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| For perusal | <i>[Signature]</i> |
| | 14/10 |
| | Secretary |
| Member/T | 13 |
| Member/F | Dt: 10-10-2015 |
| Chairman | |

To,
The Secretary,
Telangana Electricity Regulatory Commission (TSERC),
11-4-660, 5th Floor, Singareni Bhavan,
Red Hills, Lakdi-ka-pul, Hyderabad – 500004.

Sir,

Sub: Submission of Comments, Objections and Suggestions on Power Purchase Agreement (PPA) between Chhattisgarh State Power Distribution Company Limited (CSPDCL) and TSDISCOMS (TSSPDCL & TSNPDCL)— Reg.

Ref: 1. Public Notice OP No: 93 of 2015

2. Our representation dt: 05-10-2015 addressed to Secretary, TSERC

- I. The Telangana State Electricity Regulatory Commission (TSERC) vide reference 1st cited has sought comments, objections and suggestions of all the stake holders on the PPA entered by TSDISCOMS (TSSPDCL and TSNPDCL) with CSPDCL. While submitting our comments, objections and suggestions on the above PPA, **we request the Hon'ble TSERC to conduct public hearings** before taking any decision on the above issue to elicit detailed views and analysis of all the issues involved in the larger public interest.
- II. It is also noticed that, some of the vital information mentioned below is missing in the copy of PPA posted on commission's website.
 1. Schedule 1 of PPA: MOU between the Govt. of Telangana State and The Govt of Chhattisgarh State dt: 03-11-2014
 2. Schedule 2 of PPA: PPA between CSPGCL and CSPDCL dt: 03-01-2011.

We feel that no meaningful analysis can be carried out without the above information. Hence, we have requested the Hon'ble TSERC, vide reference second cited, **to post the above information on Commission's website** for furnishing our views.

We also request the Commission to direct the TSDISCOMS to furnish replies to the objections submitted below.

III. **Comments, Objections and Suggestions on the PPA between TSDISCOMS (TSSPDCL and TSNPDCL) and CSPDCL:**

1. Significantly, the above PPA is entered through MOU route. The reasons for adopting MOU route instead of competitive bidding route are not known. If the reason is attributed to the objective of responding to current power crisis in Telangana, it would be more logical. However, that is not the case. As we can see that power under this PPA can be procured only after grant of open access by CTU, which can happen after a minimum period of two years with the completion of Wardha-Maheshwaram line. Thus,

MEMBER (T) PESHU
No : 1094
DATE : 26-10-2015

there is no specific advantage in adopting MOU route over Competitive Bidding route, and as such MOU route is not recommended.

2. Additionally, there are several Generators and suppliers in the NEW grid, in both public and private sector, who are willing to supply power at a very competitive rates. This is clear from the response utilities in southern region are getting whenever competitive bidding has been called for, for procuring power on short term, medium term and long term basis. However, pertinently, the only stumbling block in not drawing above power from NEW grid has been lack of sufficient transmission corridor connecting southern corridor from North. In such a scenario, TSDiscoms should have gone for competitive bidding route instead of MOU route adopted now, which would have resulted in huge savings for the State.
3. There are several highly risky and detrimental clauses found in the PPA now signed with CSPDCL. This is because the PPA is taking MOU route, and not competitive bidding.
4. PPA or MOU: Schedule 2 of this PPA refers to a PPA between Chhattisgarh State Power Generation Company Limited (CSPGCL) and Chhattisgarh State Power Distribution Company Limited (CSPDCL) dt: 03-01-2011. However, in the monthly report on broad status of thermal power projects in the country, prepared by the Central Electricity Authority, GOI, for April, 2015, it is stated that an MOU has been executed with CSPDCL for sale of 100% power on 03-01-2011. **(copy enclosed)**.
 - TSDISCOMS may please clarify whether it is a MOU or a PPA that is referred in Schedule 2 of the PPA now submitted for approval of TSERC.
 - If it is a PPA between CSPGCL and CSPDCL, then whether the above PPA has been approved by the CSERC or not? Being a critical PPA, it needs to be established whether it has received the consent of the CSERC. Without such consent, then the PPA now submitted to TSERC for consent cannot be allowed.

In this regard, TSDISCOMS may furnish a copy of the approved PPA between CSPGCL and CSPDCL.

5. Basic information that any PPA shall contain is the expected tariff at which the procurer would buy power from the supplier for the duration of the agreement, year on year, and detailed procedure for arriving at the above tariff. However, in the PPA now submitted by the TSDISCOMS **there is no mention of any tariff** at which TSDISCOMS would buy power from CSPDC. Schedule 4 of the PPA dealing with tariff merely mentions certain parameters like ROE, Interest on loan capital, depreciation etc., which would be considered for determination of tariff. The exact details of the above parameters and procedure that would be adopted for determination of tariff is not available anywhere. It is not clear how this schedule would help in the determination of tariff?

We request the hon'ble commission not to give consent to the above PPA in the absence of above particulars. We also request the Commission to direct TSDISCOMS to furnish detailed tariff particulars for the term of the agreement and the procedure adopted for determining the tariff.

6. **Recovering Fixed Charges:** Alarming, certain provisions in the PPA will force TSDISCOMS to pay huge fixed costs to CSPDCL, even without receiving energy, for no fault on its part.

- Article 6.5.3 states that, "Notwithstanding anything contained in Articles 6.5.1 and 6.5.2 above, the supplier shall recover all Fixed Charges even in case the Procurers do not schedule the **entire Aggregate Contracted Capacity**, subject to the Power Station having declared Normative Availability as per the terms of this Agreement."
- The Wardha-Maheshwaram (W-M) line is expected to be completed by the year 2017. There are many factors which would influence the quantum of corridor that would be allotted to TSDISCOMS by CTU given the requirement of 1000 MW under the PPA. It will take many years even after the completion of Wardha-Maheshwaram line (W-M line) for TSDISCOMS to get allotted entire 1000 MW capacity transmission open access. The carrying capacity of W-M line is about **4000 MW**, and this would be available only after the completion of all upstream and downstream lines in Western grid and southern grid connecting the W-M line. Even after the completion of main W-M line, open access would be permitted to all stake holders in a phased manner. Several States like Tamilnadu, Andhra Pradesh etc., have already applied for open access and these States would be given preference over TSDISCOMS in the allotment of corridor.
- For many reasons mentioned above, if TSDISCOMS are allotted corridor less than the requirement of 1000 MW, the TSDISCOMS shall end up paying huge fixed costs to CSPDCL for the short fall in allotted capacity.

For example, if TSDISCOMS are allotted 400 MW during the year 2018 of the required 1000 MW capacity, TSDISCOMS shall pay capacity charges to CSPDCL for the unutilized capacity of 600 MW as per the provisions of Article 6.5.1. Assuming a capacity charge of Rs 2.50/unit, total capacity charge payable to CSPDCL by TSDISCOMS without receiving energy would be: $600 \times 8.76 \times 2.5/10 = \text{Rs.1,314 crore/year}$. This harmful provision needs to be deleted to avoid payment of huge fixed costs by TSDISCOMS.

7. **Scheduled Delivery Date(s) and Term of Agreement:**

- **Scheduled Delivery Date(s) (SDDs):** As per Article 1, Scheduled Delivery Date(s) (SDDs) is stated to have the meaning ascribed thereto in Article 6.1.1 of the PPA. Article 6.1.1 states that, "Subject to the approval to be accorded by the CTU for the Transmission corridor, the Supplier shall be responsible to commence supply of power up to the Aggregated Contracted Capacity by the dates on which the Developer commences supply of power from each of the Units of the Power Station under the agreement dated 03 January 2011, and which shall be commencement of supply of 500 MW power from the date of commissioning of the first Unit of the Power Station by the Developer and the balance 500MW from the date of commissioning of the second Unit of the said Power Station, which shall be the Scheduled Delivery Date(s)."

TSDISCOMS are requested to furnish the details of commissioning dates of Unit 1 and Unit 2 of Power Station by the developer.

- **Term of Agreement:**

- i. Article 2.2 states that, "Subject to the terms of this Agreement, this Agreement shall continue in force from the Effective Date to Expiry Date, unless earlier terminated to Article 2.3." As per Article 2.1, this agreement shall come into effect from the date it is executed by the last of the Parties and such date shall be referred to as the "Effective date". As the date of signing of this PPA is 22nd September 2015, it is presumed that effective date is 22nd September 2015.
- ii. And Expiry date is defined in Art 1 as the date which is the 12th anniversary of the Delivery Date or such extended period as mutually agreed upon by both parties."
- iii. There appears a **conflict between Art 2.2 and definition in Art 1** in deciding the term of the Agreement. As per the Article 2.2, the effective date for commencement of term of the agreement has already taken place, which is 22nd September, 2015. Whereas, as per Article 1 under definition clause, term of the agreement commences from Delivery Date. Though the term Delivery Date is nowhere defined, presuming that Delivery date is same as Schedule Delivery Date, it is very clear that delivery date and effective date which is date of execution of this contract, are not one and the same. This ambiguity need to be clarified and set right.

- **Revised Scheduled Delivery Date(s):** It is stated in Article 6.1.3 of PPA that, "the supplier and the procurers may mutually agree for commencement of supply of power in a phased manner from the Revised Scheduled Delivery Date(s) as specified in this Agreement."

- i. It is not clear where these details are given in the PPA.
- ii. It is also not clear what is the meaning of the term "phased manner"?
- iii. Does it mean that the supplier would agree for supply of power which is coterminous with the approved transmission capacity by the CTU? If so what would be the Aggregate Contracted Capacity for the payment of capacity Charges? Would it also change in tune with the approved transmission capacity? If so, how the tariff would be determined by the CSERC? What would happen to the balance capacity of Power Station? Who would bear the stranded costs? Would all these changes again require the approval of concerned regulatory commissions, i.e. TSERC and CSERC?

TSDISCOMS are requested to clarify these issues.

- iv. The next question arises as to what would happen if CSPDCL does not agree to revise the Scheduled Delivery Date(s)? Does it not result in cancellation of approved transmission capacity by the CTU? What will happen to all the investment made by TSDISCOMS to evacuate power from the delivery point/interconnection point in anticipation of supply of power under this PPA? Would it be reimbursed by the CSPDCL? How these costs are determined and recovered? This needs to be included in this PPA.

The above are some of many questions that need to be addressed in the current PPA itself to avoid complications at later date.

8. Article 6.7.3 of the PPA states that, "If any Procurer does not avail power up to the available capacity provided by the Supplier corresponding to such Procurer's Contracted Capacity, the Supplier shall be entitled to sell such available capacity not scheduled by such Procurer, to any person without losing the right to receive the Capacity Charges from the Concerned Procurer for such unavailed available capacity. In such a case, the sale realization in excess of the Energy Charges, shall be equally shared by the Supplier with the Concerned Procurer....".
- The above article puts the TSDISCOMS in a serious disadvantageous position. The PPA is for entire 1000 MW capacity and TSDISCOMS should have total liberty to use the above power in whatever manner they want. Schedule 5 is only indicative of the relative requirement of each of the TS Discoms. Any changes in consumption patterns, requirement of individual Discoms without affecting the overall contracted capacity under this PPA should not result in any overall additional burden. But the above Article treats the current PPA as a separate agreement entered with each of the Discoms by the supplier limiting suppliers obligation to each of the Discoms in the ratio specified at Schedule 5. This has serious implications for TSDISCOMS.
 - Following example illustrates how the above provision would result in additional financial burden on TSDISCOMS.
 - Total Capacity: 1000 MW.
 - Capacity allotted to SPDCL: 700 MW
 - Capacity allotted to NPDCL: 300 MW
 - Assuming capacity charge: Rs 3/unit, Energy charge: Rs 2/unit. (other charges like wheeling/transmission charges are ignored)
 - Period considered 1 year

Case 1 (Drawals as per Schedule 5):

scheduling by SPDCL: 700 MW

Scheduling by NPDCL: 300 MW

Charges payable by SPDCL: $700 \times 8.76 \times 3 + 700 \times 8.76 \times 2/10 = \text{Rs } 3066 \text{ cr}$

Charges payable by NPDCL: $300 \times 8.76 \times 3 + 300 \times 8.76 \times 2/10 = \text{Rs } 1314 \text{ cr}$

Total charges payable by two DISCOMS: Rs.4,380 cr

Case 2 (underdrawal by one company, say NPDCL):

Scheduling by NPDCL: 100 MW

Charges payable by NPDCL: $300 \times 8.76 \times 3 / 10 + 100 \times 8.76 \times 2 / 10 =$ Rs 963.60 cr

Scheduling by SPDCL: 700 + 200 = 900 MW

Charges payable by SPDCL: $900 \times 8.76 \times 3 / 10 + 900 \times 8.76 \times 2 / 10 =$ Rs 3942 cr

Charges shared (50% over energy charges) by the supplier with TSNPDCL=
 $200 \times 8.76 \times 3 \times 1 / 10 \times 1 / 2 =$ Rs 262.80 cr

Net charges payable by TSNPDCL = $963.60 - 262.80 =$ Rs 700.80 cr

Total charges payable by TSSPDCL and TSNPDCL = Rs 4642.80 cr

Hence, additional burden on TSDISCOMS in case 2 = $4380 - 4117.29 =$ Rs 262.80 cr

The above additional burden can be avoided if the above Article is suitably amended to allow TSDISCOMS to decide on the power share as per their requirements and accordingly schedule power.

Hon'ble Commission is requested to amend the above Article accordingly.

- Article 6.7.3 of the PPA further states that, "...If both Procurers do not avail of the available capacity corresponding to their Contracted Capacity, provisions of this Article shall be applicable to them mutatis mutandis and in such case, fifty percent (50%) of the excess over Energy Charges recovered by the Supplier from sale to third party shall be retained by the Supplier and the balance fifty percent (50%) shall be provided by the Supplier to the Concerned Procurer(s) in the ratio of their available capacity not dispatched by such Concerned Procurer(s) and sold by the Supplier to third parties. During this period, the Supplier will also continue to receive the Capacity / Fixed Charges from such Procurers."

Even in this case also TSDISCOMS would be losing 50% of the revenue realized over and above energy charges by CSPDCL from sale to third parties for the energy not availed by them.

This provision shall be suitably amended to ensure that the entire proceeds of the sale to third parties accrue to TSDISCOMS. TSERC may decide on marketing margin that may be paid to CSPDCL by the TSDISCOMS. Alternately, TSDISCOMS shall have power to sell any unutilized capacity by them for sale to third parties.

9. As per article 1 of the PPA, Normative Annual Plant Availability Factor or "NAPAF" shall mean eighty five percent (85%) of the Aggregate Contracted Capacity at the interconnection point for full recovery of fixed charges on a Contract Year basis. However, Article 6.5.1 states that, "The Procurers shall apply for the open access for the contracted quantum of energy and the period. If the Open Access is granted for 80% to

100% of the Contracted quantum of power Capacity for a particular period, the 'Supplier' will have to arrange for scheduling of a minimum of 80% of the Aggregate Contracted Capacity during that period in energy terms."

Thus, as per this clause, even if open access is granted for 100% capacity, the supplier has the obligation to supply only upto 80% of the Aggregate Contracted Capacity. The two clauses appear to contradict each other.

Hence, the Article 6.5.1 shall be suitably amended to provide scheduling of a minimum of 85% of the capacity for which open access is granted and which shall not be less than 80% of Aggregate Contracted Capacity.

10. As per Article 1, the term 'Fuel' is defined as, "the primary fuel used to generate electricity, namely domestic coal."

- The term 'domestic coal' needs to be clearly defined.
- Whether it refers to coal from a specific domestic coal mine which is allotted to the Marwa thermal station, or any other source in the entire country?
- It is also to be clarified whether the above term also includes expensive coals like 'auctioned coal' etc.
- If the term fuel refers to the coal from a specific coal mine allotted to this power station, in such a case, if sufficient coal is not available to meet the obligations under this PPA, will the developer be allowed to procure coal from alternate sources of coal or not? If yes, then how the additional costs would be treated?
- If alternate sources are not permitted, then would it be treated as Force Majeure condition for the Power Station forcing the procurers (TSDISCOMS) to pay the capacity charges for the energy not dispatched?

The above issues need to be clarified.

11. Details of total capital cost including interest during construction are not given. It may please be clarified, whether norms fixed by the CERC for the determination of capital costs for various capacities of power plants, followed by prudent check of total costs, would be followed by the CSERC or not?

12. It appears that there is no certainty to the tariff that would be applicable for the power procured by TSDISCOMS. This varies as per the amendments made by CSERC from time to time.

- For example, Power Station's Net Capacity is defined as 1000 MW, being the installed capacity of the power station measured at ex-bus, reduced by the normative auxiliary power consumption as prescribed by CSERC from time to time.
- As per Article 4.3.1, the PAFM and PAFY shall be computed in accordance with the formula prescribed by the CSERC in its regulations, and as may be amended from time to time.

This kind of uncertainty in the determination of tariff is not generally seen in the PPAs and not a desirable thing in the interest of TSDISCOMS. This issue needs to be looked into by the TSERC.

13. Article 5.1.4 deals with adhoc tariff payable by the procurer to the supplier.

- Art. 5.1.4. (c) states that, " Both the Supplier and the Procurers agree that the billing and payment shall be done on an adhoc or provisional basis as per the **proposal submitted by CSPGCL to the CSERC.**"
- Art. 5.1.4. (d) states that, " The Supplier shall inform the Lead Procurer of any **adhoc Tariff determined by the CSERC** for the sale of electricity under the power purchase agreement dated 03 January 2011, pending the determination of the actual Tariff, for the purpose of billing on a provisional basis, **subject to adjustment as and when such Tariff is determined.**"
- It is not clear from the above, whether the payments of procurer to the supplier, prior to determination of actual tariff by the CSERC, would be based on proposals submitted by CSPGCL to the CSERC or on the basis of adhoc tariff determined by the CSERC. **This needs to be clarified.**
- It is also not clear how the adjustments would be made after actual tariff has been determined. Whether entire excess amount would be paid back to procurer along with interest, if so how the interest rate would be decided or the excess amount would be adjusted in future bills, or any other method for the purpose of adjustments needs to be clearly specified.

14. Article 1 defines the Contracted Capacity with respect to each procurer as, "the power contracted by the 'Supplier' from the Power Station for supply to the Telangana State DISCOMs, viz., TSSPDCL and TSNPDCL, as per the proportion laid out in Schedule 5 of this Agreement and which is co-terminus with the approved transmission capacity by the CTU for evacuation of the power from the Supplier's Delivery point."

- It is not clear how supplier would meet his obligation under the PPA if the approved transmission capacity by the CTU is below the minimum threshold PLF required to operate the power plant? Would the supplier compensate the above power from alternate sources of power supply as stated at Article 6.8? Or the supplier would not supply any power at all and still claiming capacity charges for the entire capacity?

TSDISCOMS may clarify the above issue.

15. Article 5.1.3 of the PPA states that, "all taxes levied by the competent authority, electricity duty, cess or otherwise any levy, by whatever name or names called or either described by an Indian Governmental Instrumentality, in respect of the energy generated by the Developer, including cess or on Auxiliary Consumption or any other type of consumption, including water, environment protection shall be paid for by the Supplier, and reimbursed by the Procurers. Applicable service charges on the Trading Margin, if any, shall also be borne by the Procurers."

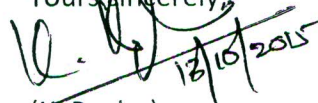
- TSDISCOMS may please furnish the particulars of current level of all taxes, electricity duty, cess, levy or cess on auxiliary consumption etc., stated above.
 - It is clear that all the above burden is a clear pass through to the procurer without any protection.
 - All these taxes and duties are outside the regulatory purview and depends on whims and fancies of concerned state governments.
16. Hence we request the TSERC obtain the details of current levels of above taxes, duties etc., and ensure their reasonableness and allow any upward revisions to the account of the supplier only.
17. Article 1 defines the Installed capacity as the sum of nameplate capacities of the units of the Power Station, confirmed by the respective performance tests. TSDISCOMS may furnish the details of performance tests.
18. The terms and conditions of the PPA signed by the Generator (CSPGCL) with CSPDCL will have direct bearing on the tariff at which power is procured by the TSDISCOMS. It is possible that some of the provisions of above PPA, say incentives, disincentives etc., may contradict the provisions of the procurers PPA with the supplier. In such an event, it is not clear which PPA would be considered as final?

TSDISCOMS may clarify this issue.

- IV. It is clear from the above analysis that the PPA between CSPDCL and TSDISCOMS has many provisions that are detrimental to the interests of TSDISCOMS. **This PPA is as open as a proforma, or a template, which can be filled unilaterally by the CSPDCL.** This cannot be termed as an agreement, between two equal parties, under any circumstances. There are several ambiguities, uncertainties, missing links which need to be addressed first before proceeding any further. The provisions of PPA are completely biased in favour of CSPDCL and against TSDISCOMS. We request the Hon'ble TSERC to not to give consent to the above PPA and direct TSDISCOMS to go for competitive bidding route for purchase of any power.

As the above PPA has serious implications for the State of Telangana **we once again request the Hon'ble Telangana Electricity Regulatory Commission to conduct public hearings** to elicit detailed views and analysis of all the stake holders in the larger public interest.

Thanking you,
Yours sincerely,


12/10/2015

(K. Raghu)

Certified Energy Manager and Auditor, and
Coordinator, Telangana Electricity Employees Joint Action Committee,
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BROAD STATUS OF THERMAL POWER PROJECTS IN CHHATTISGARH

| Sl. No. | PROJECT DETAILS | Capacity (MW) | Commissioning Schedule | | | | Broad Status |
|---------|---|--|--|--|--|-----------|--------------|
| | | | Original | | Actual(A) / As now Expected | | |
| | | | Syn. Comm | COD | Syn. | Comm COD. | |
| | State Sector | | | | | | |
| 1. | Marwa TPS (Dist: JanjgirChampa, CG) Chattisgarh) Unit-1 Unit-2 Dt of App. by State Govt Permission to establish Est. approved cost (11/08) Latest cost (02/09) Latest cost (05/10) Exp. Upto 03/07 Exp. During 07-08 Exp. During 08-09 Exp. During 09-10 Exp. During 10-11 Exp During 11-12 Exp During 12-13 Exp During 13-14 Exp During 14-15 Exp During 15-16 (Up to 04/15) Total Cumm. Exp. (up to 04/15) Type of fuel Financial Closure Zero date Date of Main Plant Order | 500 500 : 18.01.08 : Obtained on 05.05.08. : Rs. 473500 lakhs : Rs. 527730 lakhs : Rs. 631800 lakhs : Rs 496.16 lakhs :Rs 321 Lakhs : Rs 39175 lakhs : Rs 49580 lakhs : Rs.97910 lakhs : Rs 143458 Lakhs : Rs 130726 lakhs : Rs 113769 lakhs : Rs. 96421 lakhs : Rs. 21155 lakhs : Rs. 693011 Lakhs Coal : 31.03.08 : 11.04.08 for BTG and 25.08.09 for BOPs Order for civil works Placed on BHEL on 31.12.08 which is considered as zero date. : BTG on BHEL on 11.04.08 (supply, erection & commissioning of BTG and Electrical & C&I) BTG associated civil works-M/S BHEL on 31.12.08. BOPs ordered on EPC on M/s BGR on 25.08.09 | 05/12 09/12 21.12.13 (A) 30.03.14 (A) 07/12 11/12 30.03.15 (A) 08/15 08/15 | 1) 2) 3) 4) 5) 6) 7) 8) U-1: U-2: | Order issued to M/s BHEL for supply, erection, Testing & commissioning of BTG, Electrical and C&I of Rs. 1942 crores on 11.04.08 . Civil works associated in BTG package issued on BHEL on 31.12.08 . MOE&F clearance obtained on 05.02.08. Syn. of unit-1 is in 05/12 and COD is in 09/12 (45 months) and Syn. of unit-2 is in 07/12 and COD is in 11/12 (47 months). M/s Development Constructions Pvt.Ltd (DCPL, Kolkata) has appointed as consultants NOC from AAI for new Chimney obtained on 12.05.09. PPA: MOU executed with CSPDCL for sale of 100% power on 03.01.2011 Construction of RCC Chimney and stack elevators work awarded to M/s Prasad & company, HYd., on 04.03.10 by BHEL- PSER . Raft is completed. Shell concreting up to 270 M completed. Erection of steel flue can of unit-I completed and for unit-II erection Completed.All civil works including painting completed. BTG civil works awarded to M/s Bride & roof, Kolkata on 24.08.09. TG foundations under progress. M/s Indwell has been awarded for boiler erection agency by BHEL-PSER and erection work started on 15.02.10. U-1: Boiler erection started on 15.02.10. Boiler drum of U-1 lifted on 06.08.10. , 33793/41612 MT of Pressure Parts + non-pressure parts +ESP erected. 18653 MT of Boiler material erected. HT completed on 05.10.11. Non Drainable HT completed. BLU completed on 14.01.13. EDTA completed on 28.06.14. SBO completed. MDBFP for both units and TDBFP for both the units completed. MDBFP cabling under progress. Waste oil tank erection & its piping U/P. HFO line HT I/P. Safety valve exhaust line erection completed. Unit synchronized on 20.12.13 and full achieved on 30.03.14 Rotating Machines: ID Fan-1A- Lun oil skid placed.. FD Fan 1A-Lub oil flushing completed. ASPH -1B- Commissioned PA Fan- A, Erection I/P, Fan-B- Lub oil flushing U/P & piping fitting completed. PA system will be ready in 07/13. Mills (RHS)- Lub oil skid 5/5 placed. Pipe fitting completed. Mills (LHS)- Journal opening- BTT 5/5 completed. Mill 1B- lub oil flushing completed. TG-1: TG deck completed. TG erection started on 13.03.11. TG boxed-up. TG onBarring gear on 27.11.13. U-2: Boiler erection started on 24.04.10 Boiler drum lifted on 6.3.11. 11682 MT erected.. HT Completed on 06.09.12 (Drainable..BLU completed on 08.05.14. Boiler platforms erection, Mill bunker connection plate form erection U/P. Boiler insulation under progress. EDTA Cleaning completed on 28.06.14. SBO completed on 03.10.14. Unit Synchronized with oil on 31.03.15 and full load by 08/15. TG-2: TG deck completed. TG erection started on 18.10.11 MDBFP lub oil flushing completed. MDBFP trail run completed. MDBFP H/c with Motor trail run done. TDBFP 2A seal steam | | |