.4 The Commission notes that, at the 34<sup>th</sup> WRPC meeting held on 28 July 2017, the following options were suggested:
  - a. Maharashtra may explore some other tariff other than the existing Temporary category tariff, which is on a monthly basis, so that the Indian Railways' requirement of four to five hours temporary supply is charged at reasonable rates.
  - b. Maharashtra may approach MERC for approval of a methodology similar to that followed in Madhya Pradesh and Gujarat.
  - c. MSEDCL may approach its management for a dispensation other than monthly Temporary tariff as desired by Railways, and revert within 15 days.
  - d. Maharashtra and Indian Railways may first come to an agreed arrangement, and then approach MERC for approval of the modified tariff scheme on a daily basis.
- 15.5 Thereafter, no consensus has been reached between MSEDCL and Indian Railways regarding the stand-by arrangement. In the meantime, Indian Railways has continued to over-draw from the Grid from time to time, which not only affects Grid security but also has financial implications for the other SPPs. In the ordinary course, in pursuance of its obligations under Section 33 of the EA, 2003, MSLDC would have been expected to ask Indian Railways to curtail its load to match the reduced availability of its contracted Generator. However, for reasons best known to it, MSLDC has not done so. Indian Railways cannot be allowed to continue to violate Grid discipline. In these circumstances and in the absence of a consensus between MSEDCL and Indian Railways, the Commission has addressed the issue of stand-by supply to Indian Railways as follows.
- 15.6 The Commission notes that the main area of disagreement is regarding the levy of Demand Charge at the Temporary category tariff rate for stand-by supply.
- 15.7 Stand-by is the support provided by a Distribution Licensee to Open Access consumers in circumstances such as the failure of their contracted Generators or other sources. For this purpose, Open Access consumers pay the Demand

Charges applicable to their consumer category, Additional Demand Charges for exceeding their Contract Demand, and the Temporary category tariff for that quantum.

- 15.8 The Temporary category and other tariffs are determined and approved by the Commission through Tariff Orders in respect of the Distribution Licensees after a due process of public consultation. The levy of Demand Charges is intended to recover all or part of the fixed costs of the Licensees, and is applicable to all consumers. While these Demand Charges may vary from one consumer category or sub-category to another, there is prima facie no reason to discriminate in favour of the Indian Railways in the Demand Charge applicable to Temporary category supply, in terms of Section 62(3) of the EA, 2003. However, Indian Railways is free to make its suggestions during the forthcoming Mid-Term Review proceedings in respect of MSEDCL.
- 15.9 Indian Railways is also at liberty to source stand-by power through a separate arrangement with any other Generator or entity which it considers to be more financially beneficial to it, provided that arrangement adequately addresses the circumstances discussed above.
- 15.10 In the absence of such a stand-by arrangement with MSEDCL or other entity, MSLDC shall take appropriate steps to curtail the drawal of Indian Railways and limit it to the availability of the Generator(s) contracted by it.
- 16. ISSUE III: Mechanism for recovery of penalties for over-drawal of power by Indian Railways from the Grid

In view of the foregoing, no separate mechanism is required as sought by MSEDCL. Indian Railways, being a part of the State Pool, shall fulfill its obligations towards maintaining Grid stability.

The Petition of Maharashtra State Electricity Distribution Co. Ltd. in Case No. 114 of 2016 stands disposed of accordingly.

Sd/-Deepak Lad) Member

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(Ashwani Kumar Sinha) Secretary Sd/-(Azeez M. Khan) Member

