IN THE APPELLATE TRIBUNAL FOR ELECTRICITY
(Appellate Jurisdiction)

Appeal No. 230 of 2020 &
IA No. 1283 of 2020

Dated: 13th May, 2021

Present: Hon'ble Mr. Ravindra Kumar Verma, Technical Member
Hon'ble Mr. Justice R.K. Gauba, Judicial Member

In the matter of:

Kerala State Electricity Board Ltd.
Vydyuthi Bhavanam
Thiruvananthapuram,
Kerala – 695004 .... Appellant(s)

Vs.

1. **Central Electricity Regulatory Commission**
3rd&4thFloor, Chanderlok Building,
36, Janpath,
New Delhi 110 001 .... Respondent No.1

2. **Jhabua Power Limited,**
Unit No.307, Third Floor,
ABW Tower, M.G.Road,
Gurugram, Haryana – 122002 .... Respondent No.2

Counsel for the Appellant (s) : Mr. Maninder Singh, Sr. Adv.
Mr. Prabhas Bajaj

Counsel for the Respondent (s) : Mr. Sanjay Sen, Sr. Adv.
Mr. Anand K. Ganesan
Ms. Swapna Seshadri
Mr. Damodar Solanki
Ms. Mandakini Ghosh for R-2

JUDGMENT

PER HON'BLE MR. RAVINDRA KUMAR VERMA, TECHNICAL MEMBER

1. Kerala State Electricity Board Ltd. (hereinafter referred to as **"the Appellant/KSEBL")** has filed this Appeal against the Impugned Order dated 25.05.2020 passed by the Central Electricity Regulatory Commission (hereinafter referred to as "**Commission/ Central Commission**") in Petition No. 169/MP/2019.

2. The Appellant is one of the constituents of the Southern Region comprising the State of Kerala, Tamil Nadu, Karnataka, Andhra Pradesh, Telangana and Union Territory of Pondicherry. The Appellant was constituted by the Government of Kerala, as per order no. EL1-6475/56/PW dated 7-3-1957 under the Electricity (Supply) Act, 1948 for carrying out the business of Generation, Transmission and Distribution of electricity in the State of Kerala.

3. Respondent No.1 is the Central Electricity Regulatory Commission, a statutory body constituted under section 76 of the Act and functioning in accordance with section 79 of the Act.

4. Jhabua Power Limited (hereinafter referred to as **"the Respondent No.2/ Generator"**), is a 'Generating Company' as defined under section 2(28) of the Electricity Act, 2003 and has set up a generating station of 1x600 MW coal based thermal power plant, located near Village Barela – Gorakhpur, Tehsil Ghansore of Seoni district,

Madhya Pradesh. The power plant of Respondent No.2 achieved commercial operation on 03.05.2016.

5. **Prayer of the Appellant**

a. Allow the appeal and set aside the impugned judgment / order dated 25.05.2020 passed by the Central Commission in Petition No. 169 / MP / 2019.
b. Direct that the Appellant to compute/pay the Fixed Charge and Fuel Charge under the PSAs dated 26.12.2014 and 31.12.2014 as per the SHR Value of 2465.2 specified in the Completion Certificate dated 22.11.2016;
c. Pass such other order(s) as this Hon'ble Tribunal may deem just and necessary in the facts and circumstances of this case.

Facts of the case are as under:

6. The Appellant invited two separate bids in 2014 for procurement of power meeting the energy requirement of the State of Kerala. The bids were based on the Standard Bidding Documents (SBD) issued by Ministry of Power along with its Design, Build, Finance, Own and Operate (DBFOO) Guidelines of 2013, including the MPSA.

7. Subsequently the Appellant executed two separate long terms Power Supply Agreements (PSA) with the Respondent no. 2 for procuring power from the 600 MW power plant of the Respondent No. 2, situated at Seoni, Madhya Pradesh, based on the DBFOO (Design, Build, Finance, Own and Operate) guidelines issued by Ministry of

Power. Both these PSAs were entirely in conformity and in accordance with the Model Power Supply Agreements (MPSA) laid down by the Ministry of Power, Government of India.

8. The first PSA for supply of 115 MW power was executed on 31st December 2014 with the start date of supply as 1st December 2016. The second PSA for supply of 100 MW power was executed on 26th December 2014 with the start date of supply as 1st October 2017. Respondent No.2 started supplying power against the first PSA with effect from 22nd December 2016 and second PSA with effect from 1stOctober 2017.

9. The Respondent No. 2 furnished the Completion Certificate in respect of PSA dated 31.12.2014 (115 MW)(hereinafter referred to as “PSA-I”) indicating the gross SHR as 2341.94 kCal/kWh and net SHR at the Point of Connection as 2465.2 kCal/kWh.

10. The Appellant made certain deductions while making payment towards the same on account of net SHR (2465.2 kCal/kWh) in the Completion Certificate being higher than the specified SHR (2350 kCal/kWh) in the PSA.

11. Due to a number of representations by the Respondent no. 2, Appellant constituted an internal expert committee on 26.4.2017*, inter-alia*, to look into the issue related to determination of values of SHR to be considered for the purpose of calculation of Fixed Charges and Fuel Charges based on the PSA and submissions of the Respondent No. 2. On basis of report of the Committee dated

4.10.2017 and a subsequent meeting held between the Generator and the Appellant no. 2 on 31.10.2017, the parties appeared to have agreed to consider single SHR of 2347.9 kCal/kWh, for calculation of Fixed Charge and Fuel Charge in respect of both the PSAs. In furtherance, the Generator furnished the Completion Certificate for PSA dated 26.12.2014 (hereinafter referred as "PSA-II") on 4.11.2017 indicating the net SHR of 2347.9 kCal/kWh, which has been considered by KSEBL for calculation of Fixed Charge and Fuel Charge for the said PSA.

12. Subsequent to the aforesaid arrangement reached between the Parties, Respondent No. 2/KSEBL approached the State Commission through Petition being O.P No. 12 of 2018, *inter-alia*, for consideration of net SHR of 2347.9 kCal/kWh for payment of Fixed Charge since the start of supply of powerunder the PSA-I and clarification regarding the applicability of Clause 3.2 of Schedule-F of the PSA for net SHR to be considered for the purpose of payment ofFuel Charges under Article 22 of the PSA.

13. However, before the said Petition could be decided by the Kerala State Electricity Regulatory Commission ("KSERC"), the Generator filed an application seeking withdrawal of the Petition on the ground thatas the generating station was having composite scheme of generation and sale of power in more than one State, the Central Electricity Regulatory Commission would have exclusive jurisdiction in this regard under Section 79(1)(b) of the Act. KSERC vide its order dated 6.6.2019 permitted the Petitioner to withdraw the said Petition.

14. The generator filed petition no.169/MP/2019 before the Central Commission, *inter-alia*, seeking declaration that the generating station has net SHR of 2347.9 kCal/kWh for payment of Fixed Charge since start of supply of power under PSA-I and to allow the recovery of Fuel Charge at net SHR of 2465.2 kCal/kWh since start of supply of power under both the PSAs.

15. The Central Commission vide their Impugned Order date 25.05.2020 decided that for both the PSAs, for the purpose of calculating Fixed Charges, net SHR of 2347.9 kCal/kWh shall be considered for comparison with specified SHR of 2350kCal/kWh as per Schedule-C and for the purpose of calculating Fuel Charges, the "FinalSHR" of 2465.2 kCal/kWh shall be considered, accounting for the operational margin of 5%.

16. Aggrieved by the above decision of the Central Commission, the Appellant has approached this Tribunal by filing this Appeal.

Submissions of the Appellant

DBFOO Guidelines issued by Government of India

17. In exercise of power under Section 63 of the 2003 Act, the Ministry of Power, Government of India, vide notification dated 09.11.2013 notified the *Guidelines for procurement of electricity from Thermal Power Stations set up on DBFOO basis* ["**DBFOO Guidelines"**] and also issued model documents comprising of the Model Standard Bidding Documents (MBSD) comprising of:-

(i) Model Request for Qualification,

(ii) Model Request for Proposal; and

(iii) Model Power Supply Agreement (MPSA) to be adopted by distribution licensees for procurement of electricity from the power producers through a process of open and transparent competitive bidding based on the offer of the lowest tariff.

Clause 1 of the Guidelines provides that:-

> *"… 1. The terms and conditions specified in the Standard Bidding Documents referred to hereinabove shall, by reference, form part of these Guidelines and shall be treated as such……"*

18. In other words, all provisions of the Standard Bidding Documents have stood incorporated in the statutory Guidelines issued by the Central Government.

19. It is the settled position of law that the statutory Guidelines issued by the Central Government u/s 63 of the 2003 Act are binding on the Central Commission in adoption of tariff discovered through a competitive bidding process, as stipulated in Section 63 of the 2003 Act. Reliance in this behalf is placed on the judgment of the Hon'ble Supreme Court in ***Energy Watchdog Vs. CERC & Ors. – (2017) 14 SCC 80***, relevant portion whereof is reproduced as under:-

> *"…… 20……It is clear that in a situation where the guidelines issued by the Central Government under Section 63 cover the situation, the Central Commission is bound by those guidelines and must exercise its regulatory functions, albeit under Section 79(1)(b), only in accordance with those guidelines……"*

20. The DBFOO Guidelines which include the Standard Bidding Documents and the Model Power Supply Agreement – are binding and are an imperative for the Central Commission while exercising its jurisdiction under the 2003 Act.

BIDDING PROCESS

21. The Model RFQ (Request for Qualification) and Model RFP (Request for Proposal) – which are a part of the statutory DBFOO Guidelines, provide that the Tariff for procurement of power under the said Guidelines shall comprise of two components:-

    a. Fixed Charge.
    b. Fuel Charge (also known as Variable Charge).

22. The Fixed Charge is offered in the Bid by the power supplier, having regard to various factors including the annual fixed costs of the generating station.

23. The Fuel Charge is offered in the Bid on the basis of the actual cost of fuel (including cost of coal, transportation charges, washing charges etc.) borne by the Supplier for generation of electricity at the generating station.

COMPOSITE BID

24. Under the DBFOO Guidelines, the Bidders were to offer a composite Tariff comprising of Fixed Charge and Fuel Charge. The entity which offered the lowest Tariff would be awarded the Contract [i.e. the Power Supply Agreement – PSA].

25. For ready reference, the relevant clauses of the Model RFQ and Model RFP are reproduced as under:-

Model RFQ

"1.2.8 Bids will be invited for the Project on the basis of a tariff to be offered by a Bidder for production and supply of electricity in accordance with the terms of the draft PSA forming part of the Bidding Documents. For the purposes of bidding hereunder, the Fixed Charge and Fuel Charge will constitute the tariff for the Power Station (the "Tariff"). The element of coal transportation and transmission losses may vary from case to case and shall also form part of the Fuel Charge by way of adjustment. The contract period shall be pre-determined, and will be indicated in the draft PSA. The Project shall be awarded to the Bidder quoting the lowest Tariff……"

Model RFP

"1.2.6 Bids are invited for the Project on the basis of a tariff to be offered by a Bidder for and in respect of the Project. For the purposes of evaluation hereunder, the Fixed Charge and Fuel Charge will constitute the Tariff for the Power Station (the "Tariff"). The contract period shall be pre-determined and specified in the Bidding Documents.

In this RFP, the term "Lowest Bidder" shall mean the Bidder who is offering the lowest Tariff……"

STATION HEAT RATE (SHR)

26. Station Heat Rate (SHR) is a technical parameter of any generating station and it signifies the "***amount of heat energy required by the***

power plant for producing 1 unit of electricity". It is computed in the unit – Kcal/KwH.

27. It is an efficiency factor and signifies the efficiency of the generating station. A higher value of SHR means that the generating station is consuming more energy (which generally indicates consumption of more fuel) to produce 1 unit of electricity and, therefore, the generating station is less efficient. A lower value of SHR means that the generating station is consuming less energy (which generally indicates consumption of lesser fuel) to produce 1 unit of electricity and, therefore, the generating station is more efficient. In other words:-

Higher SHR = Generating station with Lower Efficiency.
Lower SHR = Generating station with Higher Efficiency.

There is only one value of SHR for any Generating Station

28. **There cannot be 2 different values of SHR for the same generating station** and any contention to the contrary would not only be unsustainable in fact and law but would also be contrary to / in violation of every known scientific logic.

29. As explained herein below, non-adherence to the strictly stipulated only one value of SHR necessarily and inevitably also results into unwarranted, impermissible windfall /unjust enrichment to the Supplier.

OBJECTIVE BEHIND LAYING DOWN A PRESCRIBED LIMIT FOR SHR IN THE MODEL POWER SUPPLY AGREEMENT (MPSA)

30. The provisions of the Model PSA laid down by the Government of India under the DBFOO Guidelines lay emphasis on the efficiency of the generating station. The MPSA provides for granting incentives for achieving the requisite levels of performance and at the same time, also stipulates for disincentives for failure to achieve the requisite levels of performance.

31. One of the stipulations contained in the Model PSA is by laying down prescribed specifications for the SHR [Prescribed SHR as per Schedule-C].

32. Fuel Charges are directly proportional to the SHR of the generating station. Higher SHR would mean higher consumption of fuel and therefore, higher Fuel Charges. Further, since variation in Fuel Charges is a pass through – higher SHR would mean higher tariff to be borne by the consumers. Therefore, higher SHR would defeat the twin objectives of:-

    a) Ensuring lower Tariff for consumers; and
    b) Saving fuel.

33. In order to achieve the above-mentioned twin objectives, the Model PSA stipulates that it would be necessary to have regard to the value of SHR prescribed under Schedule-C, for safeguarding the interests of the DISCOMS / Utilities and ultimately the interest of the consumers.

34. The objective of laying down the prescribed value of SHR in the PSA has also been stated in the “Overview of the Model Power Supply Agreement”, relevant portion whereof is reproduced as under:-

    “Station Heat Rate

Conversion of fuel into electricity shall be computed on the basis of the Station Heat Rate (SHR) which must conform to pre-determined specifications. As the fuel charge would be a pass through, adhering to the prescribed SHR would be necessary in order to safeguard the interests of the Utility. The MPSA also provides for incentives in the form of an enhanced Fixed Charge if the Supplier is able to improve on the pre-specified Station Heat Rate. Incentivising an improved SHR would be a signal for achieving greater efficiency in the interest of saving fuel."

35. The stated intent of the DBFOO Guidelines, as is apparent, is to discourage having such generating stations, which are of lower efficiency and thus, a higher SHR and encourage / incentivize such generating stations which are having higher efficiency and lower SHR.

Prescribed SHR - 2350 kCal/kwh

36. While laying down the provisions of the Model Power Supply Agreement (MPSA), the Ministry of Power, Govt. of India has also incorporated therein the pre-determined limit value of the SHR as **2350 kCal/kwh**. It has been stipulated in the MPSA that generating stations with SHR higher than 2350 kCal/kwh shall be permissible [upto a maximum value of 2350 + 5% = 2467.5 kCal/kwh], however, they shall be subject to a disincentive by way of a reduction in the Fixed Charge of the generating station.

37. The limit value of SHR being 2350 + 5% = 2467.5 kCal/kWh for the purpose of laying down the "**ELIGIBILITY**" of the Power Supplier has been stipulated in, inter alia, the following clauses of the PSA:-

a. Clause 13.2.2 of the PSA provides as under:-

> *"13.2.2 Tests in respect of Station Heat Rate shall be deemed to be successful only if the Tests establish that that the Station Heat Rate is equal to or lower than the rate specified in the*
>
> ***Specifications and Standards**.*
>
> *Provided, however, that in the event the Tests establish that the actual Station Heat Rate **exceeds the specified Station Heat Rate by upto 5% (five per cent) thereof**, the Tests shall be deemed to be successful as if the Power Station has achieved the specified Station Heat Rate."*

b. The phrase "*Specifications and Standards*" has been defined in the PSA as under:-

> *"**"Specifications and Standards"** means the specifications and standards relating to the quality, quantity, capacity and other requirements for the Power Station, as set forth in **Schedule-C**, and any modifications thereof, or additions thereto, as included in the design and engineering for the Power Station submitted by the Supplier to, and expressly approved by, the Utility."*

c. Schedule-C provides for the *"Specifications and Standards"* and in relation to Station Heat Rate (SHR), it stipulates as under:-

i. "SCHEDULE-C : SPECIFICATIONS AND STANDARDS

…2. Station Heat Rate

*2.1 The Station Heat Rate reckoned at the Point of Grid Connection shall, after accounting for auxiliary consumption and transmission losses, not exceed **2350 (two thousand three hundred and fifty) kCal/kwh** at 100% (hundred percent) Maximum Continuous Rating (MCR) or such lower Station Heat Rate as may be specified in the Completion Certificate or Provisional Certificate, as the case may be……"*

38. In other words, the provisions of Clause 13.2.2, its Proviso read with Schedule-C, cumulatively provide for the **"ELIGIBILITY"** of the generating station of any Power Supplier and that generating stations with SHR higher than 2350 kCal/kwh shall be permissible upto a maximum value of 2350 + 5% = 2467.5 kCal/kwh.

Incentive

39. For any Generating Station having SHR lower than 2350 kcal/kwh, Clause 21.2.2 of the PSA provides for an enhancement in the Fixed Charge to be paid to the Power Supplier. For ready reference, Clause 21.2.2 of the PSA is reproduced as under:-

"21.2.2 In the event the Completion Certificate specifies a Station Heat Rate that is lower than the Station Heat Rate specified in Schedule-C, the Initial Fixed Charge shall be increased such that for every improvement of 1% (one percent) as compared to the Station Heat Rate specified in Schedule-C, the amount specified in Clause

21.2.1 shall be increased by 1.5% (one point five percent) thereof.

Provided, however, that in case the source of fuel is situated within 100 (one hundred) kilometers of the Power station, such increase shall be restricted to 1% (one percent).”

Disincentive

40. However, for any Generating Station having SHR higher than 2350 and less than or equal to 2467.5 kcal/kwh, Clause 21.2.3 provides for a Disincentive by reduction in the Fixed Charge to be paid to the Power Supplier. For ready reference, Clause 21.2.3 of the PSA is reproduced as under:-

“21.2.3 In the event the Completion Certificate specifies a station heat rate that is higher than the station heat rate specified in Schedule-C, the Initial Fixed Charge shall be decreased such that for every increase of 1% (one percent) as compared to the station heat rate specified in Schedule-C, the amount specified in clause 21.2.1 shall be decreased by 2% (two percent) thereof.

Provided, however, that in case the source of fuel is situated within 100(one hundred) kilometers of the power station, such decrease shall be restricted to 1.5% (one point five percent).”

41. The scheme provided under the aforesaid contractual provisions can also be summarized in a tabulated manner as under:-

SHR (kCal/kwh)	**Eligibility to supply power**	**Incentive / Disincentive**
SHR < 2350	Eligible.	Incentive by enhancement in Fixed Charge*.
SHR = 2350	Eligible.	Fixed Charge to remain constant.
SHR > 2350 and <= 2467.5	Eligible.	Disincentive by reduction in Fixed Charge**.
SHR > 2467.5	Not Eligible.	N/A

*1.5% increase in Fixed Charge for every 1% decrease in SHR from 2350 kCal/kWh [Clause 21.2.2].

**2% reduction in Fixed Charge for every 1% increase in SHR over and above 2350 kCal/kWh [Clause 21.2.3].

42. The aforesaid position makes it clear that the DBFOO Guidelines and the PSAs in the present case envisage that generating stations of higher efficiency (lower SHR) are to be incentivized as they would lead to reduction of Fuel Charge [which is ultimately borne by the consumers] as well as saving of fuel. Generating stations of lower efficiency (SHR higher than 2350 kCal/kwH) would be disincentivized by reducing the Fixed Charge payable to the entity.

TESTS TO DETERMINE THE SHR AND FOR SPECIFYING THE SHR IN THE COMPLETION CERTIFICATE

43. It is reiterated that being a technical parameter [representing the amount of energy consumed by the generating station for producing

1 unit of electricity] expressed in a precise numerical value in the unit kCal/kWh – there is only one value of SHR for any generating station. There cannot be 2 different values of SHR for the same generating station and any contention to the contrary would not only be unsustainable in fact and law but would also be contrary to / in violation of every known scientific logic.

44. The PSA provides for "Tests" to be carried out for determination of the SHR of the generation station and specifying the SHR in the Completion Certificate.

45. In this behalf, the relevant contractual clauses are reproduced as under:-

a) Clause 39 of the PSA defines 'Station Heat Rate' as follows:-

> *"Station Heat Rate" shall have the meaning as set forth in Clause 22.1.1."*

b) **Clause 22.1.1** defines Station Heat Rate in the following terms:-

> *"**22.1 Station Heat Rate***
>
> ***22.1.1** The heat energy input, in Kcal, required for generation and supply of 1 (one) kWh of electricity at the point of Grid Connection, after accounting for auxiliary consumption and transmission losses, if any, **as determined by Tests and specified in the Provisional Certificate or Completion Certificate**, as the case may be, shall be the **net station heat rate of the Power Station (the "Station Heat Rate" or "SHR")**.*
>
> *1. Provided that the SHR shall be adjusted from time to time in accordance with the provisions of Clause 24.4, to account for*

any reduction in Despatch. Provided further that the aforesaid SHR shall be deemed to be increased by 0.15% (zero point one five per cent) per annum on each successive anniversary of COD and the number so arrived at shall be the applicable SHR for that year. For the avoidance of doubt and by way of illustration, the Parties expressly agree that if Tests determined that the Station Heat Rate at the Point of Grid Connection is say, 2,350 kCal per kwh, it shall be assumed that such Station Heat Rate has been derived after accounting for auxiliary consumption and transmission losses."

c) The term "***Tests***" is defined in the PSA as under:-

*""**Tests"** means the tests set forth in **Schedule-F** to determine the completion of Power Station in accordance with the provisions of this Agreement."*

d) Further, Clause 13.1.2 of the PSA also provides as under:-

*"**13.1 Tests***

13.1.1 No later than 30 (thirty) days prior to the likely completion of any Unit of the Power Station, the Supplier shall notify the Utility's Engineer of its intent to subject such Unit to Tests. The date and time of each of the Tests shall be determined by the Supplier, and notified to the Utility and the Utility's Engineer who may designate its representative to witness the Tests.

i. *13.1.2 **All Tests shall be conducted in accordance with Schedule-F at the cost and***

expense of the Supplier*. The Utility's Engineer shall observe, monitor and review the results of the Tests to determine compliance of the Power Station with Specifications and Standards and if it is reasonably anticipated or determined by the Utility's Engineer during the course of any Test that the performance of the Power Station does not meet the Specifications and Standards, it shall have the right to require the Supplier to remedy and rectify the defects or deficiencies. Upon completion of each Test, the Supplier shall provide to the Utility copies of all Test data including detailed Test results."*

e) **Schedule-F** of the PSA provides for the "Tests" for determining the SHR and Clause 3.2 of Schedule –F provides for the "SHR Test" and it is reproduced as under:-

*"**SCHEDULE-F**:*
(see Clause 13.1.2)

TESTS

…… 3.2 SHR Test

The Utility's Engineer shall carry out, or cause to be carried out, Tests specified in the Performance Test Code -4 (PTC-4) and Performance Test Code-6 (PTC-6) of ASME standards for boilers and turbines respectively, and Tests specified in other applicable codes in respect of associated equipment, to determine the Station Heat Rate at 100% (hundred percent) maximum continuous rating (MCR) of the Power Station, after accounting for auxiliary consumption and losses on the Dedicated Transmission System, if any, and the Station Heat Rate shall be lower of SHR so determined and 2350 kCal per kWh, ***which***

shall be increased by 5% *(five percent) thereof to account for potential variations arising from temperature, humidity, quality of coal and other unforeseen factors,* ***and the number so arrived at shall be specified as the Station Heat Rate in the Provisional Certificate or Completion certificate****, as the case may be."*

f) Lastly, **Schedule-G** of the PSA provides the format for the Completion Certificate to be issued by the Power Supplier and for ready reference, it is reproduced as under:-

"SCHEDULE-G:
(see Clauses 13.2 and 13.3)

COMPLETION CERTIFICATE

1. *I/We, _____ (Name and Designation of the Managing Director of the Supplier), acting as the Supplier, under and in accordance with the Power Supply Agreement dated _____, (the "Agreement"), for construction and operation of the Power Station with a capacity of _____ MW on design, build, finance, own and operate (the "DBFOO") basis,* ***hereby certify that the Tests specified in Article 13 and Schedule-F of the Agreement*** *have been successfully undertaken to determine compliance of the Power Station with the provisions of the Agreement, and I/We am/are satisfied that the Power Station can be safely and reliably placed in commercial service of the Utility and the Buyers thereof.*
2. *It is certified that the Power Station / Unit _____ has an Installed Capacity of ____ MW which includes the Contracted Capacity of ___ MW.*
3. *It is further certified that the Station Heat Rate of the Power Station is _____.*

4. It is also certified that, in terms of the aforesaid Agreement, all works, forming part of the Power Station / Unit _____ have been completed, and the Power Station / Unit ____ is ready for entry into commercial operation on this the ____ day of ____ 20 ___

i. SIGNED / SEALED AND DELIVERED
For and on behalf of
the SUPPLIER by:
ii. (Signature)
(Name)
(Designation)
(Address)"

46. It is submitted that a perusal of the aforesaid Clauses makes it abundantly clear that:-

a) As per Clause 22.1.1 – "net Station Heat Rate", "Station Heat Rate" and "SHR" refer to the one and same value i.e. the SHR of the Generating Station.

b) Clause 22.1.1 by reference to "Tests" [a defined term under the contract] incorporates within itself **Schedule-F and Clause 3.2 of Schedule-F**. In other words, Clause 22.1.1 and Clause 3.2 of Schedule-F are part of one unified / integrated process for determination of the single value of "SHR" for the generating station [also described as "the net SHR"] – which is then specified in the Completion Certificate.

c) This single value of "SHR" for the generating station is determined by carrying out the PTC-4 and PTC-6 tests as per ASME [American Society of Mechanical Engineers] standards and the value arrived at through these tests is then increased by 5% to account for *potential variations arising from temperature, humidity, quality of coal and other*

unforeseen factors. The final value, after adding the component of 5% - is the "**SHR**" for that Generating Station.

d) Schedule-G which provides the format for the Completion Certificate also makes it abundantly clear that there is only one single value of SHR for the Generating Station which is to be specified in the Completion Certificate.

47. The aforesaid position can also be summarized as under:-

Step 1: Perform the PTC-4 and PTC-6 Tests on the generating station after accounting for auxiliary consumption and losses on the dedicated transmission system and arrive at a value, say "X", which shall be lower of test determined value and 2350kCal/kwh.

Step 2: Increase the aforesaid value "X" by 5% *to account for potential variations arising from temperature, humidity, quality of coal and other unforeseen factors*, thereby arriving at the constant figure of the **"Station Heat Rate (SHR)"**.

Step 3: Specify the said **SHR** in the Completion Certificate and that shall be the value of the SHR also interchangeably described as "the net SHR" for operating and working out of the PSAs.

Step 4: **Computation of Fixed Charges:**
Compare the said **SHR** with the limit value (2350 kCal/kwh) to compute the Incentive or Disincentive and for computation of the Fixed Charges, as depicted below:-

SHR (kCal/kwh)	**Eligibility to supply power**	**Incentive / Disincentive**
SHR < 2350	Eligible.	Incentive by enhancement in Fixed Charge [as per Clause 21.2.2].
SHR = 2350	Eligible.	Fixed Charge to remain constant.

SHR > 2350 and <= 2467.5	Eligible.	Disincentive by reduction in Fixed Charge [as per Clause 21.2.3].
SHR > 2467.5	Not Eligible.	N/A

Step 5: Computation of Fuel Charges:

Clause 22.2.2 of the PSAs provides for computation of the Fuel Charge as under:-

$$\text{Fuel Charge} = \frac{\text{SHR X Landed Fuel Cost per kg}}{\text{Average GCV per kg}}$$

The SHR as determined above would be fed into this formula for computing the Fuel Charges to be paid to the Supplier.

48. It is extremely significant to submit that for the working out of the formula for Fixed Charge, if a lower SHR value is applied, the Supplier gets benefited in its Tariff Payment. On the other hand, for the working out of the applicable formula for Fuel Charge, if a higher SHR value is applied, the Supplier again gets benefited. This is not permissible under the binding terms and conditions of the PSA as mentioned hereinabove. However, a double benefit for the Supplier [double whammy for the Appellant - Board] inevitably occurs on applying any such impermissible and illegal methodology contrary to the binding terms and conditions of the MPSA as well as the PSAs executed between the parties and inevitably results into windfall / unjust enrichment to the Supplier. This is what is made possible by the impugned judgment by not only erroneously interpreting the provisions of the PSAs but also re-writing the terms and conditions thereof and is, therefore, entirely unsustainable, deserving to be set aside by orders of this Hon'ble Tribunal.

COMPLETION CERTIFICATE DATED 22.11.2016 SUBMITTED BY RESPONDENT NO.2

49. In the present case, Respondent No.2 had claimed to have carried out the Tests on its Generating Station between 30.04.2016 to 02.05.2016, and submitted the Completion Certificate dated 22.11.2016 specifying the net Station Heat Rate as **2465.2 kCal/Kwh**. However, no Test report was submitted by Respondent No.2 to the Appellant Board.

50. The Net SHR, as submitted hereinabove, is inclusive of the component of 5% which is required to be added in terms of Clause 3.2 of Schedule-F of the PSA. As per the format in Schedule-G, it is only this Net SHR [which is inclusive of the component of 5%] which is to be specified in the Completion Certificate. In the present case, the Net SHR in the Completion Certificate being 2465.2 kcal/kwh– by working backward, the figure arrived at through the Tests without adding the 5% component would be 2347.9 kcal/kwh. It is entirely inexplicable why the other figure of 2341.94 kcal/kwh has been mentioned in the Schedule-G Completion Certificate dated 22.11.2016 submitted by Respondent No.2.

51. As per the provisions of the PSAs, the Net SHR = the SHR for the Generating Station of Respondent No.2 is **2465.2 kCal/Kwh** and it is this one and the only value of SHR which has to be adopted for working out of the PSAs for computing the Tariff comprising of Fixed Charge as well as Fuel Charge - to be paid by the Appellant - Board to Respondent No.2.

52. Since the SHR of the Generating Station of Respondent No.2 is more than 2350 kCal/kWh – being the prescribed SHR, Clause 21.2.3 of the PSA applies and the Fixed Charge of Respondent No.2

was accordingly reduced by the Appellant in terms of Clause 21.2.3 of the PSA.

ANOTHER CERTIFICATE DATED 04.11.2017 PURPORTING TO BE "COMPLETION CERTIFICATE" FOR THE SAME GENERATING STATION - SUBMITTED BY RESPONDENT NO.2 FOR THE 2ND PSA

53. It is reiterated that both PSAs of the Appellant [for 115 MW and 100 MW respectively] are from the same Single Unit of 600 MW Capacity of the Respondent No.2. There can only be one value of SHR for any Generating Station / Unit. There is no permissibility for submitting two purported - different Completion Certificates with two different values of SHR for the same Generating Station.

54. The Respondent No.2 had claimed that the only test conducted by it was on 30.04.2016 to 02.05.2016 whereupon it had submitted the Completion Certificate dated 22.11.2016 specifying the net Station Heat Rate as **2465.2 kCal/Kwh**. There being only one Test of the only Generating Station (Unit) of 600 MW in the present case, there could only be one Test Report. Consequently, there could only be one Completion Certificate with the only one SHR value of **2465.2 kCal/Kwh** and there was no occasion for any second Completion Certificate.

55. However, for the 2nd PSA, Respondent No.2 submitted another Completion Certificate dated 04.11.2017 specifying the Station Heat Rate of the same Generating Station of 600 MW as **2347.9 kCal/kWh**. This second SHR for the same Generating Station was apparently computed by Respondent No.2 by **NOT ADDING the 5% mandatory component** stipulated in Clause 3.2 of Schedule-F.

56. It is submitted that strictly in terms of the PSA, even in the second PSA, the SHR had deserved to be taken as **2465.2 kCal/Kwh** – which includes the 5% mandatory component stipulated in Clause 3.2 of Schedule-F.

57. However, the second PSA has been erroneously / mistakenly operated based on the purported Completion Certificate submitted by Respondent No.2 on 04.11.2017 specifying the SHR as **2347.9 kCal/kWh**. The incorrect SHR value of **2347.9 kCal/kWh** applied by the Supplier for claiming and receiving Tariff were mistakenly paid by the Appellant in relation to the second PSA has led to the following impermissible over-payment made by the Appellant to Respondent No.2:-

SECOND PSA FOR 100 MW POWER SUPPLY

Payments made to Respondent No.2 on the basis of SHR of 2347.9 kCal/kWh from October 2017 till March 2020	Payments which would have been made to Respondent No.2 on the basis of SHR of 2465.2 kCal/kWh from October 2017 till March 2020	Over-payment already made to Respondent No.2 till March 2020 on account of adopting the wrong SHR for the Second PSA.
Rs. 728.33 crores	Rs. 689.56 crores	Rs. 38.77 crores

58. In other words, the incorrect SHR value of **2347.9 kCal/kWh** applied by the Supplier for claiming and receiving Tariff and mistakenly paid by the Appellant in relation to the second PSA –is required to be corrected by the Appellant – Board failing which it would imperatively lead to an impermissible unjust enrichment / windfall to

Respondent No.2 for an amount of approx. Rs. 39 crores from October 2017 to March 2020.

IMPUGNED JUDGMENT BEING CONTRARY TO THE PROVISION OF THE PSAs WHICH ARE PART OF THE DBFOO GUIDELINES

59. It is submitted that Respondent No.2 approached the Central Commission by filing Petition No.169 / MP / 2019 contending that two different values of SHR ought to be adopted for its single Generating Station / Unit – (i) in the same PSA – one for computation of Fixed Charge and the other for computation of the Fuel Charge; (ii) as well as for the second PSA in the same manner. By advancing this impermissible contention, Respondent No.2 had sought to secure whopping double benefit and unjust enrichment for itself and constituting double whammy and loss to the Appellant – Board as well as to the consumers.

60. In the impugned judgment, allowing the Petition filed by Respondent No.2, the Central Commission has erroneously held that the PSA envisages two different values of SHR – one contained in Clause 22.1.1 of the PSA and the other in Clause 3.2 of Schedule-F of the PSA. By adopting this completely erroneous interpretation, the Central Commission has invented new terms which are unknown to the PSAs – i.e. “Final SHR”.

61. The relevant portion of the impugned judgment is reproduced as under for ready reference:-

> *“…… 19. To decide the issue, let us analyze the various provisions of PSA with regard to SHR and payment of Fixed Charges and Fuel Charges.*
>
> *20. The Station Heat Rate (SHR) is defined under Article 39 of the PSA which refers to the meaning as set forth in*

Clause 22.1.1. SHR as per Clause 22.1.1 of PSA has been defined as under:

"22.1.1 ……."

We note that the above definition is for net station heat rate of the Power Station (the 'Station Heat Rate" or "SHR"). It uses two terms i.e. net SHR and SHR and does not differentiate between the two terms. In terms of this definition, SHR as determined in terms of Tests would be the net SHR that is the amount of heat energy input, in kCal, for generation of one kWh of electricity at point of grid connection and is arrived at after accounting for auxiliary consumption and transmission losses, if any, as determined by Tests and specified in the Provisional Certificate or Completion Certificate, as the case may be. Thus, SHR is required to be obtained by grossing up the amount of heat energy input in kCal for generation of one kWh of electricity at generator terminal ***(gross SHR)****, with the factor of {1- auxiliary consumption and transmission losses(%)}. In subsequent parts of this order, we will term this SHR as net SHR. We note that in this definition of net SHR, operational margin of 5% is not mentioned.*

21. The operational margin of 5% to account for potential variations arising from temperature, humidity, quality of coal and other unforeseen factors is dealt with in Clause 3.2 of Schedule-F of the PSA that is extracted as under:

"……" (Clause 3.2)

A bare perusal of the above clause reveals that the Petitioner's engineer was required to carry out Tests specified in PTC-4 and PTC-6 of ASME standards for boilers and turbines. Similar tests were required to be carried out for associated equipment in terms of other applicable codes. In this manner, the SHR was to be determined at 100% MCR of the generating station of the Petitioner after accounting for auxiliary consumption and losses on the dedicated transmission system. The SHR

shall be lower of SHR so determined through the above-mentioned performance tests and 2350 kCal/kWh. We note that this SHR is the same as mentioned in Clause 22.1.1 of the PSA i.e. this is net SHR. This net SHR is to be increased by 5% to account for variations arising from temperature, humidity, quality of coal and other unforeseen factors. The SHR increased by 5% was to be specified as the SHR in the Provisional Certificate or the Completion Certificate, as the case may be.

22. We have already observed, while analysing the provisions of Clause 22.1.1, that net SHR does not take into account the operational margin of 5%. The Clause 22.1.1 also provides that "the Parties expressly agree that if Tests determine that Station Heat Rate at the Point of Grid Connection is say 2,350 kCal per kWh, it shall be assumed that such Station Heat Rate has been derived after accounting for auxiliary consumption and transmission losses". However, we note from the provisions of Clause 3.2 of Schedule-F of the PSA that there has to be an operational margin of 5% over and above the SHR determined through performance tests (or 2350 kCal/kWh, whichever is lower) and that the SHR shall be the value that is determined after adding 5% operational margin. Thus, we note that the PSA has two sets of provisions for SHR – one in terms of Clause 22.1.1 and the other in terms of Clause 3.2 of Schedule-F. Both Clauses require SHR to take into account auxiliary power consumption and transmission losses, if any. However, Clause 22.1.1 requires the Completion Certificate to mention SHR as per Tests but does not mention any operational margin while Clause 3.2 of Schedule-F requires the Completion Certificate to also mention SHR after adding 5% operational margin. Both sets of Clauses require that the Completion Certificate should mention such SHR. We have already stated earlier in paragraph 16 above that the SHR used in Clause 22.1.1 be called net SHR. For purpose of further analysis, we term the SHR

*determined in terms of Clause 3.2 of Schedule-F as "**Final SHR**" which is the SHR that is derived after applying operational margin of 5% over and above net SHR……"*

62. It is submitted that the above-mentioned observations / findings of the Central Commission are contrary to the clear and unambiguous contractual provisions wherein Clause 22.1.1 by reference to the defined term "Tests" incorporates within itself Clause 3.2 of Schedule-F of the PSA. Clause 22.1.1 and Clause 3.2 of Schedule-F, together, comprise a single unified / integrated process for arriving at the value which is the "net Station Heat Rate" / "Station Heat Rate" / "SHR" for the same Generating Station.

63. The Central Commission, in the impugned judgment, has created new terminologies such as "*Gross SHR*", "*Final SHR*" [entirely alien to the binding terms and conditions of the PSAs] thereby impermissibly re-writing the Contract between the parties and resulting in unjust enrichment / windfall for Respondent No.2.

64. By allowing the aforesaid misconceived and impermissible claims of Respondent No.2, the Central Commission has erroneously held that even in the same PSA, two different values of SHR shall be adopted for computation of Fixed Charges on the one hand and Fuel Charges on the other hand – leading to double benefit to Respondent No.2 and effectively defeating the objectives of the DBFOO Guidelines to incentivize efficient generating stations and disincentivize inefficient generating stations.

IMPUGNED JUDGMENT HAS RENDERED THE DISCINCENTIVE CLAUSE (CLAUSE 21.2.3 OF THE PSA) OTIOSE AND REDUNDANT

65. It is submitted that by creating this impermissible distinction Clause 22.1.1 of the PSA on the one hand and Clause 3.2 of Schedule-F on the other hand, the Central Commission has completely rendered otiose the provision in the PSA for disincentivizing Generating Stations with higher SHR (lower efficiency).

66. As submitted hereinabove, the Central Commission has erroneously created two different values of SHR in the same PSA:-

c. "**Net SHR**" being the SHR without adding the mandatory 5% component in terms of Clause 3.2 of Schedule-F, in order to account for *potential variations arising from temperature, humidity, quality of coal and other unforeseen factors* [being **2347.9 kcal/kwh** in the present case].

d. "**Final SHR**" being the SHR after adding the mandatory 5% component in terms of Clause 3.2 of Schedule-F [being **2465.2 kcal/kwh** in the present case].

67. The Central Commission has, thereafter, held that there are 2 Options, either to compare the Net SHR with the limit value of 2350 kcal/kwh or to compare the Final SHR with the limit value of 2467.5 kcal/kwh. The relevant portion from the impugned judgment is reproduced as under:-

> *"…… OPTION-1: "Final SHR" as indicated in Completion Certificate (2465.2 kCal/kWh) arrived at after addition of 5% operational margin in net SHR discovered through performance test, should be compared with ceiling of "Final SHR" i.e. 2467.50 kCal/kWh which also includes operational margin of 5% in ceiling of net SHR i.e. 2350 kCal/kWh.*
>
> *Or*

OPTION-2: "Final SHR" as indicated in the Completion Certificate (2465.2 kcal/kWh) should be divided by 1.05 to arrive at the net SHR and then compared with ceiling of net SHR i.e. 2350 kcal/kWh that is the specified SHR in Schedule-C.

29. Thus, under Option-1, Final SHR as per Completion Certificate (2465.2 kcal/kWh) is less than the specified SHR in Schedule-C (2467.50 kCal/kWh i.e. 2350 kCal/kWh X 1.05) and under Option-2, the net SHR works out to 2347.9 kCal/kWh (i.e. SHR as per Completion Certificate (2465.2 kCal/kWh)/1.05], which is less than the specified SHR in Schedule-C i.e. 2350 kCal/kWh. Therefore, it may be observed that based on either option, the Petitioner qualifies for incentive in Fixed Charges by application of Clause 21.2.2 of the PSA……"

68. The aforesaid observations of the Central Commission are inherently erroneous, misconceived, irrational and unsustainable. Without prejudice to the submission on behalf of the Appellant as set out hereinabove, it is submitted that as per the "OPTION-1" proposed by the Central Commission, the "Final SHR" is to be compared with the limit value of 2467.5 kcal/kwh. However, as elaborated hereinabove, the provisions of the PSA stipulate that in any case, any SHR Value greater than 2467.5 kcal/kwh would render the Tests as having failed and the Generating Station would become ineligible for supply of power. The interpretation rendered by the Ld. Central Commission is ex-facie irrational and in any case, as submitted above, is contrary to the binding terms and conditions of the PSAs as well as the entire scheme of the Guidelines.

69. If the interpretation given by the Central Commission is accepted, there would be ***no such case*** where the so-called "Final SHR"

would be greater than 2467.5 kcal/kwh and therefore, ***the disincentive clause (Clause 21.2.3) would never become applicable in any case***. On the contrary, the incentive clause (Clause 21.2.2) would become applicable in every case. It is reiterated that this submission on the part of the Appellant – Board is without prejudice to the submissions made hereinabove.

70. The above-mentioned interpretation and observations of the Central Commission would, therefore, completely defeat the entire scheme and objective of the DBFOO Guidelines as well as the PSAs which have been executed strictly in terms of the DBFOO Guidelines.

IMPUGNED JUDGMENT LEADING TO FURTHER IMPERMISSIBLE WINDFALL / UNJUST ENRICHMENT TO RESPONDENT NO.2

71. The effect of the impugned order in creating two different values of SHR within one PSA for the same Generating Station is depicted in a tabulated manner as under:-

Date of Execution of PSA	Quantity of Power	Date of start of supply of Power	SHR as specified in Completion Certificate	Impermissible Claim of Resp-2 accepted by CERC
31.12.2014	115 MW	01.12.2016	2465.2 kcal/kwh	SHR for **Fixed Charge**: 2347.9 kcal/kwh SHR for **Fuel Charge**: 2465.2 kcal/kwh
26.12.2014	100 MW	01.10.2017	2347.9 kcal/kwh	SHR for **Fixed Charge**: 2347.9 kcal/kwh SHR for **Fuel Charge**:

72. It is reiterated that the interpretation of the CERC is contrary to the contractual terms and would necessarily result into a windfall for Respondent No.2 at the cost of the consumers in the State of Kerala. It would also defeat the purpose and intent of the DBFOO Guidelines issued by the Central Government u/s 63 of the Electricity Act, 2003 for keeping only one SHR for determination of Fixed Charge as well as Fuel Charge.

73. As submitted hereinabove and without prejudice to the submission of the mistaken application of the SHR in relation to PSA 2, it is submitted that Respondent No.2 was paid by the Appellant – Board for supply of electricity for 115 MW and 100 MW, for an amount of approx. Rs. 31 crores and Rs. 29 crores per month respectively [and there has not been any pending demand on that basis].

74. For the past period from December 2016 to March 2020, on the basis of the impugned judgment, the Respondent has raised an invoice of approx. **Rs. 82 crores** from the Appellant. The impugned judgment has also resulted in creating an additional financial liability of approx. **Rs. 2 crores per month extra** from the Appellant and that would also be at the cost of the consumers.

75. It is submitted that the erroneous interpretation rendered by the Central Commission in the impugned judgment would not only affect the PSAs of the Appellant but it would also affect all PSAs of all entities which have been executed in terms of the DBFOO Guidelines in various other States all over the country. In all such cases, it would result in a situation where the Power Supplier would obtain the impermissible benefit of adopting a lower value of SHR

for Fixed Charge and higher value of SHR for Fuel Charge – thereby resulting in double benefit and unjust enrichment to the Power Supplier at the cost of the consumers.

76. It is submitted that where any such interpretation of the contractual provisions [which are part of the statutory DBFOO Guidelines] results in creation of financial burden of crores of Rupees on the consumers, the degree of judicial scrutiny would be much higher. In the present case, it is submitted that the Central Commission, by adopting an entirely impermissible and erroneous interpretation, has completely defeated the objectives sought to be achieved by the DBFOO Guidelines and has also resulted in creating a huge financial burden / liability running into crores of Rupees for the consumers in the State of Kerala [and the interpretation in the impugned judgment would also affect all other PSAs of all other entities which have been executed under the DBFOO Guidelines].

77. It is submitted that it is the settled position of law that any payment made under mistake of law resulting in unjust enrichment would deserve to be refunded by directions of the Hon'ble Courts. In ***Mahabir Kishore v. State of M.P., (1989) 4 SCC 1***, the Hon'ble Supreme Court made the following pertinent observations:-

> *"…… 11. The principle of unjust enrichment requires: first, that the defendants has been "enriched" by the receipt of a "benefit"; secondly, that this enrichment is "at the expense of the plaintiffs"; and thirdly, that the retention of the enrichment be unjust. This justifies restitution. Enrichment may take the form of direct advantage to the recipient wealth such as by the receipt of money or indirect one for instance where inevitable expense has been saved……"*

78. The aforesaid exposition of law has also been upheld by the 9-Judges Bench of the Hon'ble Supreme Court in its judgment in the case of ***Mafatlal Industries Ltd. & Ors. Vs. Union of India & Ors. – (1997) 5 SCC 536, para 83***.

79. The Appellant, in the light of the above-mentioned principles of law and the submissions made hereinabove, most respectfully prays that this Tribunal be please to allow the appeal in terms of the Prayer and set aside the impugned judgment / order dated 25.05.2020 passed by the Ld. Central Commission in Petition No. 169 / MP / 2019 and also direct that the Appellant shall compute/pay the Fixed Charge and Fuel Charge under the PSAs dated 26.12.2014 and 31.12.2014 **as per the SHR Value of 2465.2 specified in the Completion Certificate dated 22.11.2016.** It is submitted that orders to this effect by this Tribunal would meet the ends of justice.

Submission by Respondent No.2/ Generator

80. The entire appeal of the Appellant is based on the premise that the PSA caps the SHR at 2350 kCal/kWh and both Fixed Charges and Fuel Charges are to be paid applying the said cap of 2350 kCal/kWh. According to the Appellant, by way of the impugned order, two SHR values have been adopted for the same plant, which is not permissible.

81. The Appellant is selectively relying on certain provisions of the PSA to compare apples with oranges. The architecture of the PSA is such that while for the payment of Fuel Charges, the SHR achieved by the answering Respondent in the performance test (2347.9

kCal/kWh) or 2350 kCal/kWh, whichever is lower, **is to be considered after allowing a margin of 5%** to account for potential variations arising out of temperature, humidity, quality of coal and any other unforeseen circumstances.

Further, the very same PSA in Article 21 and clause 2.1 of Schedule contemplates that for incentives and dis-incentives, the final SHR as per the Completion Certificate, i.e. 2465.2 kCal/kWh should be compared with the ceiling of final SHR, i.e., 2467.50 kCal/kWh. In the alternative, the final SHR should be divided by 1.05 to arrive at the net SHR and this should be compared with the ceiling of net SHR, i.e. 2350 kCal/kWh.

82. In either of the cases, the answering Respondent would qualify for incentives in Fixed Charges. However, the Appellant was comparing the final SHR of 2465.2 kCal/kWh, which was arrived at with 5% operational margin, to the ceiling of 2350 kCal/kWh which is without the 5% operational margin. This is contrary to the plain language of Clause 3.2 of Schedule F, which reads as under:

"The Utility's Engineer shall carry out, or cause to be carried out, Tests specified in the Performance Testing Code - 4 (PTC - 4) and Performance Test Code - 6 (PTC - 6) of ASME Standards for boilers and turbines respectively, and Tests specified in other applicable codes in respect of associated equipment, to determine the Station Heat Rate at 100% (hundred per cent) maximum continuous rating (MCR) of the Power Station, after accounting for auxiliary consumption and

losses on the Dedicated Transmission System, if any, and the Station Heat Rate shall be lower of SHR so determined and 2,350 Kcal per kWh, which shall be increased by (five per cent) thereof to account for potential variations arising from temperature, humidity, quality of coal and other unforeseen factors, and the ***number so arrived at shall be specified as the Station Heat Rate in the Provisional Certificate or Completion Certificate****, as the case may be."*

83. The Article 21 of the PPA and Clause 2.1 of Schedule C also mirror the same principle and read as under:

"ARTICLE 21 TARIFF

21.1.1 The Utility shall pay to the Supplier tariff comprising the sum of Fixed Charge and Fuel Charge payable by the Utility to the Supplier for Availability and for supply of electricity, as the case may be, in accordance with the provisions of this Agreement (the "Tariff").

21.1.2 As a part of Tariff, the Utility shall pay to the Supplier an amount, determined in accordance with the provisions of this Article 21, as the Fixed Charge for Availability of the Power Station to the extent of Normative Availability thereof (the "Fixed Charge").

21.2 Base Fixed Charge

21.2.1 The Parties agree that the fixed charge shall, in accordance with the offer of the Supplier for the Base Year,

be Rs. 2.97 (Rupees two and paise ninety seven) per kWh, to which the amount, if any, determined in accordance with the provisions of Clause 21.2.2 or 21.2.3, as the case may be, shall be added or deducted, as the case may be, and the sum thereof (the "Initial Fixed Charge") shall be revised annually in accordance with the provisions of Clause 21.2.4 to determine the base fixed charge for the relevant Accounting Year (the "Base Fixed Charge').

*21.2.2 In the event the **Completion Certificate** specifies a Station Heat Rate that is lower than the Station Heat Rate specified in **Schedule- C**, the Initial Fixed Charge shall be increased such that for every improvement of 1% (one per cent) as compared to the Station Heat Rate specified in Schedule-C, the amount specified in Clause 21.2.1 shall be increased by 1.5% (one point five per cent) thereof. Provided, however, that in case the source of Fuel is situated within 100 (one hundred) kilometres of the Power Station, such increase shall be restricted to 1% (one per cent).*

21.2.3 In the event the Completion Certificate specifies a Station Heat Rate that is higher than the Station Heat Rate specified in Schedule- C, the Initial Fixed Charge shall be decreased such that for every increase of 1% (one per cent) as compared to the Station Heat Rate specified in Schedule-C, the amount specified in Clause 21.2.1 shall be decreased by 2% (two per cent) thereof. Provided, however, that in case the source of Fuel is situated within 100 (one hundred)

kilometres of the Power Station, such decrease shall be restricted to 1.5% (one point five per cent).

SCHEDULE - C SPECIFICATION AND STANDARDS

2. Station Heat Rate

2.1 The Station Heat Rate, reckoned at the Point of Grid Connection Shall, after accounting for auxiliary consumption and transmission losses, not to exceed 2350 (two thousand three hundred and fifty) kCal per kWh at 100% (hundred per cent) maximum continuous rating (MCR) or such lower Station Heat Rate as may be specified in the Completion Certificate or Provisional Certificate, as the case may be."

84. Therefore, the Appellant was seeking to deny the incentive to the answering Respondent by comparing two values which are not comparable. The Central Commission has clearly held that the PSA itself envisages the net SHR for the purpose of payment of Fixed Charges and final SHR for the purpose of payment of Fuel Charges. This does not mean that there are two SHRs for the generating stations. Both the SHRs are not operational parameters, but a commercial arrangement which needs to be followed to ensure a fair treatment to both the Appellant and the answering Respondent.

85. In the light of the aforesaid submissions, the answering Respondent submit that the Appellant cannot be permitted to seek any indulgence from this Tribunal and the appeal deserves to be dismissed.

Affidavit filed by Respondent 2/ Generator

86. Respondent No. 2 filed an affidavit in compliance with the order dated 04.12.2020 of this Tribunal directing the parties to place on record certain necessary factual clarifications that were sought by this Tribunal during the course of hearing on 04.12.2020.

87. The Respondent Generator has submitted that prior to the declaration of commercial operation (COD) of the generating station on 03.05.2016, trial performance tests for the Respondent No. 2's plant were started on 29.04.2016 at 09:45 Hrs. and were completed on 02.05.2016 at 20:00 Hrs. The operating parameters for determination of Station Heat Rate were recorded on 02.05.2016 from 13:00 Hrs to 14:00 Hrs. While representatives of Madhya Pradesh Power Management Co. Ltd. *(***"MPPMCL"**) and the Lenders' Independent Engineer were present to witness the said trial tests, no one from the Appellant was present. Even though the Respondent No. 2 had invited the Appellant to witness the commissioning tests, instead of witnessing the tests, the Appellant waived off such requirement by relying on Article 19.6 of the PSAs dated 31.12.2014.

88. After the performance tests were conducted and before the start of delivery of power, in terms of the PSA, particularly Clause 3.2 of 'Schedule F', a Completion Certificate was issued by the authorized representative of the Respondent No. 2. This Completion Certificate was in the format given in 'Schedule G' of the PSA and was issued

by the Supplier (i.e., the Respondent No. 2) as stipulated under Clause 7 of 'Schedule F' of the *PSA.* Unlike the other Case-I and Case-II Bidding PPAs which require the commercial operation to be witnessed and certified by an Independent Engineer, under the DFBOO, the Completion Certificate is required to be issued by the Supplier itself.

89. This Completion Certificate was accepted by the Appellant. Only after it was accepted, supply/delivery of power started on 22.12.2016. It is necessary to note here that the Completion Certificate stated as follows:

> *"COMPLETION CERTIFICATE*
>
> *I, Janmejaya Mahapatra, COO, acting as the Supplier, under and in accordance with the Power Supply Agreement dated 31.12.2014 (the "Agreement"), for construction and operation of the Power Station with a capacity of 600 MW on Design, Build, Finance, Own and Operate (the "DBFOO") basis, hereby certify that the Tests specified in Article 13 and Schedule-F of the Agreement have been successfully undertaken to determine compliance of the Power Station with the provisions of the Agreement, and I am satisfied that the Power Station can be safely and reliably placed in commercial service of the Utility and the Buyers thereof.*
>
> *2. It is certified that the Power Station/Unit-I has an Installed Capacity of 600 MW which includes the Contracted Capacity of 115 MW.*
>
> *3. It is further certified that the Gross Station Heat Rate of the Power Station is 2341.94 Kcal/kWh and* ***the net station Heat Rate at the point of Grid Connection is 2465.2 Kcal/kWh***

4. It is also certified that, in terms of the aforesaid Agreement, all works forming part of the Power Station/Unit-I have been completed and the Power Station/Unit – I is ready for entry into commercial operation on this the 1st day of December 2016."

90. Respondent No. 2 has submitted that it had indicated a SHR figure of 2341.94 Kcal/kWh as Gross SHR to maintain explicit reference to the Test results as well as the SHR with the allowable margin of 5% beyond the SHR as found in the Tests at design conditions, which was to be considered for day-to-day operation of the plant. If the Completion Certificate was not in accordance with the terms of the PSA for giving two SHR values as is now being argued by the Appellant, the same ought to have been either rejected or an appropriate clarification should have been sought at that stage. This was not done by the Appellant.

91. The Western Regional Power Committee of the Central Electricity Authority has also taken cognizance of the aforesaid 72-hour full load trial run and has confirmed that the declaration of COD, pursuant to the said test, is in accordance with the CERC Tariff Regulations, 2014.

92. The Test Report which mentioned all the process parameters and the test results which *inter-alia* included the derivation of the Gross SHR (SHR at Generator Terminals), the Net SHR (SHR after taking into consideration aux. power consumption) and the OEM (M/s BHEL) supplied correction curves which were also submitted subsequently.

93. The Respondent no. 2/ Generator has also clarified that there is another Power Supply Agreement with Madhya Pradesh / MPPMCL under Section 62 of the Electricity Act, 2003 and the representative of MPPMCL was also present at the time of conducting the commissioning tests.

94. With respect to this Tribunal's question regarding conducting of a performance test by the manufacturer M/s BHEL, it is stated that at the relevant time, a dispute had arisen between the Respondent No. 2 and BHEL and the matter is now in arbitration. Due to delay by BHEL and the ongoing dispute, BHEL did not conduct the Performance Guarantee Test. However, as submitted hereinbefore, the Respondent No. 2 ensured that the trial operation tests were conducted prior to declaration of commercial operation, in the presence of the Lenders' Independent Engineers and the representatives of MPPMCL.

95. The Respondent No. 2 additionally had got the performance parameters of the generating unit also tested by a reputed third party viz. M/s STEAG Energy Services India Ltd. (a wholly owned subsidiary of M/s STEAG Energy Services GMBH, Germany) on 26.07.2019, which report was also placed by the Respondent No. 2 before the Central Commission by way of the Rejoinder Affidavit dated 28.09.2019.

96. The Appellant had accepted the operating parameters of the plant as provided by Respondent No. 2 and was assured of the efficiency of the unit which was designed, engineered, manufactured, supplied

and installed by BHEL. At no stage, had the Appellant questioned/contested any of the operating parameters of the plant including the SHR values provided in the Completion Certificate. The entire case of the Appellant is based on a wrongful interpretation of the PSAs.

97. The Appellant has relied on the revised Completion Certificate dated 04.11.2017 submitted for PSA-II of 100 MW (power flow had started from 01.10.2017), in which the SHR 2347.9 Kcal/kWh has been mentioned. However, the Appellant has concealed the prior correspondence between the parties leading to submission of the revised Completion Certificate on 04.11.2017. On 27.09.2017, prior to commencement of supply *(i.e., from 01.10.2017)* under the PSA-II dated 26.12.2014, the Respondent No. 2 had submitted to the Appellant, a Completion Certificate which was similar to the one submitted in the PSA-I. The said Completion Certificate, furnished with letter dated 27.09.2017 read as under:

> *"……*
> *……*
> *2. It is certified that the Power Station/Unit-I has an Installed Capacity of 600 MW which includes the Contracted Capacity of 100 MW.*
>
> *3. It is further certified that the Station Heat Rate of the Power Station is 2347.9 Kcal/kWh and the Station Heat Rate value as arrived at, as per the stipulations of Cl 3.2: SHR Test of Schedule – F: Tests is 2465.2 Kcal/kWh*
>
> *4. It is also certified that, in terms of the aforesaid Agreement, all works forming part of the Power Station/Unit-I have been completed, and the Power Station/Unit – I is ready for entry*

into commercial operation on this the 1st day of October 2017."

98. However, the Appellant refused to accept this and vide its letter dated 28.10.2017, asked the Respondent No. 2 as follows:

"Please refer to the above. You are requested to furnish the Completion Certificate without deviating from the format prescribed in Schedule – G of the PSA, wherein only one Station Heat Rate can be certified. KSEB Ltd. will not be in a position to honour the invoice for the energy supplied against the said PSA unless the Completion Certificate is in the prescribed format."

99. It was thereafter that the Respondent No. 2 had to furnish a new Completion Certificate vide its letter dated 04.11.2017. Had the Respondent No. 2 not given the said revised certificate, the capacity under PPA-II would have been stranded leading to further stress in an already stressed asset. These facts have been concealed in the appeal.

100. The Appellant has also in its Additional Affidavit filed before this Hon'ble Tribunal wrongly stated that it was not aware of any test conducted by the Respondent No. 2. In fact, as has been stated hereinabove, the Test Report by STEAG was placed before the Central Commission by the Respondent No. 2 by way of its Rejoinder Affidavit dated 28.09.2019 and the above sequence of events was also placed by way of an Affidavit dated 07.03.2020 and was, as such part of the record of the Central Commission and served on the Appellant.

101. The Appellant in its appeal is contending that the Respondent No. 2 has an inefficient generating station based on obsolete technology. There is no basis for the Appellant to make such remarks about a BTG set supplied by the leading manufacturer of the country, M/s BHEL. It is stated that the plant of the Respondent No. 2 has been operational since 2016 and even if today, a performance test is carried out (as per PTC-4 and PTC-6) despite the passing of more than 4.5 years, the plant of the Respondent No. 2 would achieve the SHR parameters.

102. If the contention of the Appellant is considered, it would mean that there cannot be any distinction between Design SHR and Operating SHR (as has been rightly rejected by the Central Commission), and the stipulated Net SHR of 2350 Kcal/kWhr is inclusive of auxiliary power consumption (@5%) and operational inefficiencies (@5%). Thus, for a generator supplying power under the provisions of the PSA, the following calculations would be applicable:

Max. Net SHR at the point of Connection to the Grid & inclusive of operational inefficiencies. **(a)**	2350 Kcal/kWhr
Max. Net SHR at the point of Connection to the Grid. **(b) = (a/1.05)**	2238.1 Kcal/kWhr
Gross Design SHR. **(c) = (b/1.05)**	2131.5 Kcal/kWhr
Gross Turbine Cycle HR considering boiler efficiency of 86%. **(d) = (c*0.86)**	1833.1 Kcal/kWhr

103. As can be seen from the relevant stipulations (Norms of Operation) in the CERC Tariff Regulations, 2019 for Gross SHR, such low values of Gross Turbine Heat Rate and Gross unit HR is possible only in case of super critical / ultra-super critical units operating at high pressure and temperature conditions (Main steam Pressure of 270 bar, Main Steam and Hot Reheat temperatures of 593 deg. centigrade). Such units with advanced metallurgy are being installed by NTPC recently (Darlipalli Super Thermal Power Project – 2x800 MW has a design Gross Turbine Heat Rate of 1816 Kcal / KWhr and Gross Unit HR of 2112 Kcal / KWhr).

104. It is impossible that the Ministry of Power, while framing the bid documents for procurement of power on DBFOO basis in the year 2013, had provided for such SHR which can be achieved only by such large capacity (800 MW) super critical / ultra-super critical units.

105. Further, arguments were addressed by the Appellant during the hearing to the effect that it has paid wrongly an excess amount of Rs. 40 crores to the Respondent No. 2. The aforesaid submission is factually inaccurate because at no stage any demand of Rs. 40 crores have been raised by the Appellant. Further, it was the Respondent No. 2, which approached the Central Commission, by filing Petition No. 169/MP/2019. Neither is there any claim against the Respondent No. 2 by way of a petition, nor is there a counter claim for Rs. 40 crores in the reply filed by the Appellant before the Central Commission. Therefore, the submissions made are specious and deserves to be rejected.

Analysis and Decision

106. The Central Commission in the Impugned Order has noted that the PSA has two sets of provisions for SHR – one in terms of Clause 22.1.1and the other in terms of Clause 3.2 of Schedule-F. Both Clauses require SHR to take into account auxiliary power consumption and transmission losses, if any. However, Clause 22.1.1 requires the Completion Certificate to mention SHR as per Tests but does not mention any operational margin while Clause 3.2 of Schedule-F requires the Completion Certificate to also mention SHR after adding 5% operational margin. Both sets of Clauses require that the Completion Certificate should mention such SHR. The Central Commission has termed the SHR used in Clause 22.1.1 as net SHR and the SHR determined in terms of Clause 3.2 of Schedule-F as "Final SHR" i.e. SHR that is derived after applying operational margin of 5% over and above net SHR. Accordingly the Central Commission has decided that Fixed charges are to be paid on the basis of "net SHR" and the fuel charges are to be paid on the basis of "Final SHR".

107. Per contra the Appellant has submitted that the Impugned Order dated 25th May, 2020 passed by the Central Commission is against the provisions of the PSA and is wrong and need to be set aside. The Appellant has submitted that the PSA provides for only one SHR and the Respondent Generator is to be paid both Fixed Charges and Fuel Charges on the basis of one SHR. He has prayed to issue direction that the Appellant shall compute/pay the Fixed Charge and Fuel Charge under the PSAs dated 26.12.2014 and 31.12.2014 as per the SHR Value of

2465.2 specified in the Completion Certificate dated 22.11.2016, to meet the ends of justice.

108. We have heard the Appellant, Respondents and have gone through the Appeal filed by the Appellant, written submissions/ material/ documents filed by all the parties and we are of the opinion that the following issue emerge for our consideration:

Issue: Whether the PSA provides for two SHR, one for the purpose of payment of Fixed Charges and other for the payment of Fuel Charges?

109. To decide the issue, let us analyse the various provisions of PSA with regard to SHR and payment of Fixed Charges and Fuel Charges.

Clause 39 of the PSA defines 'Station Heat Rate' as follows:-

"Station Heat Rate" shall have the meaning as set forth in Clause 22.1.1."

Clause 22.1.1 of PSA reads as under:

"22.1 Station Heat Rate

22.1.1 The heat energy input, in Kcal, required for generation and supply of 1 (one kWh of electricity, at the Point of Grid Connection, after accounting for auxiliary consumption and transmission losses, if any, ***as***

determined by Tests and specified in the Provisional Certificate or Completion Certificate, *as the case may be, shall be the net station heat rate of the Power Station (the 'Station Heat Rate" or "SHR").*

Provided that the SHR shall be adjusted from time to time in accordance with the provisions of Clause 24.4, to account for any reduction in Despatch. Provided further that the aforesaid SHR shall be deemed to be increased by 0.15% (zero point one five per cent) on each successive anniversary of COD and the number so arrived at shall be the applicable SHR for that year. For avoidance of doubt and by way of illustration, the Parties expressly agree that if Tests determine that Station Heat Rate at the Point of Grid Connection is say 2,350 kCal per kWh, it shall be assumed that such Station Heat Rate has been derived after accounting for auxiliary consumption and transmission losses."

110. From the above we note that the PSA defines the Station Heat Rate as under:

i) Station Heat Rate is the heat energy input, in Kcal, required for generation and supply of 1 (one kWh of electricity, at the Point of Grid Connection, after accounting for auxiliary consumption and transmission losses, if any

ii) Station Heat Rate is to be determined by Tests

iii) Station Heat Rate is specified in the Provisional Certificate or Completion Certificate

iv) For the purpose of this PSA, both terms i.e. 'Station Heat Rate' or 'SHR' or 'net station heat rate of the power station' are one and same.

111. The term "*Tests*" is defined in the PSA as under:-

> *"**"Tests"** means the tests set forth in **Schedule-F** to determine the completion of Power Station in accordance with the provisions of this Agreement."*

112. Clause 13.1.2 of the PSA provides as under:-

> *"**13.1 Tests***
>
> *13.1.1 No later than 30 (thirty) days prior to the likely completion of any Unit of the Power Station, the Supplier shall notify the Utility's Engineer of its intent to subject such Unit to Tests. The date and time of each of the Tests shall be determined by the Supplier, and notified to the Utility and the Utility's Engineer who may designate its representative to witness the Tests.*
>
> *13.1.2* All Tests shall be conducted in accordance with Schedule-F at the cost and expense of the Supplier. *The Utility's Engineer shall observe, monitor and review the results of the Tests to determine compliance of the Power Station with Specifications and Standards and if it is reasonably anticipated or determined by the Utility's Engineer during the course of any Test that the performance of the Power Station does not meet the Specifications and Standards, it*

shall have the right to require the Supplier to remedy and rectify the defects or deficiencies. Upon completion of each Test, the Supplier shall provide to the Utility copies of all Test data including detailed Test results."

113. Schedule-F of the PSA provides for the "Tests" for determining the SHR and Clause 3.2 of Schedule –F provides for the "SHR Test" and it is reproduced as under:-

*"**SCHEDULE-F**:*
(see Clause 13.1.2)

TESTS

…… 3.2 SHR Test

The Utility's Engineer shall carry out, or cause to be carried out, Tests specified in the Performance Test Code -4 (PTC-4) and Performance Test Code-6 (PTC-6) of ASME standards for boilers and turbines respectively, and Tests specified in other applicable codes in respect of associated equipment, to determine the Station Heat Rate at 100% (hundred percent) maximum continuous rating (MCR) of the Power Station, after accounting for auxiliary consumption and losses on the Dedicated Transmission System, if any, and the Station Heat Rate shall be lower of SHR so determined and 2350 kCal per kWh, which shall be increased by 5% (five percent) thereof to account for potential variations arising from temperature, humidity, quality of coal and other unforeseen factors, ***and the number so arrived at shall be specified as the Station Heat Rate in the Provisional Certificate or Completion certificate****, as the case may be."*

114. The activities involved in the Tests given under Schedule F are as under:

A. Carry out the Tests specified in the Performance Test Code - 4 (PTC-4) and Performance Test Code-6 (PTC-6) of ASME standards for boilers and turbines respectively, and Tests specified in other applicable codes in respect of associated equipment at 100% (hundred percent) maximum continuous rating (MCR) of the Power Station to determine the heat energy input (kCal) for generation of one unit of electricity (kWh). Let us call this as 'A'.

B. Deduct auxiliary consumption and losses on the Dedicated Transmission System from the above determined value 'A'. Let us call this as 'B'.

C. Compare this value 'B' with 2350 kCal/kWh and take the lower value. Let us call this as 'C'.

D. Increase this value 'C' by 5% (five percent) to account for potential variations arising from temperature, humidity, quality of coal and other unforeseen factors. Let us call this as 'D'.

E. Specify this value 'D' as the Station Heat Rate in the Provisional Certificate or Completion Certificate.

115. Schedule G of the PSA provides the format of Completion Certificate to be issued by the generator and the same reads as under:-

"SCHEDULE-G:

(see Clauses 13.2 and 13.3)

COMPLETION CERTIFICATE

1. *I/We, _____ (Name and Designation of the Managing Director of the Supplier), acting as the Supplier, under and in accordance with the Power Supply Agreement dated _____, (the "Agreement"), for construction and operation of the Power Station with a capacity of _____ MW on design, build, finance, own and operate (the "DBFOO") basis,* ***hereby certify that the Tests specified in Article 13 and Schedule-F of the Agreement*** *have been successfully undertaken to determine compliance of the Power Station with the provisions of the Agreement, and I/We am/are satisfied that the Power Station can be safely and reliably placed in commercial service of the Utility and the Buyers thereof.*
2. *It is certified that the Power Station / Unit _____ has an Installed Capacity of ____ MW which includes the Contracted Capacity of ___ MW.*
3. ***It is further certified that the Station Heat Rate of the Power Station is _____.***
4. *It is also certified that, in terms of the aforesaid Agreement, all works, forming part of the Power Station / Unit _____ have been completed, and the Power Station / Unit ____ is ready for entry into commercial operation on this the ____ day of ____ 20 ___*

SIGNED / SEALED AND
DELIVERED
For and on behalf of
the SUPPLIER by:
(Signature)
(Name)
(Designation)
(Address)"

116. We note from the above that a standard format has been prescribed for the purpose of Completion Certificate with provision of filling the relevant specific information/ data including the Station Heat Rate.

117. The sequence given under Schedule F concludes in determination of Station Heat Rate/ SHR/ net station heat rate of the power station with a clear direction to specify the same in the completion certificate.

118. It is important to note that as per this format only one value of the Station Heat Rate is to be given in the Completion Certificate.

119. From the reading of the PSA we find that the station heat rate would be as determined by tests given under Schedule 'F' and the same will be specified in the Completion Certificate in the format prescribed in Schedule 'G'. The Completion Certificate, as per the format prescribed under Schedule G specifies only one value of Station Heat Rate and this is same as 'SHR' or 'net heat rate of the power station'.

120. The reading of clauses 22.1.1, schedule F and schedule G makes it abundantly clear that for the purpose of transactions under the Power Supply Agreement (PSA) there is only one value of station heat rate specified in the completion certificate and the same has to be read as SHR or net station heat rate of the power station.

121. There is perfect harmony in different clauses of the PSA bringing out with clarity the fact that there is only one station heat rate/ SHR/ net station heat rate of the power station and the same is specified in the Completion Certificate. This value and only this value, as specified in the completion certificate, is to be used for the purpose of business transactions carried out under this PSA.

122. The Central Commission at Para no. 20 of the Impugned Order has recorded as under:

> *"We note that the above definition is for net station heat rate of the Power Station (the 'Station Heat Rate" or "SHR"). It uses two terms i.e. net SHR and SHR and does not differentiate between the two terms.* ***In terms of this definition, SHR as determined in terms of Tests would be the net SHR*** *that is the amount of heat energy input, in kCal, forgeneration of one kWh of electricity at point of grid connection and is arrived at after accounting for auxiliary consumption and transmission losses, if any, as determined by Tests and specified in the Provisional Certificate or Completion Certificate, as the case may be. Thus, SHR is required to be obtained by grossing up the amount of heat energyinput in kCal for generation of one kWh of electricity at generator terminal (gross SHR), with the factor of {1- auxiliary consumption and transmission losses(%)}.* ***In subsequent parts of this order, we will term this SHR as net SHR****.* ***We note that in this definition of netSHR, operational margin of 5% is not mentioned."***

123. From the reading of above Para, we observe that the Central Commission has noted as under:

i. The above definition is for net station heat rate of the Power Station (the 'Station Heat Rate" or "SHR")
ii. It uses two terms i.e. net SHR and SHR and does not differentiate between the two terms"
iii. In terms of the definition given under clause 22.1.1, SHR, as determined in terms of Tests, would be the net SHR
iv. At the end of the Para the Central Commission records it's finding that in this definition of netSHR, operational margin of 5% is not mentioned.

124. Despite the fact, that the Central Commission has noted, that as per the definition given under clause 22.1.1 of the PSA, the SHR as determined in terms of Tests would be the net SHR, the Central Commission has noted that - 'in this definition of net SHR, operational margin of 5% is not mentioned'.

125. In view of the fact that the definition clearly mentions that - "***In terms of this definition, SHR as determined in terms of Tests would be the net SHR",*** the finding of the Central Commission giving an interpretation, different from the provision of the PSA, cannot sustain in the eye of law. PSA is a legal document and governs the entire business of procuring power by the Appellant from the Respondent Generator. It's a settled position of law that a contract, like this PSA, which has been signed by the parties with mutual consent taking into consideration all commercial

aspects, cannot be interpreted in any other manner different from the provisions of the contract.

126. We have noted that as per Clause 39 of the PSA, Station Heat Rate shall have the meaning as set forth in Clause 22.1.1. Definition given under clause 22.1.1 defines the Station Heat Rate and this definition has been articulated in a manner in which it refers to the Tests to determine the Station Heat Rate/ SHR/ net station heat rate of the power station.

127. The Appellant and the Respondent Generator has signed the PSA with mutual consent after due consideration and examining all commercial aspects. The terms and condition given under this PSA govern the business of procuring power by the Appellant from the Respondent Generator. No third party can assign or interpret the provisions of the contract in any other manner different from the meaning defined in the contract.

128. In view of the above we do not agree with the Central Commission to introduce two new terms i.e. Gross SHR and Final SHR and the finding that the PSA has two sets of provision for SHR – one in terms of 22.1.1 and other in terms of clause 3.2 of Schedule F.

129. We are of the opinion that as per the provisions of the PSA, there is only one SHR and it is same as Station Heat Rate or net station heat rate of the power station. This SHR is to be determined by Tests given under Schedule F of the PSA and same to be specified in Completion Certificate.

130. The Completion Certificate submitted by Respondent No. 2 on 22/01/2016 indicates two values of SHR as under: –

(i) Gross SHR of the unit 2341.9 kCal/kWh
(II) Net SHR of the unit 2465.2 kCal/kWh

The net SHR of the unit is at the point of connection to the Grid after including 5% margin to account for potential variations arising from temperature, humidity, quality of coal and other unforeseen factors, as indicated in Schedule-F. In terms of the provision of PSA, this net SHR only needs to be specified in the Completion Certificate and is same as Station Heat Rate of the power station.

In view of the foregoing analysis, we are of the opinion that there is only one SHR of the power station and the value of this Station Heat Rate/ SHR/ net station heat rate of the power station is 2465.2 kCal/kWh.

Computation of Fixed Charges

131. Computation of Fixed Charges are given in Article 21 and it reads as under:

"ARTICLE 21 TARIFF

21.1.1 The Utility shall pay to the Supplier tariff comprising the sum of Fixed Charge and Fuel Charge payable by the Utility to the Supplier for Availability and for supply of

electricity, as the case may be, in accordance with the provisions of this Agreement (the "Tariff").

21.1.2 As a part of Tariff, the Utility shall pay to the Supplier an amount, determined in accordance with the provisions of this Article 21, as the Fixed Charge for Availability of the Power Station to the extent of Normative Availability thereof (the "Fixed Charge").

21.2 Base Fixed Charge

21.2.1 The Parties agree that the fixed charge shall, in accordance with the offer of the Supplier for the Base Year, be Rs. 2.97 (Rupees two and paise ninety seven) per kWh, to which the amount, if any, determined in accordance with the provisions of Clause 21.2.2 or 21.2.3, as the case may be, shall be added or deducted, as the case may be, and the sum thereof (the "Initial Fixed Charge") shall be revised annually in accordance with the provisions of Clause 21.2.4 to determine the base fixed charge for the relevant Accounting Year (the "Base Fixed Charge').

21.2.2 In the event the ***Completion Certificate specifies a Station Heat Rate*** *that is lower than the Station Heat Rate specified in Schedule- C, the Initial Fixed Charge shall be increased such that for every improvement of 1% (one per cent) as compared to the Station Heat Rate specified in Schedule-C, the amount specified in Clause 21.2.1 shall be increased by 1.5% (one point five per cent) thereof. Provided, however, that in case the source of Fuel is situated within 100 (one hundred) kilometres of the Power Station, such increase shall be restricted to 1% (one per cent).*

21.2.3 In the event the ***Completion Certificate specifies a Station Heat Rate*** *that is higher than the Station Heat Rate specified in Schedule- C, the Initial Fixed Charge shall be decreased such that for every increase of 1% (one per cent) as compared to the Station Heat Rate specified in Schedule-C, the amount specified in Clause 21.2.1 shall be decreased by 2% (two per cent) thereof. Provided, however, that in case the source of Fuel is situated within 100 (one hundred) kilometres of the Power Station, such*

decrease shall be restricted to 1.5% (one point five per cent).

SCHEDULE - C SPECIFICATION AND STANDARDS

2.1 The Station Heat Rate, reckoned at the Point of Grid Connection Shall, after accounting for auxiliary consumption and transmission losses, not to exceed 2350 (two thousand three hundred and fifty) kCal per kWh at 100% (hundred per cent) maximum continuous rating (MCR) or such lower Station Heat Rate as may be specified in the Completion Certificate or Provisional Certificate, as the case may be.

132. From the reading of the Article 21.2.2, 21.2.3 and Schedule C, it is clear that the net SHR of 2465.2 kCal/kWh is to be compared with 2350 kCal/kWh to decide the incentives/ disincentives.

Computation of Fuel Charges:

133. Clause 22.2.2 of the PSAs provides for computation of the Fuel Charge as under:

$$\text{Fuel Charge} = \frac{\textbf{SHR} \times \text{Landed Fuel Cost per kg}}{\text{Average GCV per kg}}$$

The SHR as determined by tests and specified in the Completion Certificate i.e. 2465.2 kCal/kWh would be fed into this formula for computing the Fuel Charges to be paid to the Supplier.

134. Since there is only one generating unit of 600 MW capacity in the power station, the net SHR for PSA 1 and PSA 2 shall be same as 2465.2 kCal/kWh. Accordingly, the computation of Fixed Charges and Fuel Charges under PSA 1 and PSA 2 shall be on the basis of

this Station Heat Rate/ SHR/ net station heat rate of 2465.2 kCal/Kwh.

135. In view of the foregoing we set aside the Impugned Order dated 25th May, 2020 passed by the Central Commission in Petition No. 169/MP/2019. The matter is remitted back to the Central Commission with the direction to consider the matter afresh keeping in view the opinion expressed in this Judgment and issue appropriate orders in accordance with law.

136. The Appeal and the IA are disposed of in above terms. No order as to costs.

PRONOUNCED IN THE VIRTUAL COURT THROUGH VIDEO CONFERENCING ON THIS 13th DAY OF MAY, 2021.

(Justice R.K. Gauba)
Judicial Member

(Ravindra Kumar Verma)
Technical Member

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REPORTABLE/NON-REPORTABLE

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