



ASSAM ELECTRICITY REGULATORY COMMISSION

FILE NO. AERC. 591/2016

Petition No.:36/2016

ORDER SHEET

05.09.2017

Before the Assam Electricity Regulatory Commission

ASEB Campus, Dwarandhar,

G. S. Road, Sixth Mile, Guwahati – 781 022

Assam Power Distribution Company limited (APDCL) ----- Petitioner

In the matter of

Petition No. 36 of 2016 filed by APDCL under Section 63 & 86 of the Electricity Act'2003 for approval of Power Sale Agreement (PSA) signed between PTC India Ltd. and Assam Power Distribution Company Ltd for procurement of power from 118 (2X59) MW Nikachhu Hydro Power Project of Bhutan

CORAM

Shri Naba Kr. Das Chairperson

Shri Dipak Chakravarty, Member

Shri Subhash C. Das, Member

ORDER

1. Assam Power Distribution Company Ltd (APDCL) filed a Petition (registered as Petition No. 36 of 2016) under Section 63 & 86 of the Electricity Act'2003 for approval of Power Sale Agreement (PSA) signed between PTC India Ltd. and Assam Power Distribution Company Ltd for procurement of power from 118 (2X59) MW Nikachhu Hydro Power Project of Bhutan. The salient points of the Petition are:
 - a. APDCL authorized PTC India Ltd for participating in bidding of power on behalf of APDCL.
 - b. Thereafter, PTC participated in a Bid opened by M/S Tangsibi Hydro Energy Ltd (THyE) for sale of power on Long Term basis from Nikachhu Hydro Power project (2X59=118 MW) in June'2014.
 - c. PTC won the bid. The arrived Levelised Tariff for 15 year period (including Trading Margin) is Rs 4.152/kWh.
 - d. The salient points of the proposed arrangement are:
 - Design Energy: 491.52 MU
 - Contracted Energy:
 - For the 1st 12 years of contract: 335.04 MU
 - For the remaining 3 years of contract: 312.20 MU
 - Delivery Point: Alipurduar or any other sub-station as determined by PGCIL, acceptable to both the seller and procurer at which delivered by the seller to the procurer
 - Scheduled commercial operation date: 1st July, 2019
 - Discovered Tariff:
 - Upto 15th Year
 - The levelised tariff is Rs 4.152/kWh considering the following factors:
 - Discount rate: 13.10% compounding
 - Initial tariff: Rs 3.38/kWh w.e.f 1st Jul'19
 - Annual Increment: 4% p.a. (Average)
 - Trading Margin to PTC @2.5% of the Tariff YoY
 - After 15th Year
 - The parties will mutually discuss, negotiate and decide on the applicable tariff.

- e. APDCL signed Power Sale Agreement (PSA) with PTC India Ltd for purchase of power from 118 (2X59) MW Nikachhu Hydro Power Project of Bhutan on 10.12.2014. And PTC India Ltd has signed PPA with M/S Tangsibi Hydro Energy Ltd (THyE).
2. The Commission held 1st Hearing on this matter on 13.02.2017. Mr. A.K.Goswami, GM (TRC), Mr. K. Goswami, DGM (Com) & Mr. A.N.Dev Choudhury, AGM (TRC) appeared on behalf of Petitioner and Mr. R.C.Chaudhary, Advisor & Mr. S. Jaiawal, Manager appeared on behalf of PTC India Ltd.
3. As per direction of the Commission during the Hearing dated 13.02.2017, APDCL submitted a detailed historical background of the matter on 05.05.2017. The salient submissions made by APDCL are:
 - a. M/S Tangsibi Hydro Energy Ltd (THyE) invited bids for purchase of power from its 118 MW Nikachu Hydro Power Project vide Request for Proposal (RfP) dated 26.05.2014. Corrigendum/Addenda to the same was issued on 16.06.2014.
 - b. PTC India Ltd. vide letter dated 18.06.2014 requested APDCL to authorize PTC India Ltd to participate in Bidding on behalf of APDCL
 - c. APDCL vide letter dated 27.06.2014 authorised PTC India Ltd to participate in the bidding, considering the annual load growth vis-à-vis the tentative availability of power from existing and upcoming projects.
 - d. Bid opening took place on 30.06.2014 and PTC India Ltd was a successful bidder.
 - e. Thereafter, PSA was signed with PTC India Ltd on 10.12.2014.
 - f. Tariff determined in the bidding process is fixed in nature and there shall be no tariff adjustment
 - g. The seller shall supply power from alternate source in case the seller is unable to supply energy to the procurer up to the contracted energy from the project except due to a Force Majeure Event or due to a procurer event of default at the same tariff and at delivery point as per agreement.
 - h. APDCL also submitted a copy of Govt. of India notification dated 05.12.16 on Cross Border Trade of Electricity and, as per the same, if the cross-border trading of electricity has been done prior to the notification, the same will be deemed to be as per provisions of the guidelines.
4. Thereafter, the Commission held 2nd Hearing on the matter on 10.07.2017. Mr. T.N.Dev Choudhury, CGM (Com), Mr. A.K.Goswami, GM (TRC), Mr. J. P. Choudhury & Mr. I Tahbildar appeared on behalf of the Petitioner and Mr. R.C.Chaudhary, Advisor & Mr. S. Jaiawal, Manager appeared on behalf of PTC India Ltd.
5. As per direction of the Commission during the Hearing dated 10.07.2017, APDCL submitted detailed reason for entering into the PSA with PTC India Ltd. The salient submissions made by APDCL are:
 - a. Rationale behind exploration for procurement of power:
 - Deficit of power- 6.4% Energy Deficit and 8.2% Power Deficit during FY 2013-14
 - Due to Transmission Constraint, even with additional cost, APDCL was struggling to meet the Peak Demand.
 - APDCL explored certain other sources for meeting demand, such as power purchase from Farakka-III @4.65/unit, power purchase from DVC, power purchase from OTPC etc.
 - As per the 18th Electric Power Survey (EPS), the gross shortfall of power was expected to be 678 MW during FY 2019-20. To mitigate the shortfall, APDCL has arranged some power allocation from Ministry of Power. However, even after that there was estimated to be a shortfall of 183 MW (approximately 8% of peak demand).

APDCL highlighted that, there was always possibility that commissioning of some stations may be delayed as compared to estimate considered in EPS. That in turn may lead to shortage of power.
 - APDCL stated that power demand has increased substantially after completion of various electrification schemes of the Govt.
 - With regard to daily Household (HH) consumption, APDCL stated that, daily HH consumption in Urban area will increase from 3.36 kWh in FY 2013-14 to 6 kWh in FY 2021-22 and in Rural area will increase from 1.71 kWh in FY 2013-14 to 3 kWh in FY 2021-22.

- Considering the need to meet power demand, APDCL endeavor to get allocation of power from various generating stations. APDCL got allocation of 49.21 MW from Tawang Project of NHPC. The estimated Levelised Tariff of the project @ 2014 price level was Rs 4.96/kWh.

- APDCL re-stated the salient features of the proposal.
- Contemporary Experience of Distribution Licensees with Competitive Bidding Process for procurement of power:

SI No	Procurer	Quantum	Term	Year of Bidding	Commencement of Supply	Quoted rate for 1 st year	Other Terms
1	Kerala SEB	450	Long Term	2014	Jan-17	3.60 to 7.29 Rs/kWh	-Variation in Fuel Cost @ actual allowed
2	Kerala SEB	400	Long Term	2014	Dec-16	4.29 to 5.95 Rs/kWh	-Capacity charge to be escalated @ WPI
3	Uttar Pradesh PCL	6000	Long Term	2012	2016-17	4.49 to 7.10 Rs/kWh	- Levelised Tariff - Yearly escalation depends on the CERC approved escalation rate for capacity & energy charge

- APDCL also highlighted outcomes of some of the competitive bidding conducted during that period, the same is re-produced below:

SI No	Procurer	Term	Capacity Sought (MW)	Date of Bidding	Successful Bidder	Capacity Offered (MW)	Quoted Levelised Tariff (Rs/kWh)	Commencement of Supply
1	Bihar State Electricity Board	Medium Term	200	Jan-12	Adani Enterprise Ltd	200	4.41	2015-16
2	Tamil Nadu Electricity Board	Medium Term	400	Apr-12	Adani Enterprise Ltd	200	4.99	2015-16
					Jindal Power Ltd	200	4.91	
					Abhijit Group	480	4.80	
3	Electricity Dept. Dadra & Nagar Haveli	Long Term	200	Jun-12	GMR Energy	200	4.62	2013-14
4	Tamil Nadu Electricity Board	Long Term	1000	Oct-13	DB Power Ltd	208	4.91	2014-15
					Ind Bharat	500	4.91	
					Jindal Power Ltd	400	4.91	
					BALCO	200	4.91	

Analysis and Decision

- After scrutinizing the original Petition and the additional submissions made by APDCL the following points are observed:

- The proposed transaction is a Cross-Border Transaction with Bhutan based generating station. APDCL has already signed the Power Sale Agreement (PSA) on 10.12.2014 with

PTC India Ltd.. As per the clause 1.4 of the Govt of India Notification No. 14/1/2016-Trans dated 05.12.2016 on Cross-Border Trade of Electricity, if the cross-border trading of electricity has been done prior to the notification, the same will be deemed to be as per provisions of the guidelines.

- b. In the proposed transaction, the following are the key parameters:
- Levelised tariff is Rs 4.152/kWh upto 15th year and beyond 15th year the parties will mutually decide
 - Scheduled commercial operation date: 1st July, 2019
 - Contracted Energy:
 - For the 1st 12 years of contract: 335.04 MU
 - For the remaining 3 years of contract: 312.20 MU
- c. As per the PSA, the seller shall supply power from alternate source in case the seller is unable to supply energy to the procurer up to the contracted energy from the project except due to a Force Majeure Event or due to a procurer event of default at the same tariff and at delivery point as per agreement. That means APDCL will receive uninterrupted power supply under this arrangement.
- d. The power demand of the state has gone up over the years because of implementation of many Electrification projects and the same is expected to further go up.
- e. APDCL submitted that even after purchase of power from all other tied up/allocated sources, there will be shortfall to the tune of 183 MW (approximately 8% of peak demand).
- f. From the submission of APDCL related to contemporary competitive bidding for long term power purchase it is observed that Levelised Tariff has been in the range of Rs 4.41/kWh to Rs 4.91/kWh. Whereas in some cases the first year Tariff itself was in the range of Rs 3.60/kWh to Rs 4.49/kWh, however, Variation in Fuel Cost to be allowed @ actual and Capacity charge to be escalated @ WPI or CERC notifications.

After scrutinizing the Petition and hearing the Petitioner, it is observed that the proposed power purchase from PTC India Ltd is required to ensure Energy Security for the State of Assam and is competitive as compared to the contemporary power purchase transaction undertaken during that period. Therefore, the Commission deems it fit to allow the Petition No 36/2016 and accordingly approves the procurement of power by APDCL from Nikachhu Hydro Power Project , Bhutan through PTC India Ltd.

Sd/-
Subhash C Das
Member
AERC

Sd/-
(Dipak Chakravarty)
Member
AERC

Sd/-
(Naba Kumar Das)
Chairperson
AERC