THE APPELLATE TRIBUNAL FOR ELECTRICITY AT NEW DELHI

(APPELLATE JURISDICTION)

APPEAL NO. 263 OF 2016 & IA No. 549 OF 2016 & IA No. 1441 OF 2019

Dated: 20th October, 2020

Present: Hon'ble Mrs. Justice Manjula Chellur, Chairperson

Hon'ble Mr. S. D. Dubey, Technical Member

In the matter of:-

Gujarat Urja Vilkas Nigam Limited

Sardar Patel Vidyut Bhawan, Race Course Circle, Vadodara - 390007

.... Appellant

Versus

1. Gujarat Electricity Regulatory Commission

6th Floor, GIFT – 1, Road No. 5-CGift City, Gandhinagar -332 335.

2. Oreva Energy Pvt. Limited

Sumel – 2, Near Gurdwara, S.G. High Way,

Ahmadabad - 380051 ... Respondents

Counsel for the Appellant(s) : Mr. M.G.Ramachandran, Sr. Adv.

Ms. Ranjitha Ramachandran

Ms. Anushree Bardhan Ms. Poorva Saigal

Mr. Shubham Arya

Counsel for the Respondent(s) : Mr. C. K. Rai for R-1

Mr. Sanjay Sen, Sr. Adv. Mr. Ashish Jha for R-2

<u>JUDGMENT</u>

(PER HON'BLE MRS. JUSTICE MANJULA CHELLUR, CHAIRPERSON)

- 1. This Appeal is preferred by the Appellant being aggrieved by the Order dated 04.08.2015 passed by the Gujarat Electricity Regulatory Commission (hereinafter referred to as 'the State Commission/GERC') in Petition No. 1424 of 2014, which was filed by Respondent No. 2, wherein the State Commission has allowed the petition and directed the Appellant to refund the amount of penalty levied by the Appellant on Respondent No. 2 on account of shortfall in guaranteed supply, in terms of the Power Purchase Agreement dated 07/08/2008 entered into between the parties. The Appellant had sought review of the said order 04/08/2015 by filing Review Petition No. 1531 of 2015 before the State Commission. The said review petition has been partly allowed by the State Commission vide Order dated 29/07/2016. Being aggrieved by the said orders i.e., the main order dated 04/08/2015 and review order 29/07/2016, the Appellant has approached this Tribunal by filing the present appeal.
- 2. The facts, in brief, which led to filing of the present appeal are as under:

- (a) The Appellant, Gujarat Urja Vikas Nigam Limited is a Company incorporated under the Companies Act, 1956, which undertakes the functions of Bulk Purchase of Electricity from the generators and other sources and Bulk Supply of Electricity to the distribution licensees in the State of Gujarat for onward supply to the consumers. Respondent No. 1 is the Gujarat Electricity Regulatory Commission. Respondent No. 2 Oreva Energy Private Limited is a generating company, which operates a 3 MW canal based hydro generating plant on the Karjan Canal in the State of Gujarat.
- (b) On 07/08/2008, the Appellant and Respondent No. 2 have entered into a Power Purchase Agreement ("PPA") for sale and purchase of electricity from the 3 MW Hydel Electricity Plant of Respondent No. 2 at Karjan Canal. Since the commissioning of the Hydel Power Plant on 15/02/2011, Respondent No.2 has been supplying power to the Appellant in accordance with the terms of the PPA read with the tariff order dated 14/06/2007 of the State Commission. The tariff of the said project was being paid in terms of the Tariff Order dated 14/06/2007 of the State Commission.

- (c) It is stated that power project of Respondent No.2 was designed in such a way that it can continuously generate 20% more energy i.e., 3.6 MW as against installed capacity of 3 MW.
- (d) The scheme of the PPA is that the rights and obligations stated in Article 4.1 (n) and Article 4.2 (b) are reciprocal in nature and have to be performed by the parties unless the performance of the obligation is affected by force majeure event. Force Majeure is defined in Article 8 of the PPA. The consequences of non-supply of minimum quantum of power by the Respondent No. 2 or non-off take of minimum power by the Appellant are provided in Articles 7.3.3 and 7.3.4 of the PPA.
- (e) On 21/02/2012, on the request of Respondent No. 2, a supplemental PPA was executed between the parties to consider the contracted capacity at 3.6 MW in place of 3 MW, while the working of shortfall in supply still remained based on 3 MW capacity. Accordingly, the shortfall in supply is worked out at 65% of 3 MW against which the project can continuously generate electricity at 3.6 MW capacity, so that less generation during any part of year due to less release of

water from the canal can be compensated by generation of higher quantum of energy up to the level of 3.6 MW during balance period of the year when it receives sufficient water from the canal.

- (f) It is stated that in the year 2012-13, Respondent No. 2 could not achieve the targeted generation of 65% resulting a shortfall in the supply to the Appellant due to which, after reconciliation, as per the terms of PPA, the Appellant deducted the consequential penalty amount of Rs. 41 Lacs from the bills of Respondent No. 2. Challenging the said action of the Appellant, Respondent No.2 filed Petition No. 1424 of 2014 before the State Commission seeking refund of the penalty amount deducted by the Appellant alleging that the said shortfall in generation and supply was on account of force majeure conditions, namely non-release of sufficient water by the Irrigation Department.
- (g) It is stated that Respondent No.2 vide Affidavit dated 10/03/2015 submitted the details of release of water by the Irrigation Department. Thereafter, the Appellant verified the said details and found several discrepancies in the data

furnished. Accordingly, further information was called for by the Appellant from Respondent No. 2 during the joint meeting held on 25/05/2015 on the aspect of technical details of turbine and day wise generation data of the disputed period. The same was submitted by the Respondent No. 2 on 28/05/2015.

- (h) Since the Appellant felt that there were errors apparent on the face of record in the order of the State Commission, it filed Review **Petition** No. 1531 of 2015 before the State Commission.
- 3. Aggrieved by the main Order dated 04/08/2015, which was merged in the Order passed in review petition, dated 29/07/2016, challenging certain aspects, the Appellant has filed the present appeal praying for the following reliefs:
 - (a) "Allow the appeal and set aside the Order dated 04/08/2016 passed by the State Commission to the extent challenged in the present appeal.
 - (b) Pass such other Order(s) and this Hon'ble Tribunal may deem just and proper."
- 4. Learned counsel for Respondent No.2 has filed reply on behalf of Respondent No.2. The gist of reply, in brief, is as thus:

- (a) According to Respondent No.2, the instant appeal is misconceived and is liable to be dismissed since the State Commission has passed both the orders dated 04.08.2015 and 29.07.2016 on merits with valid reasons after considering the issue of applicability of 'force majeure'. In support of this submission, reliance was placed on the ratio laid down by the Hon'ble Supreme Court of India in "Vohra Sadikbhai Rajakbhai and Ors. v/s. State of Gujarat and Ors" (Civil Appeal No. 1866 of 2016).
- (b) It is submitted that the Appellant has not complied with the provisions of Section 111 of the Electricity Act, which requires the Appellant to deposit the amount of levied penalty. Therefore, the present Appeal deserves to be dismissed on that ground alone.
- (c) Further, the present appeal is not maintainable since the appeal is being filed with delay i.e., beyond the prescribed time limit of filing of appeal, and no application for condonation of delay has been filed. According to Respondent No.2, being aggrieved by the order dated 04.08.2015 passed in Petition No.1424 of 2014, the Appellant had filed Review Petition No.1531 of 2015 before

the State Commission. The State Commission by its order dated 29.07.2016 partly allowed the said review petition by reducing the penalty amount from Rs.44 lakhs to Rs.41 lakhs. According Respondent No.2, the to Commission has not changed its decision on the merits of the matter except the reduction in penalty amount with Therefore, the averment of the Appellant that the interest. order dated 29.07.2016 passed in review petition is merged with the original order dated 04.08.2015 passed in Petition No.1424 of 2014 and period of limitation starts from the date of review petition is not legal and valid, hence the present appeal is barred by limitation.

- (d) Learned counsel points out that the daily order dated 07/05/2015 passed in petition no. 1424 of 2014 by the State Commission makes it clear that in case no water is released by the irrigation department then electricity cannot be generated.
- (e) It is submitted that generation of electricity from the power project depends upon the availability of water head. In case, water head availability is higher than anticipated generation for 3.0 MW, the power plant can generate more electricity

whereas the water head availability is lower than the anticipated water head availability in the relevant months of the year, the power generation may be lower than the anticipated generation. Thus, in the supplemental PPA it was stated and agreed between the parties that generation of electricity is subject to availability of head of water.

Further, the power plant set up by Respondent No.2 was (f) having the capacity of 3.0 MW only. The generation of electricity upto 3.6 MW or 120%, is subject to the increase in head of water in reservoir/ dam and capacity of operation of m/c with available design margin on it. Therefore, the generation of electricity from the Respondent's hydro power plant depends firstly on the availability of head of water (Reservoir Level or Sufficient Water into the dam) and secondly, on the release of water from the dam into the canal for the irrigation purpose, which in turn enables power plant to generate electricity. Therefore, higher generation of electricity up to 120% is possible when there is adequate water release and, accordingly, the submission that guaranteed supply of 65% on annual basis can be achieved, is repudiated. According to Respondent No.2, the State

Commission has rightly justified the force majeure event for non-generation of power due to adverse situations during the respective period.

- (g) It is stated that the plant was always available for generation of electricity and its Hydro Power Generating Plant was fully utilized as and when water was released from the reservoir into the canal. However, the targeted generation of electricity of 65% of 3.0 MW could not be achieved due to non-release of water during the relevant period. Therefore, the ground raised that when sufficient water is released and water head was available for generation of electricity up 3.6 MW or 120% is misconceived and denied.
- (h) According to Respondent No.2, the grounds, on which the Appellant is relying upon in the present Appeal, are the conditions, which are beyond the control of the Respondent i.e., 'Force Majeure Event' and that included in 'Acts of God' specified in Sub-clause (i) of Clause (a) of Sub-Article 8.1 of Article 8. It is submitted that non-release of water into canal from the dam/reservoir by the concerned Dam Authority from time to time due to low rainfall and reduction in quantum of water availability in the reservoir, which is not in the hands of

the Respondent, therefore it is an event of 'Acts of God'. In such circumstances, Respondent could not generate the electricity. It is the condition of a natural calamity due to lower rainfall in the year which led to non-availability of water in requisite quantum in reservoir and resulted in less release of quantum of water into canal for the purpose of electricity generation. Therefore, taking recourse to supplemental agreement for higher generation of electricity is denied.

- (i) It is submitted that, Respondent No.2 can generate more power as compared to the design i.e. 1500 KW if the head on the turbine is more than design parameter available at the generating plant, below the reservoir level 107m, however, Respondent No.2 cannot generate power at the capacity of 1500kw with same discharge due to less in the turbine head.
- (j) It is further stated that while deciding the issue of generation of electricity, it is necessary to see the average reservoir level and actual release of water during the months in Mm3 (million meter cube) together with actual and historical data. As per the data, the average release of water in 2012-13 was 195.78 whereas Historical / planned release of water was 382.15 Mm3 in 12 months.

- (k) As regards the issue of refund of penalty amount deducted along with interest by the Appellant by applying Article 7.3.1 of PPA, Respondent No.2 submits that the Appellant GUVNL is also purchasing electricity from various other hydro generating stations of the State. i.e. Gujarat State Electricity Company Limited. According to Respondent No.2, it is necessary to refer to the PPA of GUVNL with the said company on above aspect and whether penalty imposed on such companies when less water released by the irrigation department / dam Authority in a particular year and what is targeted generation provided in the PPA with the said company and to check whether on non generation of power, whether any penalty levied or deducted in terms of PPA or not.
- (I) It is submitted that in the year 2012-2013, during the monsoon season, the reservoir level was below the reservoir operating level (rule level). Thus, due to less /shortfall in the water, which was stored in the dam, the irrigation canal was in operation for only 169 days out of 365 days. Out of the approved historical /planned water release of 382.15 million meter cube (Mm3) during the year 2012-2013 only 195.78

million meter cube (Mm3) water was released through the canal for irrigation, which was used for power generation. Thus, 186.27 Million meter cube (Mm3) less water was released into the canal. This is the reason for less generation of electricity during 2012-13.

- (m) It is further submitted that illegal levy of penalty by the Appellant is nothing but non compliance of the terms of PPA. Therefore, the averments made by the Appellant are unjust, unreasonable and devoid of merits.
- (n) The issues raised by the Appellant are properly dealt with by the State Commission, and the same do not warrant any interference by this Tribunal and thus the above Appeal deserves to be dismissed.
- 5. Learned counsel for the Appellant has filed rejoinder on behalf of the Appellant, which in brief is as under:
 - (a) So far as the Judgment of the Hon'ble Supreme Court in "Vohra Sadikbai Rajakbai & Ors v. State of Gujarat & Ors," which was relied on by Respondent No. 2, is concerned, it is stated that the said judgment has no application to the present case as in the said case, the

Hon'ble Supreme Court has not laid down any general principles of universal application.

- (b) Respondent No. 2 has wrongly relied upon Section 111 of the Electricity Act to deposit the amount of penalty while filing an appeal, Appellant says this provision is applicable only when an Order under challenge is made by an Adjudicating Officer imposing penalty. The State Commission has only given the benefit of Force Majeure clause to Respondent No. 2 under the PPA, which is being challenged by the Appellant.
- (c) The Appellant had filed Review Petition No. 1531 of 2015 and the same was partly allowed by the State Commission vide Order dated 29/07/2016. Accordingly, the Order dated 04.08.2015 merged with the Order dated 29.07.2016. Therefore, the Appeal filed is within the specified time.
- (d) The State Commission has ignored the fact that less/no generation during low water release can be compensated by higher generation upto 120% during the period of adequate water release, and accordingly guaranteed supply of 65% on annual basis can be achieved. As per the design of the power project, it can continuously generate 20% more

energy (i.e. 3.6 MW as against installed capacity of 3 MW). It's on the request of Respondent No. 2, a supplemental PPA was executed on 21.02.2012 wherein the capacity of 3.6 MW was recognized.

- (e) Appellant contends that the most important aspect to examine is "whether the power plant was generating energy at its fullest capacity when there was sufficient water release and water head available?" In such a situation, such generation could be utilized to compensate less/no generation during the period of less water release/head. According to the Appellant, the State Commission has not applied this test. The test is not that the project was generating energy at 65% capacity when adequate water release/head was available, as contended by Respondent No. 2 and which was allowed by the State Commission.
- (f) It is further stated that Respondent No. 2 could not reach targeted generation of 65% not due to non-release of water and non availability of water head. The State Commission has ignored that the design of the power project of Respondent No. 2 is such that it can continuously generate 20% more energy (i.e. 3.6MW as against installed capacity

of 3 MW) when adequate water release and water head is available. In this regard, as per the request received from Respondent No.2, the supplemental PPA was executed on 21.02.2012 to consider the contracted capacity at 3.6 MW in place of 3MW while the working of shortfall in supply still remained corresponding to 3 MW capacity only.

- (g) According to the Appellant there was no force majeure as contended by Respondent No. 2. There is no merit in the submission that due to Act of God, Respondent No. 2 could not achieve targeted generation. It is stated that Respondent No. 2 was very well in a position to meet the criteria of guaranteed supply @65% by adequate generation corresponding to the availability of water head and water release.
- (h) The Appellant denies the submission of Respondent No.2 that the shortfall in targeted generation is on account of less release of water compared to historical water release data. It is submitted that Respondent No.2 has failed to generate adequate power corresponding to quantum of water release and available water head. For instance, for five days, there was no generation at all, even though adequate water

discharge and water head was available. For this the explanation given by Respondent No. 2 is that during that period the machine may have been under shut down conditions. Such reasons obviously do not qualify as force majeure in terms of provision of PPA.

(i) Lastly, it is submitted that the Appellant has correctly recovered the penalty as per the PPA and the Impugned Order has been wrongly passed by the State Commission and therefore, the present appeal needs to be allowed and the Impugned Order is liable to be set aside.

ANALYSIS & CONCLUISON:

- 6. We have heard learned counsel for the parties and have gone through the judgments relied upon by them and relevant portions of the PPA.
- 7. According to Appellant's counsel, in terms of PPA the obligation is on the generator (Respondent No.2) to generate and supply minimum of 65% of contracted capacity of 3 MWs in a year. Failing which, Respondent No.2 has to pay compensation to the Appellant in terms of Article 4 read with 7 of the PPA. This undertaking of minimum of 65% in a year came to be incorporated on the basis of detailed project report of Respondent No.2 by taking into consideration historical water

discharge between June to August in any year, which would have lower discharge of water. In terms of Article 4, the reciprocal rights and obligations to be discharged by the parties are to be complied with unless it is affected by event of force majeure, which is again detailed in Article 8 of the PPA. Therefore, consequences are provided for nonsupply of minimum quantum of power by the generator, so also non-off take of minimum power by the Appellant in terms of Article 7.3.3 and 7.3.4 of the PPA. The Appellant contends that the power plant of Respondent No.2 is so designed enabling it to generate continuously 20% of more energy i.e., 3.6 MWs as against installed capacity of 3MWs. Incorporating these terms, a Supplementary Agreement was executed between the parties to consider the contracted capacity of 3.6 MWs in the place of 3 MWs. However, the working of shortfall remained at 3 MWs capacity. According to Appellant, this would compensate shortfall of generation of energy due to less water head/discharge.

8. According to Appellant, contention of Respondent No.2 that a shortfall in the power generated due to non-release of water by the irrigation department cannot be a ground since this fact of less/non-release of water by irrigation department during specific period was within the knowledge of Respondent No.2 when it undertook to supply minimum of 65% of 3 MWs. They further contend that if only

Respondent No.2 had generated as per the capacity when there was sufficient water head/release, there would not have been any shortfall. The minimum capacity was incorporated only because of the fact that there is no guarantee in a Hydro Project that there would be same water level on all the days of a year. They further contend that the detailed project report ("DPR") of possible generation and supply of power in all the months includes low generation for want of less release of water.

- 9. The availability of water for the year 2012-13 was based on anticipated availability of water and they also refer to detailed project report pertaining to reservoir level based on historical data. Therefore, on the basis of detailed project report itself, it is clear that during certain months of the year water level would be higher than the level considered in the DPR. Therefore it was possible for Respondent No.2 to generate agreed minimum capacity of 65% of 3 MWs.
- 10. So far as cause of force majeure is concerned, the Appellant contends that the terms of PPA only refer to certain calamities as force majeure i.e., famine, drought and floods. Therefore, less rainfall during few months in a year, which is normal and anticipated, cannot become a force majeure event. They also refer to the following three judgments to support their contention.

- a) "Firm Rampratap Mahadeo Prasad v. Sasansa Sugar Works Ltd.," 1962 SCC OnLine Pat 123: AIR 1964 Pat 250 at page 251;
- b) "Satyabrata Ghose v. Mugneeram Bangur & Co.," 1954 SCR 310 : AIR 1954 SC 44;
- c) "*Union of India v. Chanan Shah*", 1954 SCC OnLine Pepsu 19 : AIR 1955 Pepsu 51 at page 55; and
- d) "Singh v. Sheoprasad", 1945 SCC OnLine Pat 196: ILR (1945) 24 Pat 197 : AIR 1945 Pat 300.
- 11. They also refer to the following judgments to contend that normal seasonal variations, which could be foreseen, cannot become force majeure event. Therefore, according to the Appellant, Respondent Commission was not justified to exclude months of July, August and September, during which period water was not released.
 - (a) "Powergrid Corporation of India Ltd v. Central Electricity Regulatory Commission and Others" Order dated 13.08.2015 in Appeal No. 281 of 2014.
 - **(b)** "Powergrid Corporation of India Ltd v. Central Electricity Regulatory Commission and Others" Order dated 16.09.2015 in Appeal No. 117 of 2014."
- 12. According to Appellant, Respondent 2 failed to generate corresponding water head release, therefore, it has resulted in shortfall of minimum contracted capacity. They also refer to various heads of

water to contend that even with head of water level is less than 30 m and less than 107 m of reservoir level, Respondent No.2 could generate 2.16 million units for that month. Therefore, they contend that the Respondent Commission has taken wrong data to arrive at the conclusion in the impugned order. According to the Appellant, even with proper release of water over 450 cusec or 600 cusec, Respondent No.2 could generate only 50% of 3 MWs capacity. The explanation given by Respondent No.2 that during the relevant period the machine might have been shut down, does not amount to force majeure event.

13. Pertaining to direction for payment of interest by the Appellant in respect of 41 lakhs of rupees, according to the Appellant is contrary to the terms of contract. The Appellant further contends that Respondent No.2 did not offer any written notice explaining the particulars of force majeure or describing the particulars of force majeure, which is incorporated at Article 8.1(b)(i) of the PPA. They also refer to the attempt of State Commission to reconcile the dispute between the parties. During the said reconciliation process, Respondent No.2 furnished details of water release and said data reflects wrong figures. The Appellant asked for the technical details of the turbine for the disputed period and the same was produced at a belated stage. Therefore, it is not justified to direct the Appellant to pay interest. The

party who is at fault cannot get the benefit of carrying cost/interest, which is supported by the following decisions:

- i) "Maharashtra State Electricity Distribution Co. Ltd v. Maharashtra Electricity Regulatory Commission" dated
 19.09.2007 in Appeal No. 70 of 2007;
- ii) "Torrent Power Ltd v. Gujarat Electricity Regulatory Commission" dated 30.05.2014 in Appeal No. 147, 148 and 150 of 2013:
- iii) "Paschim Gujarat Vij Company Ltd and Ors v. Gujarat Electricity Regulatory Commission" dated 04.12.2014 in Appeal No. 45 of 2014:
- iv) The above decision in Appeal No. 70 of 2007 has also been considered by the Full bench of the Tribunal in Order dated 11.11.2011 in OP No. 1 of 2011.
- v) "Punjab State Power Corporation Limited v. Punjab State
 Electricity Regulatory Commission" dated 22.04.2015 in
 Appeal No. 174 of 2013

14. As against this, Respondent No.1 Commission's arguments, in short, are as under:

Respondent No.1 contends that Respondent Commission has passed a detailed order after hearing the parties at length. They refer to several clauses of the PPA, which are relevant for consideration of the

matter on merits. Respondent No.2 approached the Commission when the Appellant imposed penalty for not supplying minimum capacity of power at 65% of 3 MWs. The case of the Respondent No.2- generator was based on force majeure clause. Respondent No.1 contends that the Hydro Power Plant of Respondent No.2 is designed as such, which requires water head at a particular height from the base of tail channel at a particular level with discharge of certain quantum of water in order to generate power at full capacity of the plant i.e., 3 MWs. Therefore, any shortfall either in the height of water head or the shortfall in discharge of water calculated at seconds would affect the generation of electricity. Therefore, according to Respondent No.1, if water head is below the required meters and required quantum of water, the capacity of the plant will reduce even below 3 MWs. Therefore, based on the design parameters of the power plant and taking into consideration availability of water head and quantum of release of water on daily basis, the Respondent Commission proceeded to pass order dated 04.08.2015. According to Respondent No.1, the arguments of Appellant that Respondent No.2 was required to generate electricity to its full capacity for 2012-13 based on the plant capacity at 3.6 MWs is not correct since the capacity to produce electricity from the plant depends on the head of water on turbine and required quantum of water release. Since

Appellant failed to consider various design parameters while imposing penalty on Respondent No.2, the Respondent No.1 had to intervene.

- 15. They also bring on record by way of arguments that based on the data provided by the Appellant during the months of July, August and September there was no release of water. Therefore, the PLF achieved by Respondent No.2's plant was zero, which condition qualifies as force majeure. Respondent No.1 further contends that the water was effectively available only for 169 days, as admitted by the Appellant, which is 150 days according to Respondent No.2. Therefore, if 169 days is taken, it comes to 85.50% and it comes to 94.74%, if it is 150 days. With these submissions, Respondent No.1's counsel submits that on account of release of water below the required quantum and non-availability of required water head, Respondent No.2 was unable to achieve minimum required capacity of 65% of 3 MWs.
- 16. Learned counsel for Respondent No.2 apart from filing additional affidavit also submitted more or less similar submission as that of Respondent No.1 Commission. Annexure-I, annexed to the affidavit dated 10.03.2015, which is filed by the Appellant itself clearly indicate quantum of discharge of water and so also the available head water on daily basis. This undisputed details convinced State Commission that on account of force majeure event Respondent No.2 was unable to

achieve the required target of generation of power. They rely upon paragraphs 8.14, 8.18 and 8.23 of the impugned order to support their According to Respondent No.2, the Appellant failed to arguments. consider fundamental aspect of calculation of energy generation based on the formula to be applied. Respondent No.2 further submits that the State Commission has properly based its finding on the formula referred to in the impugned order. Respondent No.2 further contends that if the water head is below 30 meters coupled with lower discharge of water, it is not possible to generate at the full installed capacity i.e., 3 MWs. To achieve full capacity, the reservoir water level must be 107.65 meters i.e., turbine head of 30 meters and even the discharge of water must be at required quantum i.e., 450 cusec of water for generation of 3 MW power. Respondent No.2 reiterated that the Appellant has not at all considered the technical parameters of Hydel Power Plant of Respondent No.2, which cannot handle discharge more than 450 cuses. Therefore, according to them, the design head is capable of generating power if the water head is between 13 to 20 meters coupled with release of water at 450 cuses or less than that. Therefore, Respondent No.2 contends that the Appellant has not properly demonstrated that Respondent's plant could not generate power even when water head and quantum of discharge of water was available at required parameters. Respondent No.2 further contends that in the impugned

order, Respondent No.1 Commission has assessed the reasons properly for under generation of power by Respondent No.2. Therefore, Respondent No.2 contends that the data furnished by them is only by way of an illustration, but in fact, the generator will be able to generate full capacity only if head of water and release of water are at required parameter. They also contend that the Appellant was not justified to contend that there was constant discharge of 450 cuses of water. On the other hand, they have failed to correlate actual water discharge with available head, therefore, the Appellant was not justified to calculate the generation of power only by taking into consideration water head at 30 meters and beyond. Unless adequate/required discharge of water is available, only with the appropriate water head, it cannot generate power as contended by the Appellant. Therefore, the Appellant was not justified to impose penalty on Respondent No.2, which is unilateral. They conclude their arguments contending that there are numerous instances where Respondent No.2 could generate less power than the possible generation in terms of formula, which is due to either shortfall of water release or water head, therefore, they contend that the tabulation of possible generation as furnished by the Appellant cannot be taken as According to Respondent No.2 except non-availability of certainty. water/water head, they have not claimed any other event as force majeure. Only if Respondent No.2 fails to generate required capacity in

spite of existence of required corresponding water head and quantum of water, then only Respondent No.2 is liable to pay liquidated damages in terms of the PPA. Taking into consideration the detailed pleadings and arguments submitted by both the parties, we proceed to discuss and pass the following order:

17. It is not in dispute that Respondent No.2 did provide a detailed project report, wherein the possibility of power generation month-wise was mentioned, which reads as under:

| Sr. No. | Month | Energy in Million Units |
|---------|-----------|----------------------------|
| 1. | June | 0.71 |
| 2. | July | 0 |
| 3. | August | 1.77 |
| 4. | September | 2.16 |
| 5. | October | 2.16 |
| 6. | November | 2.16 |
| 7. | December | 2.16 |
| 8. | January | 2.16 |
| 9. | February | 1.25 |
| 10. | March | 0.99 |
| 11. | April | 0.98 |
| 12. | May | 1.03 |
| | Total | 17.52 |

- 18. It is seen that the above generation of power is possible only if required water head and water discharge are available. Therefore, the above table indicates ideal picture (possibility) of power generation if all required conditions (in terms of plant design) exists.
- 19. The relevant clauses of PPA, which would assist us to arrive at the right conclusion, are as under:

"ARTICLE 1 DEFINALTIONS

- 1.1 For all purposes of this Agreement, the following words and expression shall have the respective meaning set forth below:
 - qq. Minimum Guaranteed Supply Energy means Guaranteed supply by Power producer of sixty five percent (65%) of contracted Capacity during the fiscal year excluding force majeure period, if any

ARTICLE 4 UNDERTAKINGS

4.1. Obligation of Power Producer

n. To supply the Minimum Guaranteed power as specified at Article-1(qq) or else pay the compensation for difference between Minimum Guaranteed Supply energy and actual Energy declared/available to SLDC/GUVNL at the Rs. 0.60 per kWh within 30 days to GUVNL.

ARTICLE 7 BILLING

7.3.4 Compensation towards minimum guaranteed supply by power producer

In case, power producer fails to make available "minimum Guaranteed Supply Energy" on yearly basis as defined in article- 1(qq). Power purchaser shall pay the compensation for difference between minimum guaranteed supply and actual energy declared/available to GUVNL/SLDC at the rate of Rs. 60/kWh within 30 days to GUVNL. However, the minimum guaranteed supply energy compensation shall be worked out on cumulative-basis and settled on monthly basis".

- 20. Relevant clause pertaining to force majeure issue in PPA is Article
- 8, which reads as under:

"ARTICLE 8 FORCE MAJEURE

- "8.1 Force Majeure Events:
- a. Neither Party shall be responsible or liable for or deemed in breach hereof because of any delay or failure in the performance of its obligations hereunder (except for obligations to pay money due prior to occurrence of Force Majeure Events under this Agreement) or failure to meet milestone dates due to any event or circumstance (a "Force Majeure Event") beyond the reasonable control of the Party experiencing such delay or failure, including the occurrence of any of the following:
 - i. acts of God;
 - ii. typhoons, floods, lightning, cyclone, hurricane, drought, famine, epidemic, plague or other natural calamities;
 - iii. acts of war (whether declared or undeclared), invasion or civil unrest;
 - iv. any requirement, action or omission to act pursuant to any judgment or order of any court or judicial authority in India (provided such requirement, action or omission to act is not due to the breach by the Power Producer or

- GUVNL of any Law or any of their respective obligation under this Agreement);
- v. inability despite complying with all legal requirements to obtain, renew or maintain required licences or Legal Approvals;
- vi. earthquakes, explosions, accidents, landslides:
- vii. fire:
- viii. expropriation and/or compulsory acquisition of the Project in whole or in part;
- ix. chemical or radioactive contamination or ionising radiation; or
- x. non availability of transmission network, damage to or breakdown of transmission facilities of GETCO.
- xi. Exceptional adverse weather condition which are in excess of statistical measure of the last hundred (100) years.
- 8.1 b The availability of Article 8.1 (a) to excuse a Party's obligations under this Agreement due to a Force Majeure Event shall be subject to the following limitations and restrictions:
 - i. the affected party gives the other Party written notice describing the particulars of the Force Majeure Event soon as practicable after it occurrence:
 - ii. the suspension of performance is of no greater scope and of no longer duration than is required by the Force Majeure Event and the repairs required due to the Force Majeure Event:
 - iii. the affected Party is able to resume performance of its obligation under this Agreement, it shall give the other Party written notice to that effect:
 - iv. the Force Majeure Event was not caused by the affected Party's negligence/failure to comply with any material Law, or by any material breach or default under this Agreement;

v. in no event shall a Force Majeure Event excuse the obligations of a Party that are required to be completely performed prior to the occurrence of a Force Majeure Event.

8.2 Available Relief for a Force Majeure Event: No party shall be in breach of its obligations pursuant to this agreement to the extent that the performance of its obligations was prevented, hindered or delayed due to a Force Majeure Event. For avoidance of doubt, GUVNL's obligation to make payments of money already due and payable prior to Force Majeure Event shall not be suspended or excused due to the occurrence of a Force Majeure Event."

21. Both Respondent Nos.1 and 2 stress upon the fact that unless there is availability of adequate water head coupled with adequate quantum of water release i.e., both simultaneously available, the possibility of generating adequate power is impossible. In other words, with the availability of any one of the two of the required situation, i.e., either required water head or required quantum of water, it is not possible to generate power. The relevant paragraphs with reasoning of the Respondent No.1 Commission to arrive at the opinion in the impugned order read as under:

"8.14.The Petitioner has submitted a statement showing the various details for the period from April 2012 to March 2013 which is annexed herewith and marked as Annexure-A for ready reference. The statement shows that the electricity generation from the power plant in respective months from April 2012 to March 2013 is more than 65% PLF with consideration of head of water available, quantum of water released, simultaneously from the dam into canal and the number of days water released.

Extracts of the above submissions are stated below:

- 1) Max. Head of Reservoir = 115.25 m and Minimum = 108 m to generate 3000 Kw power.
- 2) 350 to 450 cusec per day water released to generate 3000 Kw power at the desired Head (115.25 to 108) If, the head and discharge is more than the design head and discharge, the generating capacity may increase who maximum to 20% of the installed capacity.
- 3) Below reservoir level 108 m, power cannot be generated upto the installed capacity i.e. 3000 Kw capacity.
- 4) In case of reservoir level below 108 m then generation would be lesser than 3000 Kw irrespective of water release in cusec.
- 5) To decide the electricity generation during the month it is necessary to verify head of water of reservoir and quantum of water released in cusec on daily basis to arrive daily / monthly generation from plant and determine PLF of plant.
- 6) In case head of water in the reservoir is available, but water is not released on a particular day, there would not be any generation from the hydropower plant.
- 7) In case head of water of reservoir is available but release of water from reservoir is

below 445 cusec, the electricity generation will be less.

8) In case head of water of reservoir is above 97 m but quantum of water release is less than 360 cusec per day, in such a case less power can be generated due to plant's technical constraint meaning thereby turbine can be operated only at derated capacity.

Table

| Sr. | Year | Average | Average | Release | Release |
|-----|----------|-----------|----------|----------|-------------|
| No. | (2012- | Reservoir | Cusec | of water | of water |
| | 13) | Level in | Water | in days | effectively |
| | month | meter | Released | | in days for |
| | | | | | power |
| | | | | | generation |
| 1 | April | 104.03 | 194.44 | 9 | 3 |
| 2 | May | 101.5 | 567.74 | 31 | 30 |
| 3 | June | 97.54 | 503.7 | 27 | 27 |
| 4 | July | 96.62 | 0 | 0 | 0 |
| 5 | August | 100.4 | 0 | 0 | 0 |
| 6 | Sept. | 109.5 | 0 | 0 | 0 |
| 7 | Oct. | 114.35 | 528.13 | 16 | 14 |
| 8 | Nov. | 113.1 | 516.32 | 19 | 16 |
| 9 | Dec. | 111.87 | 400 | 11 | 11 |
| 10 | January | 110.52 | 420 | 24 | 22 |
| 11 | February | 109.26 | 429.55 | 11 | 10 |
| 12 | March | 107.5 | 456.9 | 21 | 17 |

8.18. The Respondents has not considered the head of water available at turbine/generator. The petitioner had submitted on 10.03.2015 the discharge of water and available head on daily basis as given in annexure — I attached with this order.

On verification of the above it seems that the discharge of water in the month of April on 1st & 2nd, the discharge of water was 500 cusec. While the discharge of water on 24th, 25th & 26th April was 25 Cusec only. In discharge of water on 27th April was 50 Cusec. The discharge of water 28th April was 125 Cusec and the discharge of water on 29th April was 300 Cusec and on 13th April it was 200 Cusec. On comparison of the aforesaid discharge of water level with the designed parameters of the Petitioner Plant where full generation of electricity available from the Hydro turbine of the petitioner is require 450 cusec with an head of 30 meters i.e. the level of reservoir is at 107.65 meter.

..

8.23. So far as the month of June, 2012 is concern, the level of water in reservoir was very between 96.03 meter to 99.33 meters. The level of water in the reservoir above 97.54 meters was only for 15 days and it was below the 97.54 meter for remaining dates. The effective head available on turbine was vary on various dates is between 18.35 meter to 22.35 meter. Moreover. the water discharge from the reservoir for 27 days only and the same vary between 450 cusec to 600 cusec. The capacity of the plant due to reduction in water head available on turbine during the above month was very between 1822 Kw to 1489 Kw i.e. at the head of 19.89 meter. The average discharge during the month works out 503.70 cusec which is higher than the required discharge of waster at designed parameters of the plant. However the average reservoir level works out to 97.54 meter. The water head available turbine average on

generation works out 19.89 meter the electricity generated from the plant during the above month was 10,80,562 Units. Thus, the PLF works out to 76.96 %. However, if the PLF is evaluated on the basis of reduced capacity of the plant due to less availability of head and no discharge of water for four days the PLF work out to 113.68%."

22. Admittedly, the power plant was set up by Respondent No.2 having the capacity of 3 MWs only. The possibility of generation of electricity up to 3.6 MWs or 120% is subject to availability of required parameters i.e., the increase in the head of water in reservoir and capacity of operation of the machinery with available design margin on it. Therefore, the generation of power totally depends in the Hydro Plant, firstly, on the availability of head of water, and secondly, the quantum of release of water into the Canal from the dam/reservoir for the irrigation This condition may not be possible throughout the year. purpose. Therefore, under the PPA the guaranteed supply is 65% of the capacity However, this 65% of guaranteed supply annually on annual basis. again depends upon required condition i.e., required height of the water level/water head and required quantum of water as indicated in the order of the Commission. Since both the parties knew that it was not possible to have constant required conditions including reasons beyond the control of the parties, force majeure clause was introduced in the PPA.

As per the data, the average release of water was 195.78 cusecs or Mm3, whereas anticipated/historical/planned release of water was 382.15 Mm3 in 12 months.

- 23. According to Appellant, during 2012-13 the irrigation Canal was in operation only for 169 days of the year. The release of water in the whole year was 195.78 Mm3 as against 382.15 Mm3. Therefore, the shortage of water was at 186.27 Mm3.
- 24. It is also noticed that the supplemental agreement though incorporated possible generation of 20% more energy i.e., the contracted capacity at 3.6 MW, the working of shortfall remained at 3 MWs capacity. Therefore, we cannot appreciate the argument of the Appellant that Respondent No.2 failed to generate power corresponding to water head *vis-à-vis* minimum contracted capacity. Similarly, we cannot appreciate the stand of the Appellant that Respondent No.2 could generate guaranteed supply of 3 MWs power since plant's capacity is at 3.6 MW because for both capacities required conditions of water head and quantum of water must exist. In the absence of such data coming forth from the Appellant, we opine that the Appellant is not submitting arguments based on the available data. As a matter of fact, from the data of the Appellant itself it is clear that for the months of July, August, September there was no release of water. Therefore, this

resulted in PLF of the Plant at zero. According to the Appellant, for 169 days there was release of water. According to Respondent No.2 it was 159 days only. As already stated, to achieve full capacity, the reservoir water level must be 107.65 meters i.e., turbine head of 30 meters and water discharge must be 450 cusecs of water. This is to achieve guaranteed supply of 65% against the 3 MWs capacity. It is also seen from the records that the stand of Respondent No.2 is based only on shortfall of water head and availability of water and no other ground.

25. By reading the above paragraphs of the impugned order and relevant facts from the pleadings, we are not able to accept the contention of the Appellant's counsel that based on the data available and calculations furnished by the Appellant before the Tribunal that it would be possible to generate power in terms of PPA in a year by the Respondent generator, even if there is water release at required quantum, since it requires water head at 30 meters on turbine from level of the water. Similarly, if the water head is at 30 meters but required cusecs of water is not released, again it is not possible to achieve the target. Therefore, it is possible that on certain days only one of the required conditions for generation of power is available, therefore it would automatically result in less generation of power. Though in the detailed project report an ideal situation is brought on record by the

project proponent, it would not lead to conclusion that the anticipated situation/conditions would certainly occur as detailed in the Project Report. It is seen in spite of best expert on weather forecast it can go wrong. Similar would be the day-to-day circumstances or weather conditions, which are certainly not within the hands of human beings.

- 26. If the contention of the Appellant that with all possible disadvantages the terms of PPA between the parties indicate minimum of 65% of generation of power against 3 MWs, we fail to understand then why force majeure clause was incorporated into the terms of PPA. Therefore, parties did anticipate force majeure events i.e., happening of an event beyond the control of the parties.
- 27. The penalty clause was incorporated to assist the losing party to get compensation if there is failure on the part of Respondent No.2 generator to generate power in spite of best possible availability of water head and also quantum of water. Therefore, we are of the opinion that Respondent No.1 Commission in depth has gone into all the details and has arrived at the conclusion by adopting PLF of the Respondent Generator's plant based on the formula applied, which reads as under:

" $P = 9.8 \times H \times Q \times n$ Where, 9.8 is constant P = Power generation of plant in kw

H=Head of water in m, available on the turbine, of power plant.

Q= Quantum of water required to generate the electricity in M3 / sec

N= Overall Efficiency of the turbine (it is considered as 80% in Respondent No. 2's case)"

28. In the light of above discussion and reasoning, we are of the opinion that none of the grounds raised by the Appellant and the decisions relied upon by them would warrant interference with the impugned order at our hands. Accordingly, we opine that the Appeal lacks merit and as a consequence it deserves to be dismissed. Accordingly, the appeal is dismissed by upholding the impugned order. No order as to costs. Needless to say, all the pending IAs shall stand disposed of.

29. Pronounced in the Virtual Court on this day of 20th October, 2020.

(S.D. Dubey)
Technical Member

(Justice Manjula Chellur) Chairperson

REPORTABLE / NON-REPORTABLE