Petition No. 1390 of 2018

BEFORE

THE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

LUCKNOW

Date of Order 06.04.2021

PRESENT:

Hon'ble Sh. Raj Pratap Singh, Chairman

Hon'ble Sh. Kaushal Kishore Sharma, Member

Hon'ble Sh. Vinod Kumar Srivastava, Member (Law)

IN THE MATTER OF: Petition in the matter regarding Petition under Regulation 22 (2) read with Regulation 21 of UPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014 and Section 61, 62 and 86 of Electricity Act, 2003 for approval of Additional Capitalization.

M/s Rosa Power Supply Company Ltd.
3rd Floor, South Wing, Reliance Centre
Near Prabhat Colony, Off Western Express Highway,
Santacruz (East), Mumbai-400055

..... **Petitioner**

UP Power Corporation Limited
(through its Managing Director),
7th Floor, Shakti Bhawan
14- Ashok Marg, Lucknow.

..... **Respondents**

ORDER

(Date of hearing 05.11.2020)

1. The instant petition has been filed by M/s Rosa Power Supply Company Ltd. (RPSCL) under Regulation 22 (2) read with Regulation 21 of UPERC

Generation Tariff Regulation 2014 and Section 61, 62 and 86 of Electricity Act, 2003 to seek in-principle approval of additional capital cost and tariff for enhancement of capacity of ICT between 220 KV and 400 KV switch yard from 2X200 MVA to 2 X315 MVA and raising of ash dyke bund for lagoon 1 and 2. The total cost of above works as estimated by RPSCL is about Rs. 67.50 crores (Rs. 25 crores for ICT and Rs. 42.5 crore for bund raising). The Petitioner has submitted that ICT work is required to be done for ensuring efficient and successful operation of plant and to comply with the system requirement as directed by UPPTCL. Ashy dyke bund raising is being undertaken owing to uncontrollable factors faced by the petitioner as provided under Regulation 21 read with Regulation 22 of the Tariff Regulations.

2. The Petitioner has prayed as follows:

a. Approve in-principle Capital Cost required to be incurred by the Petitioner towards enhancement of capacity of existing ICTs from 2x200 MVA to 2x315 MVA between Rosa 220 kV & 400 kV Switchyards and Ash Dyke Bund raising works of Lagoon 2 and Lagoon 1 of Rosa TPP. The cost incurred towards financing / interest and other incidental expenditure would be additional.

b. Allow Petitioner to raise provisional invoices based on provisional Capital cost and Tariff approved in the Order, immediately after commissioning of aforesaid capital works till the final approval of Capital cos is granted by Commission

Background

3. The Petitioner has entered into a Power Purchase Agreement ('PPA') dated 12.11.2006 with Uttar Pradesh Power Corporation Limited ("UPPCL"), which was duly approved by this Commission for supplying 600 MW capacity from Stage 1 vide Order dated 02.02.2006,

01.11.2006 and 08.11.2006. Subsequently, a Supplementary PPA ('SPPA') and an Amendment to the SPPA ("ASPPA") were signed with UPPCL on 11.09.2009 and 19.11.2011 respectively for supplying 300 MW each from Stage 2 pursuant to the approval by this Commission on 15.06.2009 (for SPPA) and 22.12.2011 (for ASPPA).

4. The Petitioner has raised the following issues for the consideration of the Commission:

i. <u>Issue of ICT</u>

a) During 27th meeting of the standing committee on transmission system planning of Northern region held on 30.05.2009, the petitioner was asked to provide 400/200 KV ICT of adequate capacity as it was planned by the petitioner to sell power to other states from ROSA stage-II connected with national grid on 400 KV whereas ROSA stage-I was connected with UPPTCL's network at 220 KV and supplying full power to state. Subsquently, RPSCL conducted load flow study before installing ICT and accordingly placed orders for 2X200 MVA ICT.

b) In the 29th meeting of the standing committee on transmission system planning of Northern region held on 29.12.2010 the issue of capacity of 400/220 KV ICT was again discussed and 2X315 MVA was requested by UPPTCL. However, order for ICT was already placed. Subsequently, on 19.11.2011 RPSCL entered into agreement with UPPCL to sell remaining 300 MW power to UPPCL. **Thus, the entire 1200 MW power is being supplied to UPPCL without having any technical problem on account of capacity of ICT.**

c) On 08.05.2018, UPPCTL wrote to the petitioner to install 2X315 MVA ICT as existing 2X200 MVA ICTs may create bottleneck

during certain grid condition. UPPCL vide letter dated 01.09.2018 provided in-principle approval for the same with the rider that it is subjected to approval of the Commission.

d) The expenditure on ICT is squarely covered under Regulation 22(2)(vi) of tariff Regulations, 2014 and prayed for the consideration under same.

ii. **Issue of Ash Dyke bund raising**

a) Ash dyke management is dynamic in nature and needs periodic capacity enhancement and strengthening. This is industry wise practice followed across the world. Existing ash dyke of RPSCL with Lagoon-1,2A and 2B has total capacity of approx. 48 lakh Cum. The usable capacity of existing ash dyke is 33.6 MT. **The bund raising of lagoon-1 after its exhaustion was completed in March 2016, creating an additional capacity of 17 Lakh Cum. and has been capitalized under additional capital expenditure work of Rs. 550 Crores approved by the Commission.** However, as again lagoon-1 was exhausted, bund raising of lagoon-2 (1st raising) and lagoon-1 (2nd raising) was undertaken. **The work on lagoon-2 (1st raising) has been completed in March 2018 with expenditure of Rs. 22.50 crores. The raising of bund for lagoon 1(2nd raising) is underway and shall be competed by October 2019 with estimated cost of Rs. 20 crores.** The petitioner has submitted that it constantly makes efforts to increase ash utilization.

b) Bund raising is necessitated owing to lack of demand for ash within proximity of the plant and therefore it constitutes a force majeure condition covered under Regulation 21 of Tariff Regulations, 2014. The petitioner has cited orders of CERC

dated 29.07.2016 in petition no. 281/GT/2014 and order dated 27.06.2016 in petition no. 270/GT/2014 allowing capital cost of ash bund raising.

5. The Respondent, UPPCL, vide counter-affidavit dated 26.03.2019 has submitted as follows:

a) There is no provision in the UPERC Tariff Regulations for either in-principle approval of additional capitalization or for raising provisional invoices until prudence check of each claim raised is concluded by this Commission.

Installation of 2x315 MVA ICT

b) The Petitioner was always made aware of such a requirement right in the beginning when no ICTs were installed. It was Petitioner's own choice not to give effect to UPPTCL' request of installing 2X315MVA ICTs. The Petitioner has made a conscious decision of not installing 2X315 MVA ICTs because the Petitioner had already placed the order for 2X200 MVA ICTs as per Petitioner's own assessment.

c) The Petitioner had the opportunity to either modify its already placed order or terminate it. Most of the Original Equipment Manufacturers (OEM) are open to negotiations and providing the equipment as pet the revised requirement on payment of the balance cost. However, there is no evidence that any such efforts were made by the Petitioner.

d) As per Petitioner's communication dated 21.08.2018, the salvage value of the existing ICTs has been stated to be Rs. 2.50 Crores and the cost of installation of new 2x315 MVA ICTs is provided to be Rs. 27.33 Crores. The cost of new ICTSs is based

on a single quote from one manufacturer, i.e. M/s Siemens. The Petitioner has not even sought any quotes from other manufacturers to see if better rates are available.

Ash Dyke Bund raising works for Lagoon 2 and Lagoon 1

e) The ash dyke is used for the disposal of fly ash generated from the Project. Petitioner was under a pre-existing obligation to ensure 100% Fly Ash utilisation through various activities since 1999 onwards on account of the promulgation of the Ministry of Environment, Forests and Climate Change, Government of India (MoEF) Notification. The said notification dated 14.09.1999 was amended vide Notification No. S.O. 979 (E) dated 27.082003, MoEF's Notification No. S.O. 2804((E) dated 03.11.2009, and MoEF's Notification S.O. 254(E) dated 25.01.2016.

f) Further, similar obligations were cast upon the Petitioner in terms of the Environmental Clearances granted to the Petitioner for Stage-I and Stage-II of the Project.

g) The Petitioner, on one hand, has been claiming the additional expenditure as being necessary and imperative for the Project under Regulation 22(2)(vi) and on the other hand, the Petitioner has also stated that the expenditure for raising the bund wall in necessitated on account of lack of fly ash demand in the proximity of the Project, which is claimed to be a Force Majeure event.

h) The Petitioner also needs to establish what all efforts were made by the Petitioner to ensure 100% utilization of Fly ash and that no other option was available with the Petitioner apart form the raising of the bund wall.

Record of Proceedings

6. The Commission heard the matter on 28.03.2019 and directed RPSCL to file its rejoinder. Further, Commission vide order dated 09.10.2019 directed UPPCL to take inputs from UPPTCL in the matter and appraise the Commission. Commission also directed Petitioner to submit yearly details of coal consumption, specific coal consumption, % ash in coal, ash produced, ash disposed and dumped in dyke during previous years of operation and projection for next 5 years for ash dyke management. Commission concluded the hearing on 05.11.2020 with direction to Petitioner and Respondent to furnish their respective final submissions and UPPTCL to submit its comments in the matter.

7. The Petitioner, in its rejoinder dated 18.04.2019 has submitted as follows:

   i. The start-up power for Rosa stage-II was required in the month of Nov/Dec 2011 for which the commissioning of these ICTs was of utmost necessary requirement for timely commissioning & trial synchronization etc. The upcoming 400KV Line Transmission lines for Rosa-Stage-II switchyard were still under construction which was subsequently commissioned in March 2012. Therefore, the Petitioner had to install the 200 MVA ICTs which had been supplied under the Purchase Order dated 01.06.2010.

   ii. A detailed load flow study was undertaken by the Petitioner to ascertain the MV capacity of the ICTs required to be installed at the switchyard. After considering the existing scenario, the options with respect to power evacuation from Phase-2 were evaluated by the Petitioner in discussion with PGCIL. Load flow conditions were considered and based upon the above analysis conclusion with respect to capacity of the ICTS was arrived at by the Petitioner.

iii. On 14.07.2009, the Petitioner vide its letter apprised UPPCL about the above said study and provided a report on the same to UPPCL. After concluding the above said study, the Petitioner had also requested UPPCL to grant necessary instructions/consent on the above said report to enable the Petitioner to initiate the procurement process of 200 MVA ICTs as had been advised by the 27th Committee Meeting, to interconnect both phases with transformers of adequate capacity, the purchase order for 200MVA transformer was placed almost one year after the above said letter submitted to UPPCL.

iv. The capacity of the transformers was altered in the 29th standing committee meeting held in December 2010 as 315 MVA. However, much before the occurrence and communication of MoM of 29th Standing Committee Meeting, the Petitioner issued a Purchase Order dated 01.06.2010 for procurement of 200 MVA ICTs. Any attempt on alteration/modifications of already placed order on 01.06.2010, would have led to the complete change in specifications of the transformers and redo complete process of procurement to place the new order for 315 MVA transformer.

v. The budgetary offer/quote from the vendors i.e. M/s Siemens was duly submitted by the Petitioner to UPPCL vide letter dated 21.08.2018. In the said letter, the Petitioner provided a detailed tabular description about price estimates for procurement, transportation, erection, and commissioning of the ICTs. UPPCL vide letter dated 01.09.2018 responded to Petitioner's letter dated 21.08.2018 and has granted in-principle approval to the proposal of the Petitioner.

vi. While the responsibility to achieve 100% fly ash utilization vests upon the Petitioner, however, the same is majorly dependent upon a variety of factors for which other stakeholders are required to

constructively contribute. therefore, while the onus to provide fly ash still vests with the Petitioner but the actual usage of the same is solely dependent upon the prescription of use of fly ash. On 25.01.2016, MoEF&CC once again amended its earlier Notification dated 14.09.1999 mainly to the effect that the TPPs were required to bear the cost of transportation of fly ash to user industry within radius of 100 kilometers and cost for transportation of fly ash to the user industry beyond 100 Kilometers and up to 300 Kilometers, shall be shared equally by the TPPs and the user. In addition to the foregoing, the time period to comply with the 100% utilization of fly-ash was also duly extended to 31.12.2017.

8. The Respondent UPPCL vide submission dated 14.10.2019 has submitted that UPPTCL vide its letter dated 27.09.2019 informed UPPCL that the augmentation of 400/220 kV, 2X200 to 2x315 MVA RPSCL's plant needs to be done considering the commissioning of nearby generating stations such as 2x660 MW Extn. Tanda TPS which will have a substantial impact on loadings of grid substations. Further, the 2x200 MVA ICTs capacity at RPSCL's plant was already indicating N-1 to be grossly non-compliant during certain load-generation situations. In view of the above UPPTCL requested that an early action be taken on the issue to obviate any effect on Total Transfer Capability and reliability.

9. The Petitioner, RPSCL, vide submission dated 22.10.2019 has submitted the details of the required parameters/information sought by the Commission with respect to the issue of 2nd Ash Bund raising of Lagoon 1 and 1st Ash Bund raising of lagoon 2A and 2B. RPSCL has also submitted details of utilization and balance quantity available in ash dyke for next 5 years. The Petitioner has also submitted that Ash dyke Management for the coming years requires Additional Expenditure either by way of bund raising activity and by way of Ash transportation from the dyke to the potential nearby customers which are within the

vicinity of around 300 Km radius. The Petitioner has relied upon CERC order dated 29.07.2016 and 27.06.2016 in Petition No. 281/GT/2014 and 270/GT/2014.

10. In compliance to the directions of the Commission during hearing held on 05.11.2020, UPPTCL has submitted its comments dated 11.11.2020. RPSCL has submitted its affidavit dated 22.12.2020 and UPPCL has filed its written submission dated 22.01.2021.

Commission's analysis and decision

Issue of ICT

11. UPPTCL has submitted that even in 2011, vide letter dated 11.02.2011 and 04.06.2011, it had pursued for installation of 2x315 MVA ICT instead of 2x200 MVA proposed by RPSCL. UPPTCL has also submitted that average loading during last three years on both the ICTs is of the order of 70% and is "N-1 no-compliant" during certain load generation conditions.

12. RPSCL has submitted that detailed load flow study was undertaken by the Petitioner to ascertain the MV capacity of the ICTs required to be installed at the switchyard. After considering the existing scenario, the options with respect to power evacuation from Phase-2 were evaluated by the Petitioner in discussion with PGCIL. Load flow conditions were considered and based upon the above analysis conclusion with respect to capacity of the ICTS was arrived at by the Petitioner.

13. RPSCL has further submitted that the capacity of the transformers was altered in the 29th standing committee meeting held in December 2010 as 315 MVA. However, much before the occurrence and communication of MoM of 29th Standing Committee Meeting, the Petitioner issued a Purchase Order dated 01.06.2010 for procurement of 200 MVA ICTs. Any attempt on alteration/modifications of already placed order on

01.06.2010, would have led to the complete change in specifications of the transformers and redo complete process of procurement to place the new order for 315 MVA transformer.

14. RPSCL has also submitted that start-up power for Rosa stage-II was required in the month of Nov/Dec 2011 and upcoming 400KV Line Transmission lines for Rosa-Stage-II switchyard were still under construction. Therefore, the commissioning of these ICTs was of utmost necessary requirement for timely commissioning & trial synchronization etc. RPSCL has also submitted that the said ICTs of 2x200 MVA having been in service since 2012 and the Petitioner has never faced any constraint of power flow or tripping on account of the capacity of the ICTs till date.

15. UPPCL has submitted that it has provided in principle approval to the installation of 2x315 MVA ICT, however, the same can't be construed as waiver of mandatory requirement of prudence check by the Commission. It has also submitted that UPPCL would be entitled to claim the difference in value of 2x315 MVA ICTs from that of 2x200 MVA as on the date of installation of 2x200 MVA.

16. **Both RPSCL and UPPCL have consensus that there is no constraint of power or tripping on account of the capacity of the 2x200 MVA. There being no Regulatory provision for in-principle approval, the Commission is not presently inclined to deal with the proposed additional capitalisation of Rs. 25 Crs towards enhancement of capacity of ICT between 220 KV and 400 KV switch yard from 2X200 MVA to 2 X315 MVA.**

Issue of Ash dyke

17. The existing ash dyke of RPSCL with Lagoon-1,2A and 2B has total capacity of approx. 48 lakh Cum. The usable capacity of existing ash

dyke is 33.6 MT. The bund raising of lagoon-1 after its exhaustion was completed in March 2016, creating an additional capacity of 17 Lakh Cum. and has been capitalized under additional capital expenditure work of Rs. 550 Crores approved by the Commission. However, as again lagoon-1 was exhausted, bund raising of lagoon-2 (1st raising) and lagoon-1 (2nd raising) was undertaken. The work on lagoon-2 (1st raising) has been completed in March 2018 with expenditure of Rs. 22.50 crores. The raising of bund for lagoon 1(2nd raising) is underway and shall be completed by October 2019 with estimated cost of Rs. 20 crores. During the hearing on 05.11.2019, petitioner has submitted that it has filed True-up Petition No. 1529/2019 based on the actual expenditure incurred and the Commission may consider the same.

18. **RPSCL has already filed True-up Petition No. 1529/2019 considering actual expenditure incurred on Ash dyke which shall be considered after prudence check by the Commission.**

Commission's View

19. **The Commission, in view of admission by RPSCL that there is no constraint to the power flow, is not inclined to deal at present with the proposed additional capitalisation of Rs. 25 Crs towards for enhancement of capacity of ICT between 220 KV and 400 KV switch yard from 2X200 MVA to 2 X315 MVA.**

However, with the upcoming power stations, the transmission network strengthening work is also being carried out in parallel at all voltage levels in the state. Therefore, UPPTCL may undertake a detailed load flow study considering all future transmission network upgradation projects and generation capacity addition in the state and recommend whether 2x315 MVA ICT is required or not.

20. **The Commission shall consider actual expenditure incurred on account of ash dyke after prudence check at the time of dealing with True-up Petition filed by the Petitioner.**

The Petition is disposed of in terms of above.

(Vinod Kumar Srivastava)	(Kaushal Kishore Sharma)	(Raj Pratap Singh)
Member	**Member**	**Chairman**

Place: Lucknow

Dated: 06.04.2021