

ODISHA ELECTRICITY REGULATORY COMMISSION
BIDYUT NIYAMAK BHAWAN
UNIT-VIII, BHUBANESWAR - 751 012

Present : Shri S. P. Nanda, Chairperson
Shri S. P. Swain, Member
Shri A. K. Das, Member

Case No. 94/2013

OHPC Ltd.
Vrs.
GRIDCO & SLDC

..... Petitioner

..... Respondents

In the matter of: **An application u/S. 33 (4) of the Electricity Act, 2003 read with CERC (terms and Conditions of Tariff) Regulations, 2009 seeking direction of the Commission to SLDC and GRIDCO to settle the capacity charges and revised PAFM certificates of the two units of Balimela Power House for the period from 4th April, 2012 to June, 2012 as per actual availability.**

For Petitioner: Shri A. K. Mishra, Director (Operation).

For Respondents: Shri U. N. Mishra, CGM (PP), GRIDCO
 Shri Umakanta Sahoo, GM (GO), SLDC

ORDER

Date of Hearing: 30.09.2014

Date of Order: 06.12.2014

- The present petition has been filed by OHPC Limited for correct certification of daily declared capacity and computation of Plant Availability Factor per Month (PAFM) of Balimela Hydro Electric Project (BHEP) by SLDC and settlement of capacity charges between OHPC and GRIDCO for the disputed period from 17.04.2012 to 30.06.2012 as per Clause 33 (4) of Indian Electricity act, 2003 and CERC (Terms and Conditions of Tariff) Regulations, 2009.
2. Balimela Power House of OHPC is located at Balimela in Malakanagiri District of Odisha. The total installed capacity (IC) of Balimela Power House is 510 MW, consisting of 8 nos. of units, out of which units 1 to 6 are of 60 MW capacity each and the Units 7 and 8 are 75 MW capacity each.
 3. The fixed cost of OHPC hydro generation stations is computed on annual basis, based on norms specified under the CERC (Terms & Conditions of Tariff) Regulations, 2009 and recovered on monthly basis under capacity charge (inclusive of incentive) and energy charge, which is payable by the GRIDCO.
 4. Based on the agreed PPA, Balimela Power House sells its entire capacity (510 MW) along with available generation to GRIDCO and raise:

- i. The monthly capacity charge bill based on the Annual Capacity Charge (ACC) fixed by Commission and PAFM (Plant Availability Factor achieved during the Month, in percentage) certified by SLDC.
 - ii. The monthly energy charges bill based on Energy Charge Rate (ECR) fixed by OERC and the actual energy sent out, recorded at the interface metering point of OHPC and OPTCL system.
5. OHPC submitted that
- (a) SLDC deducted the full MW availability of 150 MW (75 MW x 2) of Units 7 and 8 of Balimela Power House from the total declared capacity from 17.04.2012 to 30.06.2012 and certified the PAFM of BHEP for the month of April, 2012 to June, 2012 basing on the performance capability test of Units 7 & 8 of BHEP during the peak hours on 18.04.2012.
 - (b) The decision of SLDC to perform the capability test of units 7 & 8 of BHEP is not in conformity with the provisions underlined in the CERC (Terms and Conditions of Tariff) Regulations, 2009.

CERC (Terms and Condition of Tariff) Regulations dated 19th January, 2009 regarding performance test of generating units for pondage or storage type Hydro Power Stations as quoted below:

“In case the hydro generating station with pondage or storage is not able to demonstrate peaking capability corresponding to the installed capacity for the reasons of insufficient reservoir or pond level, the date of commercial operation of the last unit of the generating station shall be considered as the date of commercial operation of the generating station as a whole, provided that it will be mandatory for such hydro generating station to demonstrate peaking capability equivalent to installed capacity of the generating unit or the generating station as and when such reservoir/pond level is achieved.”

But contrary to the above regulation, SLDC programmed the performance test of Unit No. 7 & 8 simultaneously when the level was near to MDDL and other 3 nos. of units (I.e. Unit Nos. 2, 5 & 6) were generating.

- (c) The adverse situation under which SLDC performed such test definitely ignored the procedures norms set by OERC in their generation tariff order for the FY 2013-14. It is to mention here that the performance or capability test of the generating units is to be done one by one. In this connection, OERC in the order dated 20.03.2013 in Case No. 100/2012 have directed as under:

“OHPC should maintain and test its generating units which are capable of its rated capacity including margin of over generation during peak time (Continuous operation of 3hours at a time in a day) one by one and keep all its units ready for optimal generation during the monsoon time for maximizing the secondary

generation. The Commission expects the statement of status of maintenance and testing peak time generation, validated by SLDC of all its generating units to make available to the Commission latest by 31st May, 2013.”

- (d) But ignoring the above provisions/directions of the CERC and OERC the performance capability test of Units 7 & 8 of BHEP was programmed by SLDC on 18.04.2012 and SLDC on 19.04.2012 took an unilateral decision and considered Unit nos. 7 & 8 of Balimela Power House not available since 17.04.2012 giving the reason that both the units failed in the performance capability test on 18.04.2012 during the evening peak hours.
- (e) The stand of SLDC is not correct since on 18.04.2012 the Unit-7 was synchronised to the bus at 19.15 hrs and loaded upto 70 MW to demonstrate its capability. Thereafter, SLDC insisted for synchronising Unit-8 when other four units of the power stations are running. Accordingly, OHPC hand tripped Unit No. 7 after 26 minutes in consultation with SLDC and synchronised Unit No. 8 at 19.50 hrs. and loaded it upto 60 MW. But Unit 8 tripped at 19.52 hrs due to failure of one of its guide vane shear pin.
- (f) On the next day morning, Unit-8 was made available by replacing the broken shear pin and OHPC intimated SLDC to synchronise Units 7 & 8 for capability test by stopping the other running units. But SLDC did not allow such synchronisation. Thereafter, Unit 8 was taken for annual maintenance from 28.04.2012.
- (g) In spite of above clarification of OHPC including all regulatory provisions on 11.12.2012 and 24.06.2013, SLDC ignored the declarations of BHEP and reduced the PAFM for the month of April, 2012 to June, 2012 by deducting the MW availability of Units 7 & 8 to the tune of 150 MW from the daily declared capacities resulting in a financial loss of around Rs.1.74 Crs. to OHPC on account of non-recovery of its annual capacity charges for the FY 2012-13. The matter was also brought before Grid Co-ordination Committee (GCC) and could not be resolved there.
- (h) Therefore, the Petitioner prays that the Commission may issue necessary directives to SLDC to revise the PAFM certificates of Balimela Power House for the months of April, 2012, May, 2012 and June, 2012 as per the actual availability of these two units (Units 7 & 8) and SLDC may also be directed to follow the guidelines of the Commissions (both OERC and CERC) while conducting the performance capability test of the generating units with due consideration of the reservoir level.

6. The respondent SLDC stated that

- (a) While the State was in acute power crises during the months of March to June, 2012, Balimela HEP was declaring the availability of all units including Units 7 & 8 having capacity of as 75 MW each on day ahead basis. To meet the requirement of the State whenever SLDC had asked BHEP to synchronize its Units 7 & 8 in to the system, they never synchronized both the units. On 17th April, 2012 at 17.00 hrs, SLDC requested BHEP to synchronize its Units 7 & 8, but it did not synchronise both the units. Again, SLDC sent a written message at 18.00 hrs to BHEP in this regard stating that the Units would be treated as not available if they fail to synchronize them but still BHEP could not synchronise the units although both the units were declared to be available for that day.
- (b) Since BHEP failed to establish the declared capacity time and again, SLDC decided to conduct the performance test on real time basis to know whether Units 7 & 8 are actually available, as that is the responsibility of SLDC. As per the CERC (Terms and Conditions of Tariff) Regulations, 2009, the Plant Availability Factor achieved in a month (PAFM) is to be certified by SLDC for determination of the monthly capacity charge bill for a hydro station. The Load Despatch Centre shall certify the PAFM after due verification of the machine availability during the related month. Accordingly, on 18.04.2012 at 18.00 hrs, SLDC requested the unit head of BHEP, to synchronize Unit Nos. 7 & 8 and increase the generation up to the Declared Capacity (DC) i.e. 75 MW each.
- (c) In response to the instruction of SLDC Unit 7 of BHEP could only be synchronized at 19:13 hours, after a lapse of one hour and 13 minutes of sending instruction and got tripped after 26 minutes. Similarly, the Unit 8 was synchronized at 19:50 hours and tripped after 2 minutes.
- (d) In turn, Unit head of BHEP took the plea that they could not synchronize the units due to low reservoir level and the unit was stopped as per the instruction of SLDC, which is not true. Rather, SLDC again requested to synchronize Unit 7 after both Units 7 & 8 tripped, but they failed to synchronize Unit 7. This has been logged in the SLDC Operational LOG Book on 18.04.2012.
- (e) Subsequently, Unit 8 was taken on shutdown by OHPC for annual maintenance from 28.04.2012 to 30.06.2012. On 24.05.2012, SLDC again requested BHEP to run Unit-7 for only 30 minutes on any suitable day for consideration of certification but BHEP failed to synchronize Unit-7.

- (f) In view of the facts and submissions made herein above, the respondent SLDC, has prayed that the Commission may allow SLDC to determine the PAFM as per the actual availability of unit basing on availability test conducted on real time basis.
7. Heard parties at length.
- The written submission of the parties are also taken on record.

We observe that the dispute arises over the payment of capacity charge to the Balimela Hydro Power Station for Units-7&8 for the period from 18.4.2012 to 30.06.2012. SLDC, the respondent, refuses to PAFM certification for the above Units for the stated periods, on the ground that when SLDC asked BHEP to synchronize Unit-7&8 into the system on 17th April at 18.00 hrs. the authorities of BHEP could not bring and synchronise the units for stated duration. SLDC sent a message at 18.00 hrs. to BHEP that unless the above Units were synchronized, they will be treated as “non-available”. Accordingly PAFM certification for unit-7&8 were declined.

OHPC submitted that the Unit was synchronized for performance test on 18.04.2012 for certification of availability of the units in response to the request of SLDC. SLDC in its letter stated that synchronisation should be done for at least 30 minutes to demonstrate the performance of the disputed units. OHPC submitted that seeking performance test for Unit under consideration when the reservoir had gone down to near MDDL and other 3 units running in synchronization, the decision of SLDC is unfair and unjust. The capacity charge has been denied to them is unlawful. Moreover, in one of its orders Commission has restrained OHPC for trial run of the units when the reservoir level is close to MDDL.

The definition of “declared capacity” in respect to generating stations as per the Regulation is as follows:

“Declared Capacity” or “DC” in relation to a generating means the capability to deliver ex-bus electricity in MW declared by such generating station in relation to any time-block on the day or whole of the day, duly taking into account the availability of fuel or water, and subject to further qualification in the relevant regulation.”

The same is further explained in the computation of PAFM as follows:

“DC_i = Declared capacity (in ex-bus MW) for the ith day of the month which the station can deliver for at least three (3) hours, as certified by the nodal load dispatch centre after the day is over.”

Therefore, the capacity charge or declared capacity, on concurrent reading reads that the capability of units to deliver ex-bus electricity in MW declared by such generating station and can deliver at least 3 hours as certified by SLDC provided water is available.

OHPC presented the log book for that day of 18.04.2012. At about 6.45 hrs. Units- 2,5 & 6 were running and generating 180 MW. At 19.15 hrs., Unit-7 was synchronized, obviously in response to the communication from SLDC which directed it to run for 30 minutes duly synchronised to demonstrate the capability of the units for 3 hrs. loading . The total load on the station with the Units-2, 5, 6 & 7 running was around 250 MW. At 19.38 hrs., stop command was given to Unit-7 and it was stopped. It implies that the unit No.7 was stopped consciously. At 19.50 hrs. Unit-8 was synchronized to grid and loaded with 60 MW. At 19.52 hrs. Unit-8 tripped on excitation failure. SRV of Unit-8 did not close. Thus, the time limit given by SLDC to run the Units for 30 minutes to observe capability of the machine for three hours is the own stipulation of SLDC and not as per regulation. The reservoir level on 18th April, 2012 was 1444.20 with MDDL of 1440. The reservoir level on the previous year for this period was 1477.60. The water utilized on that day was 1750.22 cusec. Thus, the water level on that day was close to MDDL i.e. 4.20 ft. above MDDL and lesser than the previous year. The time chosen for synchronisation by SLDC was the peak load time. Unit-8 malfunctioned on that day and afterwards it was taken on maintenance from 24.04.2012. Thus, we feel that had the Unit-7 not stopped consciously by BHEP authorities and not affected by low pondage due to lean season, it had the possibility and capability of delivering the rated load (declared capacity) for at least 3 hours as per regulation. Unit-8 could not withstand synchronization on 18th April, 2012 and after six days, it was taken on maintenance. We do not accept the contention of OHPC that it was repaired immediately. Therefore, obviously, it was not capable of delivering load for three hours as per rules from 18.04.2012. We feel that Unit-7 could have delivered the rated load to qualify for PAFM and consequential capacity charges. Unit-8 does not substantiate through operation and qualify for the PAFM for the period from 18.04.2012 to 30.06.2012. Capability test on any other date after such date would have been affected by low pondage. Therefore, we direct as follows:

SLDC shall accept the declared capacity of the Unit-7 to be available from 18.04.2012 to 30.06.2012 and shall not accept availability of Unit-8 for calculation of PAFM.

8. Accordingly, the case is disposed of.

Sd/-
(A. K. Das)
Member

Sd/-
(S. P. Swain)
Member

Sd/-
(S. P. Nanda)
Chairperson