

PETITION NO.....

**PUDUCHERRY POWER
CORPORATION LIMITED**

**PPCL GAS POWER STATION
(32.5 MW)**

**BEFORE THE HON'BLE JOINT ELECTRICITY REGULATORY
COMMISSION FOR THE STATE OF GOA AND UNION TERRITORIES,
GURUGRAM**

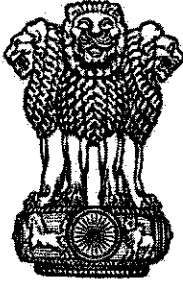
PETITION NO.
OF 2020

Petition for determination and approval of tariff of PPCL Gas Power Station (32.5 MW) for the period 2021-22 along with Annual Performance Review for the FY 2020-21, Revision of Tariff for the period 01.04.2018 to 31.03.2019 after the provisional truing up exercise and Revision of Tariff for the period 01.04.2019 to 31.03.2020 after the Provisional truing up exercise

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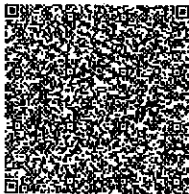


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BEFORE THE JOINT ELECTRICITY REGULATORY COMMISSION FOR THE
STATE OF GOA AND UNION TERRITORIES
Udyog Vihar - Phase I, Sector-18, Gurugram

PETITION NO:
of 2020

IN THE MATTER OF

: Petition under Section 62 and 83 (4) of the
Electricity Act, 2003 read with chapter-II of

.....2/-



Notary Seal

ARJUN SHARMA, I.A.S
Managing Director
Puducherry Power Corporation Limited
(A Government of Puducherry Undertaking)
Puducherry.

:2:

The Joint Electricity Regulatory Commission (Terms & Conditions for Determination of Tariff) Regulations, 2018 for approval of Tariff for Karaikal Gas Power Station, (32.5MW) for the period 2021-2022.

AND IN THE MATTER OF :

PETITIONER : The Managing Director
Puducherry Power Corporation Ltd.(PPCL),
#10, Second Cross, Jawahar Nagar,
Boomiyanpet,
PUDUCHERRY-605 005.

RESPONDENT : The Superintending Engineer-cum-HOD,
Electricity Department,
Government of Puducherry,
137, NSC Bose Salai,
PUDUCHERRY - 605 001.

AFFIDAVIT OF THIRU ARJUN SHARMA, IAS, SON OF SHRI OM PRAKASH SHARMA AGED ABOUT 32 YEARS RESIDING AT GOVERNMENT HOUSE, DUPLEX STREET, KARAİKAL - 609 602.

I, the deponent above named do hereby solemnly affirm and state as under:

- 1.0 I am working as Managing Director (MD) of the Petitioner Company and I am duly authorized by the said petitioner to file this affidavit. I am conversant with the facts of the case.
- 2.0 I have read the accompanying Tariff Petition under Section 62 and 83 (4) of the Electricity Act, 2003 read with chapter-2 of the Joint Electricity Regulatory Commission (Terms & Conditions for Determination of Tariff) Regulations, 2018 and I say that the facts stated therein are based on the records of the Petitioner maintained in the ordinary course of its business and believed by me to be true.



(Handwritten Signature)

DEPONENT

ARJUN SHARMA, I.A.S
Managing Director
Puducherry Power Corporation Limited
(A Government of Puducherry Undertaking)
Puducherry.

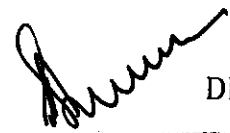
VERIFICATION:

I, the deponent above named do hereby verify that the contents of my above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed there from.

Verified at Karaikal on this 23 day of November, 2020.

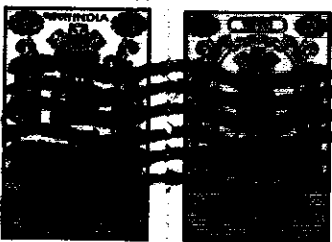
PLACE : Karaikal

DATE : 23-11-2020



DEPONENT

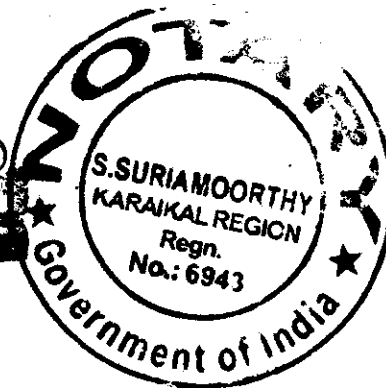
ARJUN SHARMA, I.A.S
 Managing Director
 Puducherry Power Corporation Limited
 (A Government of Puducherry Undertaking)
 Puducherry.



S. SURIAMOORTHY, B.A., LL.B.
 ADVOCATE & NOTARY
 No. 45/1, MARKET STREET,
 KARAİKAL- 609 602.
 PUDUCHERRY STATE
 SOUTH INDIA

Reg. Under N.C. No 161/2020

Date : 23-11-2020




PUDUCHERRY POWER CORPORATION LIMITED
PUDUCHERRY

RESOLUTION PASSED BY CIRCULATION DT 19.11.2020

RESOLVED THAT the Managing Director, PPCL be and is hereby authorized to file, sign the tariff petition for the tariff period 2021-22 and subsequent tariff period and also filing the Truing up petition/ Clarification petition /Review petition / Miscellaneous petition, etc., to the earlier tariff orders for the period 2018-19, 2019-20 and Tariff Order for the tariff period 2020-21, if any and Condonation of delay petition for the tariff petition for the tariff period 2021-22, if required and any other documents required for the purpose of filing tariff petition on behalf of the Corporation before JERC and also to authorize such officials of the Corporation to attend the hearings / meet clarifications, etc., to be required for the purpose.

ALSO RESOLVED THAT a sum of ₹ 15,00,000/- (Rupees fifteen lakhs only) or fees payable at the time of filing the Tariff petition / Truing up petition / Condonation of delay petition / Review petition / Miscellaneous petition, etc., be and are hereby approved towards the cost of licence fee for filing the tariff petition for the tariff period 2021-22.

ALSO RESOLVED THAT approval is hereby accorded for incurring any other incidental expenditure (or) fees other than the filing fees as may be required for filing of tariff petition for the tariff period 2021-22 and filing the Truing up petition / Clarification petition / Review petition / Miscellaneous petition, etc., to the earlier tariff orders for the period 2018-19, 2019-20 and Tariff Order for the tariff period 2020-21, if any and Condonation of delay petition for the tariff petition for the tariff period 2021-22, if required.


ARJUN SHARMA, I.A.S
Managing Director
Puducherry Power Corporation Limited
(A Government of Puducherry Undertaking)
Puducherry.

BEFORE THE JOINT ELECTRICITY REGULATORY COMMISSION**PETITION NO:****OF 2020**

IN THE MATTER OF : Petition under Section 62 and 83 (4) of the Electricity Act 2003 read with chapter-II of the Joint Electricity Regulatory Commission (Terms & Conditions for Determination of Tariff) Regulations, 2009 for approval of Tariff for Karaikal Gas Power Station, (32.5 MW) for the period 2021-22.

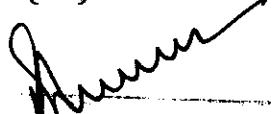
**AND IN THE
MATTER OF:**

PETITIONER : The Managing Director
Puducherry Power Corporation Ltd.(PPCL),
#10, Second Cross, Jawahar Nagar,
Boomianpet,
Puducherry-605 005

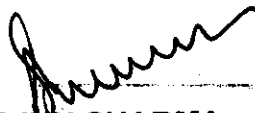
RESPONDENT : The Superintending Engineer-cum-HOD,
Electricity Department,
Govt. of Puducherry,
137, NSC Bose Salai,
Puducherry - 605 001.

MEMORANDUM OF TARIFF PETITION**MOST RESPECTFULLY SHOWETH:**

1.0 The Petitioner herein i.e. the Puducherry Power Corporation Ltd. (PPCL) is a Government of Puducherry undertaking and is a Government Company within the meaning of the Companies Act, 1956. Further, it is a "Generating Company" as defined under Section 2(28) of the Electricity Act, 2003.


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- 2.0. The Puducherry Power Corporation Ltd was incorporated on 30.03.1993 with the objective of generating 32.5 MW of Electricity (22.9 MW from gas turbine and 9.6 MW from Steam turbine) at Karaikal which is one of the outlying regions of Union Territory of Puducherry. The required gas of 1.91 lakhs cu.m of gas per day is obtained from the gas wells at Narimanam in the Cauvery basin under an agreement with the GAIL (India) Ltd.
- 3.0. The Karaikal Gas Power Station was declared commercial operation w.e.f. 03.01.2000 and is supplying power to Electricity Dept., Puducherry under a PPA signed with them on 25.02.2002. Consequent to setting up of Hon'ble Joint Electricity Regulatory Commission, the Petitioner had filed first petition for determination of tariff for the period 2011-12. The Hon'ble Commission vide Order dated 06.08.2011 had determined tariff with effect from June, 2011. At present, the Petitioner is operating at the tariff rate fixed by the Hon'ble Commission for the PPCL vide order dated 20th May 2019 on the basis of petition filed for the tariff period 2019-20.
- 4.0 Section 62 of Electricity Act, 2003 provides for determination of tariff by the Appropriate Commission for supply of electricity by a generating company. The Hon'ble Commission, under Section 83(4) of Electricity Act, 2003, is vested with the jurisdiction to regulate the tariff of the Generating Companies owned or controlled by the Govt. of Union Territories.
- 5.0 In terms of Section 61 of the Electricity Act, 2003 this Hon'ble Commission has also notified the Joint Electricity Regulatory Commission (Terms & Conditions for Tariff) Regulations, 2009 (hereinafter referred to as "Tariff Regulations, 2009").

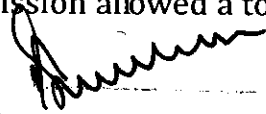

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6.0 In terms of the Tariff Regulations, 2009, the Petitioner has formulated the tariff for Karaikal Station for the year 2021-22. As per Regulation 12 of Tariff Regulations, 2009 the formats 1G to 12G as applicable to generating Companies have been filled in and placed at **Annexure-I**. The various assumptions considered for finalization of tariff brought up in the following paras is as per the methodologies specified by this Hon'ble Commission as well as the Hon'ble CERC as the case may be.

7.0 The Tariff has been calculated as fixed /capacity charges in Cr./per annum and the energy charges calculated based on cost of fuel/gas consumed for generation of electricity, as provided in Regulation 19 of the Tariff Regulations, 2009. The JERC/CERC Regulations have been kept in view as applicable while finalizing this petition and formulating tariff for instant station.

A. CAPITAL COST:

- i. The Petitioner has claimed the total capital cost as stated in Regulation 22 (2) of the Tariff Regulations, 2009. The Petitioner has prepared the tariff for the year 2021-22 by considering the capital cost of ₹.169.33 crores as opening capital cost as per Hon'ble Commission Order dated 18.05.2020. The total Capital Cost of ₹.162.62 crores is up to 31.03.2020, as per the unaudited financial statement pertaining to the financial year 2019-20.
- ii. In the FY 2018-19, Rotor amounting to ₹.9.93 crores, Stator Vane Kit amounting to ₹.2.18 crores and Inlet Guide Vane arrangement amounting to ₹.1.09 crores, totaling to ₹.13.20 crores were installed in gas turbine during the major inspection of the gas turbine held in Dec'18-Jan'19, for which the Hon'ble Commission allowed a total cost

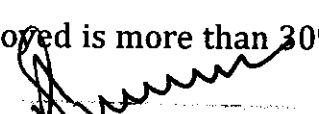

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of ₹.11.769 crores instead of ₹.13.20 crores, as a result of which, there is a difference of Capital cost amounting to ₹.1.43 crores, for which supply order is enclosed. Therefore, the difference cost amounting to ₹.1.43 crores is considered in the tariff petition 2021-22 additionally. M/s BHEL GE Gas Turbine Services in its inspection report of Extended Hot Gas Path Inspection carried out in April-May'2015 had recommended for i) Compressor rotor and stator blades replacement with inlet guide vanes replacement as a set. Compressor rotor blades were replaced along with turbine rotor. In view of above Stator vane kit and Inlet guide vanes were replaced. Accordingly, the same is also added to arrive at the Closing capital cost for the tariff period 2020-21 (i.e) the opening capital cost for the tariff period 2021-22. Copy of the recommendations, MOM and the supply order are enclosed as proof of installation of above items as **Annexure - II**.

- iii. As such, the said amount may also be considered while arriving the opening capital cost of the Corporation for the financial year 2021-22, as the said item are also replaced along with Rotor in order to have the better performance and efficiency which would also be beneficial to the Respondent. Accordingly, the Interest on ROI and Depreciation thereon has been arrived in the respective clause.
- iv. It is submitted to the Hon'ble Commission may allow the claim of the Petitioner for a capital cost of ₹ 170.76 crores for the tariff period 2021-22.

RETURN ON EQUITY

- i. It is submitted that as per Regulation 23 of the Tariff Regulations, the tariff determination is by splitting the capital expenditure into debt and equity of 70:30. If the equity employed is more than 30%,

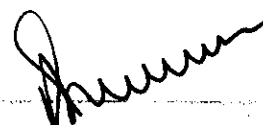

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the amount of equity for determination of tariff is limited to 30% and the balance amount is considered as normative loan. In case of instant station, since the entire capital cost has been funded from the own funds, the equity has been considered at the normative level of 30% and the balance 70% has been considered as normative loan for calculation of Interest on Loan component of capacity charges.

- ii. The return on Equity has been calculated @ 21.868% for the year 2020-21 as per Regulation 24 of the Tariff Regulations, 2009 read with CERC Tariff Regulations 2019.
- iii. It is submitted that Petitioner does not have tax holiday with effect from the financial year 2010-11 as the tax holiday was applicable to the Corporation up to 2009-10. As therefore, the Petitioner is claiming return on equity in the tariff petition at grossing rate @ 21.868 %.
- iv. It is respectfully prayed that the return on equity as calculated @ 21.868 % may be allowed by the Hon'ble Commission.

B. DEPRECIATION ON ASSETS

- i. The rate of depreciation has been considered as per Regulation 26 of the Tariff Regulations, 2009 read with the applicable CERC Regulations 2019. In this regard, it is submitted before the Hon'ble Commission that the accumulated depreciation of the respective individual Asset has been restricted to 90% of the Capitalized value of the Assets in order to keep the 10% of the Cost as WDV as per Regulation 26 beyond which the depreciation has not been claimed in view of the provisions in the Tariff Regulations, 2009.



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- ii. The station is more than 20 years old and Petitioner has calculated depreciations accordingly. The claim of the Petitioner is on the same methodology as adopted for the previous years.
- iii. It is prayed that the depreciation may be allowed as claimed by the Petitioner.

C. INTEREST ON WORKING CAPITAL

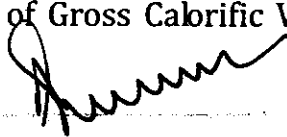
For computing the element of Interest on Working Capital (IWC) of fixed/capacity charges the rate of interest considered is SBI Base Rate as on 01.4.2019 as per CERC Regulations 2019 Regulation 34 (B). The energy charges considered while working out IWC are based on average actual fuel consumption and payments made pertaining the period commencing from July '20, August '20 and September '20 and the same as per Petitioner's unaudited annual accounts.

D. OPERATION & MAINTENANCE (O&M) EXPENSES

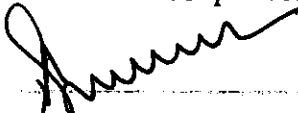
- i. The Operation and Maintenance expenses element of Fixed/Capacity charges has been taken @ $49.62 \text{ lac/MW} * 1.068 = ₹.52.99 \text{ lac/MW}$ as approved by the Commission in its tariff order dated 20th May 2019. It is submitted that Petitioner has implemented the Seventh CPC replacement scales of pay to its Officers and staff from 01.04.2019 and the additional annual recurring financial implication will be ₹.1.70 crores per year.

E. HEAT RATE AND AUXILIARY CONSUMPTION

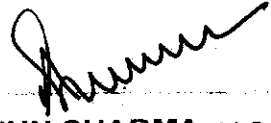
- i. The Tariff Regulations, 2009 of the Hon'ble Commission provides that the norms and parameters of the Central Commission's Tariff Regulations shall be applicable. The Central Commission's Regulations provide for determination of Station Heat Rate on the basis of Gross Calorific Value (GCV).


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- ii. The Station design net heat rate is 2291 Kcal/kwh. A copy of the heat balance diagram for design heat rate is enclosed in **Annexure-III**. The gross heat design heat for net station design heat rate of 2291 Kcal/kwh works out to (2291×1.1) 2520 Kcal/kwh considering a conversion factor of 1.1 i.e. GCV = 110% of NCV. Further, applying the degradation factor of 5% as per the CERC regulations, the normative GSHR comes to $2520 \times 1.05 = 2646$ Kcal/kwh. The Commission approved the Gross Station Heat Rate at 2646 kcal/kWh for the FY 2015-16 on the basis of the submission of the Performance Guarantee Report of the Corporation for the guaranteed heat rate of 2291 kcal/kWh (on the basis of the NCV of the gas).
- iii. With regard to auxiliary power consumption, the Petitioner seeks to invoke the power of the Hon'ble Commission to deviate from the Tariff Regulations, 2009 considering the peculiar facts of the case and for reasons beyond the control of the Petitioner. The Auxiliary Power Consumption (APC) is considered as per actual based on period from 01.04.2020 to 30.09.2020 because the station has electric Gas Booster Compressor pumps due to which APC is higher.
- iv. The CEA has also recommended higher APC for plants having electric Gas Booster Compressor. Since Natural Gas is supplied at a lower pressure i.e. 3 to 5 kg/sq.cm. Electric driven Gas Booster compressors are required to boost up the gas pressure to 17 kg/sq.cm resulting in increase of APC. Four electric driven Gas Booster Compressor of 300 KW each has to run to achieve full load. It is imperative to submit that the Hon'ble Commission and also the Hon'ble Appellate Tribunal have taken the view that in number of judgments, the vintage of power plants has to be kept in mind before determining the various operating parameters for the power plant and accordingly the petitioner has considered APC at .6% percentage which is around the actual.


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- In Gujarat State Electricity Corporation Limited v Gujarat Electricity Regulatory Commission &Ors (Judgment dated 23.11.2006 in Appeal No. 129 of 2006), where, the Hon'ble Tribunal had recommended a *modification in respect of the auxiliary consumption of the said generating stations viz. Gandhinagar 1 to 4, Sikka, KLTPS, Dhuravan.*
 - In Indraprastha Power Generation Company Limited v. DERC(Judgment dated 10.01.2008 in Appeal No. 81 of 2007) wherein the Hon'ble Tribunal directed the DERC to consider relaxation in heat rate and O & M Expenses considering the vintage of the Stations.
- v. The CERC also in its order dated 19.06.2002 in Petition No.62 of 2000 has allowed relaxed operational norms in case of Takhar Thermal Power Station comprising of four units of 60 MW and two units of 110 MW.
- vi. As per the Assam Electricity Regulatory Commission (AERC) Tariff Order for the FY 2103-14 to FY2015-16 for Assam Power Generation Corporation Limited in petition no.3/2013, the AERC has allowed APC of 4.5 % for NTPS for against CEA recommendation of APC as 4% and APC of 5.5 % for LTPS with WHRU.
- vii. It is not possible for the Petitioner to achieve the norms specified in the Regulations, which are applicable generally. It is for this specific purpose that where there is sufficient justification and taking into account the facts of a particular generator, the power to relax and the power to deviate are provided for.
- viii. It is submitted that the month wise under recovery of Energy Charges on account of APC and Heat rate is enclosed as **Annexure-IV**. For the FY 2018-19, the under recovery is ₹ 4.40 crores. Hence, request for


ARJUN SHARMA, I.A.S
 Managing Director
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relaxation of APC to 5.5 % as allowed in the case of AERC may be considered.

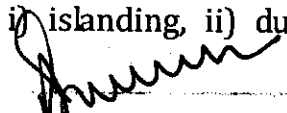
- ix. Applying the above analogy, the Petitioner is praying for the APC of 5.5%. The Petitioner is placing all the relevant pages from the above Judgments / Orders in a separate compilation

F. FUEL COST

It is submitted that the Petitioner has considered requirement of fuel stock etc. for working out interest on working capital and the Variable Charges for power supply from Karaikal station, based on landed cost of gas for the months of July'20, August'20 and September'20 instead of landed cost of the gas for the months of Jan.'19, Feb.'19 and March'19. This has been considered to arrive the fuel cost in realistic manner. Therefore, it is prayed that Hon'ble Commission may please allow working out of capacity and variable charges based on weighted average landed cost of gas for the months of July'20, August'20 and September'20.

G. NORMATIVE ANNUAL PLANT AVAILABILITY FACTOR (NAPAF):

- i. It is submitted that PPCL is not connected to State Load Dispatch Centre(SLDC) since the inception of plant operation. Although PPCL is sending the Declared capacity by mail to SLDC daily, the same is not certified by the concerned load dispatch centre after the day is over as per the Regulation 42(5) CERC Tariff regulation 2019. Further, as per the regulation "peak hours", "off peak hours", "High demand season" & "low demand season" have not been declared by SLDC. So there are no instructions from SLDC regarding the maintenance of load. Hence the PPCL plant generates at full load unless the plant load is restricted due to i) islanding, ii) due to


ARJUN SHARMA, I.A.S
Managing Director
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reduced gas flow from GAIL iii) due to lack of load from Electricity Department. PPCL is ready to provide the Plant Availability Factor but since it is not validated by the SLDC, it is not been given. In view of above, PPCL may be allowed to give the Plant Load Factor instead of Plant availability Factor. In terms of Regulation 36 of the Tariff Regulations, 2009 read with the CERC Regulations, 2014, the Petitioner is praying for **Normative Plant Load Factor** of 85% instead of NAPAF of 85%. The CERC has specified Normative Annual Plant Availability Factor (NAPAF) for recovery of full fixed charges at 85% for the period 2019-24 for thermal generating stations as per Regulation 49(A)a of Tariff regulation 2019.

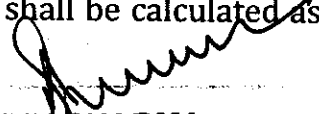
- ii. The Hon'ble Commission may be pleased to fix the norm-"Normative Annual Plant Load Factor" for the Karaikal station for recovery of full fixed charges in the FY 2021-22 at 85% .
- iii. The plant availability factor of PPCL in accordance with the prevailing tariff regulation of CERC, is calculated for the months from April'19 to March'20 and enclosed in **Annexure - V**.

H. ANNUAL PERFORMANCE REVIEW FOR FY 2020-21:

- i. The details of Annual Performance Review for FY 2020-21 is enclosed in the **Annexure-VI**. The cumulative Plant load Factor from April'20 to September'20 is 88.08 % and cumulative generation from April'20 to September'20 is 117.54 MU.

ii. ANNUAL FIXED CHARGES AND ENERGY CHARGES

Based on above, the Annual Fixed/Capacity charges have been worked out for the financial year 2019-20 (for detailed computations please refer **Annexure-I**). The monthly Capacity Charge payable shall be calculated as


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per the formula given in para 30(2) of CERC Tariff regulation 2014-19. As per regulation 42(3) of CERC tariff regulation 2019-24 , " hours of peak and off peak periods during the day " shall be declared by the concerned RLDC atleast one week in advance. Further High demand season (3 months) and low demand season(9 months) shall be declared by the concerned RLDC at least 6 months in advance. Since PPCL is not connected to RLDC, so the above data are not communicated to PPCL. Hence PPCL may be allowed to calculate capacity charges as per the formula given in para 30(2) of CERC Tariff regulation 2014-19 with NAPAF as calculated by PPCL .

Financial Year	Annual Capacity charge (₹ In Cr.)
2021-22	₹ 36.23 crores

The energy charges to be billed every month shall be as per following formula based on CERC Regulations 2019.

$$\text{Energy Charge (ECR)} = \text{GHR} \times \text{LGP} \times 100 / \{ \text{GCV} \times (100 - \text{APC}) \}, \text{----- A}$$

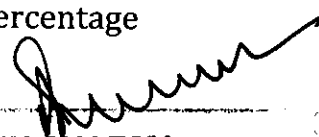
Where ECR = Energy charge rate, in Rs per KWH sent out upto three decimal charges,

GHR= Normative Gross Station Heat Rate in Kcal/kwh,

LGP= Weighted average landed price of gas in Rs/SCM, during calendar month,

GCV= Gross calorific value of gas , in Kcal per SCM during the calendar month,

APC= Normative Auxiliary Power Consumption in percentage

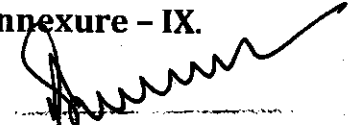

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The petitioner has considered Gross Station Heat Rate = 2646 kcal/Kwh
Auxiliary Power Consumption (APC) = 5.5%.

I. STATUTORY LEVIES /TAXES ETC

It is submitted that in addition to Billing of Fixed/capacity charges & Energy charges as being submitted for approval of this Hon'ble Commission, the Petitioner may be allowed to recover statutory taxes, duties, etc., on actuals.

- 8.0 It is also submitted that the Petitioner is presently raising bills for the energy supplied to The Respondent - Electricity Dept., Govt. of Puducherry with normative Gross heat rate of 2646 Kcal/kwh and Auxiliary power consumption of 5.0% w.e.f. 01.04.2020 as energy charges per unit and ₹.33.17 crores as capacity charges per annum at 85% PLF for the tariff period 2020-21 vide order dated 18.05.2020 issued by the Hon'ble Commission.
- 9.0 The Accounts of the Petitioner for the FY 2018-19 is completed and the same is going to be placed before the ensuing Board meeting which will be held in the month of December, 2020 for approval, after which, it would be sent to the Statutory Auditors for audit and report and to the A.G. Authorities, Chennai for further audit. Copy of the Accounts for the FY 2018-19 is enclosed as **Annexure-VII**.
- 10.0 As regard the Accounts for FY 2019-20, the Petitioner is filing the unaudited accounts for FY 2019-20 as **Annexure - VIII** since Statutory auditor would normally commence their audit after completion of audit for the FY 2018-19. The copies of invoice raised by GAIL for the period 01.04.2020 to 31.10.2020 are attached hereto as **Annexure - IX**.


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PRAYER

11.0 In view of the above, the Petitioner prays as under –

- i) Approve the tariff for the year 2020-21 as brought out in this Petition as detailed below at 85% PLF.

Fixed cost - ₹. 36.23 Crores per annum

Variable Energy Charges - As per formula in CERC regulation 2019-24 clause 43(2)(b) with normative SHR of 2646 Kcal/kwh and normative AUX of 5.5 %.

- ii) Allow the "Normative Annual Plant Load Factor" @ 85% as calculated by PPCL instead of NAPAF as laid down in the CERC Regulation 2014-19 vide clause No.36(A) for Karaikal Power Station for the year 2021-22 for full fixed cost recovery and allow CERC 2014-19 formula for calculation of capacity charges.

- iii) Allow capital cost as prayed by the Petitioner.

- iv) Allow the additional cost incurring towards implementation of 7th CPC of ₹.1.70 crores approximately per year, as this is the additional burden to the Corporation considering the Operation & Maintenance expenses as per provision.

- v) Allow the recovery of filing fees as and when paid to the Hon'ble Commission and publication expenses from the beneficiary.

- vi) Pass any other order in this regard as the Hon'ble Commission may find appropriate in the circumstances pleaded above.

**PETITIONER -
PUDUCHERRY POWER CORPORATION LIMITED**

ARJUN SHARMA, I.A.S
Managing Director
Puducherry Power Corporation Limited
(A Government of Puducherry Undertaking)
Puducherry.

PLACE : Karaikal

DATE : 23-11-2020

Annexure - I

(Tariff Format – 1 G to 12 G)

SUMMARY SHEET

FORMAT-1G

Name of the Applicant
Name of the Generating Station

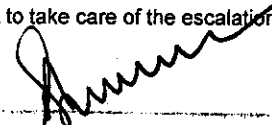
Puducherry Power Corporation LTD.
Karaikal Gas Power Station

State/UT

S.No.	Particulars	Previous year	Current year	Ensuing year
		2019-20	2020-21	2021-22 (Projections)
1	2	3	4	5
1	Calculation of Capacity /Fixed Charges(Rs.in cr.)			
1.1	Interest on notional Loan Capital (Notional)	0.00	0.00	0.00
1.2	Depreciation	2.70	3.11	3.11
1.3	Advance Against Depreciation	0	0	0
1.4	Return on Equity	11.16	11.20	11.20
1.5	Operation & Maintenance Expenses	15.80	16.13	18.93
1.6	Foreign Exchange Rate Variation	0	0	0
1.7	Interest on Allowed Working Capital (Loan Capital (Form 9 as applicable)	3.43	2.85	2.98
1.8	Taxes on Income			
1.9				
	TOTAL	33.09	33.29	36.23
2	Calculation of Energy/Variable charges	63.97	52.73	52.73
2.1	Rate of Energy Charge from Primary Fuel (REC)- P/kwh	265.12	229.38	230.59
2.2	Rate of Energy Charge from Secondary Fuel (REC)			
2.3	Rate of Energy Charge ex-bus (REC)			
3	Total			
	Grand Total (1+2) (Rs.in cr.)	97.05	86.03	88.96

Note:

- 1 Details of calculations, considering equity as per regulation, to be furnished and Detailed Calculations of all the above components of costs be furnished in the Forms mentioned against each.
- 2 Financial years for which details are to be submitted should be adjusted in accordance with the year of filing.
- 3 If multifuel is used simultaneously, give 2.1 in respect of every fuel individually.
- 3A The rate of energy charge shall be computed for open cycle operation and combined cycle operation separately in case of gas/liquid fuel fired plants.
- 3B The total energy charge shall be worked out based on ex-bus energy scheduled to be sent out in case of plants covered by ABT, and exbus energy sent out in case of plants not covered by ABT, as the case be.
- 3C Any escalation in fuel cost to be considered for subsequent years or FPA to take care of the escalation.


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FORMAT - 2G**Tariff Norms for Energy/Variable Charges**

Name of the Applicant: **Puducherry Power Corporation LTD.**
 Name of the Generating Station **Karaikal Gas Power Station**
 Region **Karaikal** State/UT **Puducherry**

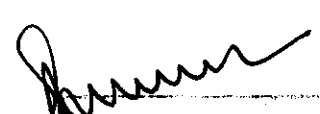
Special features of the Plant **Gas Booster pump**

a)
b)
c)
d)
e)

Basic Characteristics & Site Specific Features	Combined Cycle Plant with frame V Gas Turbine of 22.9 MW and steam Turbine of 9.6 MW, Unfired HRSG
Environmental Regulation related Features	ISO 14001 CERTIFIED
Any other specific features	
Date of Commercial Operation (COD)	03.01.2000
Type of cooling System	Induced Draft Cooling Tower

Fuel Details	Primary Fuel	Secondary Fuel	Alternate Fuel
Mention type of fuel	Natural gas		

Sl.No.	Particulars	Unit	Ref.	Derivation	Previous Year			Current year
					2017-18	2018-19	2019-20	2020-21
1	2	3	4	5	6	7	8	9
					Actual	Actual	Actual	Actual
1	Installed Capacity	MW			32.5	32.5	32.5	32.5
2	PLF	%			80.9	80.63	80.63	89.22
3	Generation	MU	A		230.33	229.57	229.57	254.70
4	Auxiliary Consumption	% MU			6.79	6.7	6.70	5.70
5	Auxiliary Consumption	MU	B		15.33	15.38	15.38	14.51
6	Generation (Ex-bus)	MU	C	A-B	215	214.18	214.18	240.19
7	Station Heat Rate	Kcal/kWh	D		2949.16	2700.56	2700.56	2601.62
8	Specific Oil Consumption	M/kWh	E					
9	Calorific Value of Fuel Oil	Kcal/Litre	F					
10	Calorific Value of Gas	Kcal/scm	G		10048.01	10065.20	10065.20	10574.00
11	Overall Heat rate	Gcal	H	A X D	679280.02	619967.56	619962.63	662631.70
12	Heat from Oil	Gcal	I	(A X E X F)				
13	Heat from Coal	Gcal	J	H - I				
14	Actual Oil Consumption	KL	K					
15	Actual Gas consumption(MCM)	MT	L	(H*1000/G)	67603.44	61595.16	61794.81	62666.11
16	Cost of Oil per KL	Rs/KL	M					
17	Cost of Gas per MCM (incl. LAD)	Rs /MT	N		8.02	10.07	10.07	11.54
18	Total cost of Gas	Rs.in Cr.	O	(N*L/100)	5421.80	6202.63	6219.77	7230.94
19	Fuel cost/kwh	Rs./kwh	P	O/(C*10)	2.52	2.90	2.90	3.01


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