



ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION

Vidyut Niyamtrana Bhavan, Adjacent to 220/132/33/11 KV AP Carbides SS,
Dinnedevarapadu Road, Kurnool - 518 002, Andhra Pradesh.

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SEVENTEENTH DAY, THE TUESDAY OF JUNE
TWO THOUSAND AND TWENTY-FIVE
(17.06.2025)

:Present:

Sri P.V.R.Reddy, Member & Chairman_(I/c)

O.P. No. 2 of 2025.

In the matter of granting consent to the Power Purchase Agreement (PPA) dated 12.12.2024 between the three Distribution Licensees of Andhra Pradesh, namely APSPDCL, APEPDCL, and APCPDCL (collectively referred to as APDISCOMs) and SEIL Energy India Limited (hereinafter referred to as SEIL) for 12 years for the purchase 660 MW of power from the latter's Unit-2 of Project-I located at Nelatur and Pynampuram villages of Nellore District in Andhra Pradesh, under Section 86(1)(b) of the Electricity Act, 2003 and Section 21(5) of the AP Electricity Reform Act, 1998.

Between:

1. Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL)
2. Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL)
3. Andhra Pradesh Central Power Distribution Corporation Limited (APCPDCL)

....Petitioners(s)

AND

SEIL Energy India Limited

....Respondent

O.P.No.8 of 2025

In the matter of determination of tariff for the 5th control period, i.e., from 01.04.2024 to 31.03.2029, for the sale of 660 MW of power by SEIL Energy India Limited from its Unit-2 of Project-I located at Nelatur and Pynampuram villages of Nellore District in Andhra Pradesh to the Distribution Licensees in Andhra Pradesh, namely APSPDCL, APEPDCL, and APCPDCL, under Section 62 of the Electricity Act, 2003.

Between

SEIL Energy India Limited

....Petitioner

AND

1. Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL)
2. Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL)
3. Andhra Pradesh Central Power Distribution Corporation Limited (APCPDCL)

....Respondent(s)

These petitions were taken up for final hearing on 07.05.2025 in the presence of Sri Ch. Babu Rao, CPI (M); Sri M. Venugopala Rao, Senior Journalist; Sri Kandarpur Murali, CPI (M); Sri Vishrov Mukherjee and Sri Yashaswi Kant, learned Counsel for SEIL; Sri Ch. Ranga Rao, Executive Engineer, APPCC, and Sri G.V. Brahmananda Rao, counsel representing Sri P. Shiva Rao, the learned Standing Counsel for the APDISCOMs. After hearing all the parties and after carefully considering the material available on record, the Commission passes the following:

COMMON ORDER

Brief facts of both petitions and subsequent submissions:

1. In the letter dated 03.05.2023, SEIL offered 570 MW of power from its Unit-2 of Project-1 to APDISCOMs, stating that it would be available from 01.04.2024, as their contract with TSDISCOMs was set to expire in March 2024.
2. APDISCOMs agreed to procure the offered power, citing a shortage of long-term base load thermal capacity. They requested SEIL increase the capacity to 625 MW (net) by dedicating the full 660 MW capacity of the Unit.
3. In their letter dated 17.10.2023, APDISCOMs requested APERC to grant permission to procure 625 MW capacity from Unit-2, Project-I of SEIL, given the long-term shortage of Base Load Thermal Capacity on mutually agreed terms and conditions. In its letter dated 07.11.2023, APERC permitted APDISCOMs to proceed with further steps on SEIL's proposal, contingent upon the condition that SEIL accepts the tariff for the supply of 570/625 MW of power as determined by APERC under Section 62 of the Electricity Act, 2003. In the Retail Supply Tariff Order (RSTO) for FY 2024-25 issued on 11.03.2024, the Commission included 625 MW from this Unit as an approved power source for FY 2024-25, with an indicative tariff of Rs. 4.16/kWh (Fixed Cost: Rs. 1.69/kWh, Variable Cost: Rs. 2.47/kWh) with the caveat that this inclusion is solely for estimating available capacity during FY 2024-25 and the same does not grant automatic regulatory approval for power procurement from this source, which has to be obtained separately based on merits as per the law.
4. On 12.12.2024, APDISCOMs entered into a PPA with SEIL for 12 years for the purchase of 660 MW (gross Capacity) of power from Unit-2 of Project-I, located at Nelatur and Pynampuram villages in Nellore District, Andhra Pradesh. Subsequently, APDISCOMs filed a petition before APERC on 20.01.2025, requesting

consent to the PPA.

5. The Commission took the petition on record and numbered it as O.P. No. 2 of 2025, and posted the matter for hearing on 29.01.2025. During the hearing on the said date, the Commission directed SEIL to file a petition for the determination of the tariff. Accordingly, SEIL filed a petition on 05.02.2025 requesting APERC to:
 - A. Approve the Tariff for the supply of 660 MW of power to APDISCOMs under the PPA dated 12.12.2024 from Unit-2 of Project-1 for the period from FY 2024-25 to FY 2028-29;
 - B. Approve the recovery of other charges on an actual basis as incurred during the said Control Period;
 - C. Approve the billing of Annual Fixed Charges and Energy Charges in accordance with the provisions of the APERC Tariff Regulations, 2008, as amended from time to time;
 - D. To allow SEIL to claim an interim tariff of Rs. 1029.45 Crores towards Annual Fixed Charges and Energy Charge at Rs.3.06/kWh towards supply of power by using the coal mentioned in the petition, pending the final determination and approval of the tariff.
6. The Commission took the tariff petition on record and numbered it as O.P. No. 8 of 2025, and posted both petitions for hearing on 07.03.2025. Further, the Commission posted a public notice along with copies of the petitions on its website on 28.02.2025, inviting views, objections, and suggestions, if any, from all interested persons and stakeholders to reach the Secretary/APERC on or before 21.03.2025.
7. Meanwhile, APDISCOMs filed I.A.No.1 of 2025 in O.P.No.8 of 2025 on 17.02.2025, requesting the Commission to pass an appropriate order fixing Interim Tariff till final adjudication of the said O.Ps to enable APDISCOMs to procure power from

SEIL from 01.03.2025, duly considering the 75% coal that is allocated to SEIL at zero premium under SHAKTI B (iii) auction. In the RSTO for FY 2025-26, issued on 20.02.2025, the Commission has maintained its position regarding the 625 MW power from this Unit, consistent with its stance in the RSTO for FY 2024-25.

- 8.** In the counter to the I.A.No.1 of 2025 filed on 21.02.2025, SEIL prayed the Commission to grant interim tariff towards the entire PPA capacity based on the entire coal allocation secured by SEIL under Shakti Scheme B(iii) auction and to direct APDISCOMs to pay annual fixed charges of Rs. 1029.45 Crores and Fuel Cost at the base rates as claimed for FY 2024-25 in the tariff Petition, till the final order on tariff petition is passed. In their letter dated 21.02.2025, APDISCOMs sought the Commission's permission to procure power from SEIL's Unit-2 of Project-1, using the zero premium coal allocated under SHAKTI B (iii), pending the finalisation of the proceedings in I.A.No.1 of 2025. In its letter dated 24.02.2024, the Commission permitted APDISCOMs to procure power from SEIL's Unit-2 of Project-I, using the zero premium coal allocated under SHAKTI B (iii) at the interim/tentative tariff indicated in the RSTO for FY 2025-26 for four months, or until the finalisation of the proceedings in O.P.No.2 of 2025 and O.P.No.8 of 2025, whichever is earlier.
- 9.** During the hearing on 07.03.2025, SEIL filed the proof of the publication of the tariff petition in newspapers on 25.02.2025. On the same date, SEIL filed I.A.No.2 of 2025 in O.P.No.8 of 2025, in which it submitted amendments to O.P. No. 8 of 2025 to correct inadvertent typographical errors. In the I.A., SEIL revised the interim tariff to Rs. 1029.23 Crores towards Annual Fixed Charges and Energy Charge at Rs.3.05/kWh as against the original claim of Rs. 1029.45 Crores and Rs.3.06/kWh respectively, as submitted in O.P.No.2 of 2025, among other things. Further, SEIL stated in the I.A. that an error had crept into the paper publication, wherein the Commercial Operation Date (COD) was incorrectly mentioned as

15.09.2025 instead of 15.09.2015, and requested time to publish a corrigendum in the newspapers. The Commission granted the request. Accordingly, SEIL published the Corrigendum in the newspapers on 10.03.2025 and submitted the proof to APERC.

10. The Commission took I.A.No.2 of 2025 in O.P. No. 8 of 2025 on record and placed it on its website, along with the counter filed by APDISCOMs. Further, in view of the amendments to O.P. No. 8 of 2025 and the request of several objectors to extend the time for filing objections/suggestions on the O.Ps, the Commission extended the time for furnishing comments/suggestions by all stakeholders to 07.04.2025 through a public notice dated 25.03.2025.

11. In response to the public notices dated 25.02.2025, and 25.03.2025, the Commission received views, comments, and suggestions from five stakeholders. SEIL and APDISCOMs submitted their replies to these objections. The Commission placed the views, comments, and suggestions received, along with the replies from SEIL and APDISCOMs, on its website.

12. APDISCOMs filed a counter dated 25.03.2025 before the Commission in response to O.P. No. 8 of 2025. The main submissions in the counter are as follows:

- SEIL has claimed a fixed cost of Rs. 1029.23 Crores for the full FY 2024-25. However, the plant is expected to commence supply only on or after 01.04. 2025. Therefore, the first year of operation for the procurement of power should be FY 2025-26.
- SEIL's method of calculating the Capital Cost for the 660 MW Unit-2 of Project-I by equally apportioning the total completed Capital Cost across their two 2X660 MW Projects (totalling 2,640 MW) at Krishnapatnam is strongly objected to. While both Projects belong to SEIL, they are distinct entities with separate Detailed Project Reports (DPRs), approvals, implementation schedules, financing

patterns, and different CODs. Therefore, the approved Capital Cost for each project as on its COD should be the basis for tariff determination.

- SEL claimed a Capital Cost of Rs. 4,816.66 Crores as of March 2024, which translates to Rs. 7.30 Crores per MW. Given that the Unit has been in commercial operation for over 9.5 years, the claim is exorbitant. A prudent check of the Capital Cost may be carried out with reference to the Benchmark Cost specified in the CERC order dated 04.06.2012 on "Benchmark Capital Cost (Hard cost/Mandatory Package) for Thermal Power Stations with Coal as Fuel" as the norms for Units above 500 MW capacity have not been specified in APERC Regulation No. 1 of 2008.
- As per the above CERC order, the Benchmark Capital Cost for a 1 x 660 MW thermal power Unit with December 2011 as base year is Rs. 5.01 Crores/MW. After applying an annual escalation of 5% to account for the Unit's commissioning in 2015, the applicable Benchmark Capital Cost becomes Rs. 6.0897 Crores/MW. This translates to an allowable Capital Cost of Rs. 4,019.2 Crores (6.0897 x 660) as of COD. Further, considering a conservative straight-line depreciation rate of 3.6% per annum (based on a 25-year Unit life and 10% salvage value) over the 9.5 years of operation, the depreciated value of the allowable Capital Cost would be $(100\% - 34.2\%) \times \text{Rs. } 4,019.2 \text{ Crores} = \text{Rs. } 2,644.63 \text{ Crores}$. This results in a permissible capital cost of Rs. 4.0 Crores per MW for the first year of tariff determination.
- SEIL's claim of Rs. 14.948 Crores towards taxes and duties, which includes tax liability of Rs.3.737 Crores for the FY 2024-25, should be excluded.
- In the absence of operating norms in APERC Regulation 1 of 2008 for Units above 500 MW capacity, the operating norms specified in CERC tariff regulations for supercritical Units such as SEIL's Units, i.e., 85% normative plant

availability, 0.5 ml/kWh secondary oil consumption, and 5.25% auxiliary consumption, should be adopted for determining the tariff.

- SEIL has claimed a Weighted Average Cost of Capital (WACC) of 13.72%, based on a Return on Capital Employed (RoCE) of 15.5% and a weighted average interest rate of 9.99% from various bank loans (Axis, ICICI, Kotak, HDFC, and IndusInd Banks). However, as per the details furnished by SEIL in Part-1, Form-7 of its petition, the actual weighted average interest rate is 8.358%.
- The Rs. 22.4 Crores additional capitalisation for FY 2024-25 claimed by SEIL should be excluded as power supply begins only on or after 01.04.2025. Further, the proposed additional capitalisation for items such as ECHP Conveyor belt, ICHP Conveyor belt, Plant IT expenditure, GIS, and TD BFP Drive turbine is excessive and lacks justification. The Commission may prudently verify the necessity and cost of the proposed additional capitalisations, including an assessment of the remaining useful life of existing equipment, subject to a true-up based on the Auditor's report.
- SEIL has claimed two months of receivables as part of its working capital, which is contrary to the CERC Tariff Regulations for thermal Units above 500 MW, which stipulate that only 45 days of receivables should be considered. Therefore, the receivables for tariff calculations should be limited to 45 days.
- Water charges, security expenses, ash transportation expenses, and capital spares claimed by SEIL should be allowed only after a prudent check. Specifically, water charges require scrutiny as SEIL estimated them at Rs. 0.5 per cum, ten times higher than the Rs. 0.05 per cum permitted by the Port Department, A.P. For security expenses, the generating station must submit detailed assessments and estimated costs with their tariff petition. Lastly, for capital spares exceeding Rs. 10 lakh individually, yearly consumption details

and justification are required during the true-up, ensuring they aren't funded through other allowances, such as compensatory allowance, special allowance, additional capitalisation, consumption of stores and spares, or renovation and modernisation.

- The average Gross Calorific Values (GCVs) for coal grades G12 (3,307 Kcal/Kg), G13 (3,007 Kcal/Kg), and G11 (3,607 Kcal/Kg) indicated by SEIL are not acceptable. To ensure accurate energy charge computation, the GCV of received coal must be measured through sampling and analysis by a third-party agency appointed by SEIL, adhering to APERC regulations/guidelines or by a third-party from the list of approved agencies by the Central Government agreed to by APDISCOMs. In the absence of such third-party sampling, energy charges should be computed based on "GCV as Billed" as per Clause 15.3.7 of the PPA. For imported coal, no loss in calorific value between "GCV as billed" and "GCV as received" should be permitted, and a 0.8% transit and handling loss for coal should be applicable. Finally, crushing, transportation, and handling charges should only be admitted by the Commission after a prudent check, with reference to the rates from Coal India Limited or similar coal mines.
- APDISCOMs would pay fixed costs based on the plant's actual monthly availability, capped at the normative value specified in the relevant regulations or orders.

13. SEIL filed a reply dated 14.04.2025 before the Commission in response to O.P. No. 2 of 2025. The main submissions in the reply are as follows:

- SEIL is committed to fulfilling its PPA obligations, which include supplying power to consumers in Andhra Pradesh. Therefore, the entire PPA, along with details of coal allocation under Shakti B(iii) and SEIL's exit rights under Article 10, should be approved by the Commission.

- Coal allocation under SHAKTI B(ii) does not apply to the PPA dated 21.12.2024, because SHAKTI B(ii) only covers PPAs executed before May 2017. Therefore, the only primary coal available for this PPA is that secured by SEIL under SHAKTI B(iii), as detailed in Annexure II of the PPA. It is reiterated that SHAKTI B(iii) coal has been included as "Primary Fuel" in the PPA.
- Regarding the interim power supply based on the Commission's letter of 24.02.2025, SEIL informed APDISCOMs that it can supply 461.71 MW gross capacity (considering CEA consumption norms in terms of the letter dated 08.03.2024). During this interim period, PPA Articles 5.14 (Normative Availability), 15.5 (Minimum Fuel Stock), 15.6 (Fuel Shortage), and 15.7 (Supplementary Fuel Supply Agreement) will not be applicable.
- SEIL requests that the Commission allocate any balance generation capacity (i.e., from premium coal) beyond what is supplied based on SHAKTI B(iii) allocated coal, should be solely at SEIL's disposal, with no obligation to supply it to APDISCOMs under the interim arrangement. Further, Fixed Charges payable by APDISCOMs should apply to the entire declared capacity at 100% using SHAKTI B(iii) coal.
- The interim power supply should be allowed with Fixed Charges of Rs. 1.7 per kWh and Variable Charges as claimed in O.P. No. 8 of 2025 for FY 2025-2026, pending final determination. SEIL is entitled to the differential amount between the interim and final tariffs, plus carrying costs.

14. Further, SEIL filed a reply dated 14.04.2025 before the Commission in response to the counter filed by APDISCOMs in O.P.No. 8 of 2025. The main submissions in the reply are as follows:

- Regulation 1 of 2008 issued by APERC provides that in case of the existing generating stations, the actual original cost of the project recorded in the books

of account of the Generating Company, subject to prudence check by the Commission, shall be considered as the original cost of the Project for the said Regulation. SEIL has applied the said Regulation and claimed its Capital Cost based on its books of account.

- Apportioning Capital Cost across four Units is not explicitly covered by the APERC Tariff Regulations 2008. Since SEIL's books of account combine both Projects and all four Units are adjacent, similar in nature, and use the same technology, SEIL has equally apportioned the total audited Capital Cost as of 31.03.2024, among the four Units to determine the Capital Cost for Unit-2 of Project-I.
- Regarding the CERC Benchmark Capital Cost, it is worth noting that the Wholesale Price Index (WPI) has increased by 51.4% between FY 2011-12 and FY 2023-24. After adjusting the CERC Benchmark of Rs. 5.37 Crores/MW for this WPI increase, the computed Benchmark as of March 2024 becomes Rs.8.13 Crores/MW, which is actually higher than SEIL's claimed Capital Cost of Rs. 7.29 Crores/MW. APDISCOMs' contention that the Capital Cost as of the COD should be considered is incorrect since prior to the current PPA, power from Project-I was supplied under Section 63 of the Electricity Act and it is only with the execution of the present PPA that Unit-2 of Project-I now falls under Section 62 of the Electricity Act, 2003.
- The current petition seeks tariff determination for the 5th Control Period (April 1, 2024, to March 31, 2029) under the APERC Tariff Regulations 2008. Therefore, the period covering FY 2024-25 must be included, with the Unit cost based on SEIL's books of account as of FY 2023-24. The Annual Fixed Charges (AFC) for FY 2024-25 form the basis for the AFC of FY 2025-26, meaning the cost of power supplied from 01.04.2025, must necessarily factor in the costs

from FY 2024-25.

- The Gross Fixed Assets (GFA) as of 31.03.2024, which was derived from audited accounts for FY 2023-24, include additional capitalisation since the COD. SEIL has already addressed APDISCOMs' concerns regarding depreciation by applying the APERC Tariff Regulations of 2008 when calculating the Return on Capital Employed (ROCE). This involved subtracting the depreciation from previous years to arrive at the Net Fixed Assets (NFA).
- The allocation of coal under SHAKTI B(ii) is not applicable to the present PPA dated 12.12.2024, as SHAKTI B(ii) only covers PPAs executed before May 2017. Therefore, the primary coal available for the PPA is secured by SEIL under SHAKTI B(iii), as listed in Annexure II of the PPA, and designated as the 'Primary Fuel.' SEIL has secured this SHAKTI B(iii) coal for the gross capacity and will use it to supply power to APDISCOMs.
- As per Clause 12.5 of the APERC Tariff Regulations 2008, SEIL is entitled to claim income tax based on actuals, limited to the tax on the ROE component, excluding taxes on excess profits, penalties, or interest on delayed tax payments, and adjusted for any refunds from previous periods. SEIL clarifies that it has not claimed any income tax in the current petition, contrary to APDISCOM's contention. SEIL may be permitted to bill income tax based on actuals to APDISCOMs at the end of each Financial Year.
- As per Clause 10 of the APERC Tariff Regulations 2008, tariff determination for generating stations should follow the principles and methodologies of the CERC tariff regulations. Accordingly, SEIL aligned the tariff computation in the current petition with the APERC Tariff Regulations 2008 and the applicable CERC (Terms and Conditions of Tariff) Regulations 2024, as the power supply from SEIL's project falls within the CERC Tariff Regulations 2024 for the control

period (01.04.2024 to 31.03.2029).

- APDISCOMs incorrectly computed the WACC. SEIL calculated WACC at 13.72%, using a 15.50% return on equity as per Clause 30(2) of CERC Tariff Regulations 2024, an actual interest rate of 9.99%, and an equity-to-loan ratio of 67.73%:32.27% based on actuals. APDISCOMs' reliance on Form 7 is misplaced, as it only details project-specific loans, while Form 13 specifies the actual weighted average interest rate for this Unit.
- SEIL claimed additional capitalisation for the 5th Control Period, in line with Clause 10.9 of the APERC Tariff Regulations, 2008. The Capital Cost is based on the latest audited accounts for FY 2023-24, with additional capitalisation for FY 2024-25 used to determine the opening GFA for FY 2025-26. The proposed additional capitalisation complies with Clause 10.9(iv), as it is necessary for the efficient and successful operation of the generating station and was not included in the original Capital Cost. SEIL will submit actual additional capitalisation during the true-up for each respective year
- SEIL has computed the Gross Station Heat Rate as 2,246.75 kcal/kWh in accordance with the norms specified in the CERC Tariff Regulations, 2024. Further, SEIL has computed the Working Capital Requirement in accordance with Clause 12.4 of the APERC Tariff Regulations, 2008, which provides for the inclusion of two months' receivables in the working capital.
- SEIL claimed normative Operation & Maintenance (O&M) expenses, water charges, security expenses, fly ash transportation expenses, and capital spares as separate charges as per Clause 36(1)(6) of the CERC Tariff Regulations, 2024. An error in water charge calculation was made, using Rs. 0.5/m³ instead of the correct Rs. 0.05/m³, as per the Andhra Pradesh Port Department's letter dated 15.06.2011. Therefore, the water charges may be computed based on an

estimated seawater drawal of Rs.0.05/m³, with an 18% tax rate, subject to a true-up based on actual usage.

- Security expenses are projected based on historical data and anticipated costs, including payments to security providers and IT-related security, adjustable via true-up. Fly ash transportation expenses will also be claimed based on actual costs, with SEIL filing a true-up petition for approval of these expenses.
- SEIL secured coal under SHAKTI B(iii) auctions to meet its coal requirements for power supply to APDISCOMs, with tentative GCV provided in letters dated 11.09.2024 and 17.09.2024. As per Clause 11.1.5. (a) of the APERC Tariff Regulations, 2008, a normative transit and handling loss of 0.8% has been adopted. The energy charge is computed using actual coal prices and GCV from February 2023 to December 2024, subject to true-up based on actual results.
- In compliance with Article 15.3.3 of the PPA, SEIL proposed three approved third-party agencies for sampling to APDISCOMs in the letter dated 07.02.2025, followed by a reminder on 24.03.2025, which informed APDISCOMs that SEIL is yet to receive details of agency agreeable to APDISCOMs and that as supply under the PPA will commence soon and that appointment of agencies takes time (on account of completion of formalities), and requested APDISCOMs to expedite the confirmation of the agency for third party sampling. However, there has been no response from APDISCOMs.
- The monthly fixed costs should be paid based on the actual cumulative availability achieved each month, compared to the normative availability, with adjustments made at year-end. Total AFCs are fully recoverable at normative availability annually. An interim fixed charge of Rs. 1.7/kWh should be allowed for FY 2025-26 pending final tariff determination, including entitlement to the differential amount between interim and final tariffs, along with carrying costs.

- 15.** In their letter dated 25.04.2025, APDISCOMs requested the Commission to extend the consent already issued by the Commission on 24.02.2025 to procure power from SEIL's Unit-2 of Project-1 beyond 30.06.2025 to meet the anticipated power shortage, pending finalisation of proceedings in O.P Nos. 2 & 8 of 2025.
- 16.** SEIL filed an affidavit on 05.05.2025 stating that the total quantum of coal allocation secured under Shakti B(iii) is now 3.04 Million Tons per Annum (MTPA) (which meets the requirement for supply of 660 MW contracted capacity at 85% normative availability) including the additional coal allocation of 0.152 MTPA from MCL-Talcher on 17.04.2025 at zero premium price. SEIL further stated that the additional allocation is contingent upon the execution of the Fuel Supply Agreement (FSA) and obtaining the necessary approvals by SEIL, including appropriate certificates from APDISCOMs along with the details of the approved PPA. SEIL requested the Commission to consider the above submissions while approving the Tariff.
- 17.** The Commission conducted a public hearing on 07.05.2025, in both online and in-person modes, following advance notice on its website on 28.04.2025.
- 18.** In their letter dated 08.05.2025, APDISCOMs requested the Commission to grant permission to procure power from SEIL's Unit-2 of Project-1 using the above-mentioned additional coal of 0.152 MTPA. In its letter dated 13.05.2025, the Commission, keeping in view the Grid demand and energy requirement in the current financial year, approved the DISCOMS' request to procure power from SEIL's Unit-2 of Project-1, using the coal allocated under SHAKTI B (iii) at zero premium notified price at the interim/tentative tariff indicated in the RST Order for FY2025-26 until further Orders, subject to the adjustment of interim tariff based on the final tariff to be determined by the Commission.
- 19.** In its letter dated 17.05.2025 to the Commission, SEIL reiterated the earlier

sequence of events and its earlier submissions, including its replies to the objectors.

20. APDISCOMs made the following additional submissions to the Commission through a letter dated 23.05.2025.

- SEIL commenced supply of power to APDISCOMs from Unit-2 of Project-1 w.e.f. 00:00 hours of 06.05.2025, and is scheduling 461.77 MW (Gross)/438.27 MW (Net) power with notified zero premium coal under RTC.
- APDISCOMs will approach the Ministry of Power (MoP)/Government of India (GoI) to increase the zero-premium coal allocation from 2.332 MTPA to 3.116 MTPA under SHAKTI B(iii) and to streamline coal logistics, as the current allocation from three different sources results in high transportation costs. APDISCOMs will also continue their efforts in securing 100% zero-premium coal before the existing Fuel Supply Agreements (FSAs) with premium coal, signed by SEIL with MCL, expire.
- If the MoP does not increase the zero-premium coal allocation from 2.332 MTPA to 3.116 MTPA under SHAKTI B(iii), APDISCOMs will request the Commission to permit the use of premium coal secured by SEIL for the remaining Contracted Capacity, since the weighted average variable cost (VC) of Rs. 2.78/unit using zero-premium (76%, Rs. 2.66/unit) bundled with premium coal, is only Rs. 0.12/unit higher than the VC with zero-premium coal alone. Additionally, SEIL's VC with premium coal is cheaper than APGENCO's SDSTPS Stage-II VC of Rs. 3.20 per unit at the same location, making it a cost-effective option despite the premium coal usage.

Views/objections/suggestions

21. In response to the public notices dated 25.02.2025, and 25.03.2025, the Commission received views, comments, and suggestions from five stakeholders. SEIL and APDISCOMs submitted their replies to these objections. The

views/objections/suggestions and the replies of SEIL and APDISCOMs are as follows:

Sri M. Venugopala Rao and three others:

- The depreciation and the profit earned by SEIL from the COD of the Unit to the end of March 2024, after excluding the ROE permitted by the respective Electricity Regulatory Commission (ERC), should be deducted from the Capital Cost.
- The fixed cost of Unit-2 of Project-I should logically be lower than that of Unit-1, given the shared infrastructural facilities. Therefore, a thorough examination of how the value of these common facilities within Project-I is allocated between the two Units is necessary to accurately calculate the permissible Capital Cost for Unit-2. Similarly, where infrastructural facilities serve both Project-I and Project-II, the apportionment of their value across all Units in both Projects requires scrutiny for this Unit's Capital Cost determination.
- The Capital Cost of Rs. 4,816.66 Crores as of 31.03.2024 at Rs.7.30 Crores per MW is exorbitant for an eight-year-old coal-based Unit and exceeds the CERC Benchmark Capital Cost of Rs. 5.37 Crores per MW. As the CERC Benchmark is intended for new projects commissioned during the relevant period, the applicability of this Benchmark to the present eight-year-old Unit warrants examination. Furthermore, the Capital Cost of this specific Unit was previously determined by the respective SERCs when approving its PPAs with various DISCOMs. The Capital Cost of this Unit should be subjected to prudence checks, based on CERC norms.
- SEIL has claimed a debt-equity ratio of 32.37%:67.73%, which deviates significantly from the regulatory norm of 70:30. Typically, debt carries a lower interest rate than the ROE. Further, the liability for income tax also increases if

the equity exceeds the permitted regulatory norm of 30%. Therefore, the debt-equity ratio should be limited to 70:30, and the equity exceeding 30% of the permissible Capital Cost should be treated as notional debt.

- Given that coal-based power plants have a useful life span exceeding 25 years, SEIL's projection of an additional capital expenditure of Rs. 254.32 Crores for this 8-year-old Unit for the control period FY 2024-29 is not permissible, particularly for FY 2024-25 (Keeping in view the power supply commences from 01.04.2025). Further, existing regulatory parameters already provide for O&M expenses. Moreover, mechanisms exist for claiming costs related to Renovation & Modernisation (R&M) as and when required.
- Due to the uncertainty regarding the allocation and availability of coal required to run the Unit at a PLF of 85%, complicated provisions have been incorporated in the PPA for working out variable charges, which will burden consumers.
- As the tentative commencement of power from this Unit is from 01.04.2025, as per APCPDCL, the claim of SEIL for a fixed cost of Rs. 1,029.23 Crores for FY2024-25 is baseless and should be rejected.
- SEIL's claim for Rs.3.737 crore towards taxes and duties for FY 2024-25 should be disallowed, as no PPA was in force during that time.
- It's unclear if SEIL's SHAKTI B (iii) coal allocation (for 646 MW at 85% normative capacity) is co-terminus with the PPA. Provisions for procuring coal from other sources introduce uncertainty, particularly regarding the approval of APDISCOMs. If APDISCOMs reject cost-prohibitive coal from other sources, and the plant is backed down, they should have no liability.
- A suitable Clause should be included in the PPA to penalise SEIL for failing to achieve normative availability, consistent with the Commission's acknowledgement of the need for such penalties in its FY2022-23 FPPCA order.

- Operational parameters (secondary oil consumption, receivables in working capital, gross station heat rate, and gross calorific value of coal) should be considered based on CERC Regulations or actual values, whichever are lower.
- SEIL's claims for water charges, security expenses, and ash transportation expenses should undergo a prudence check and be limited to permissible amounts, compared against market trends.
- The allowance of 0.8% for coal transit and handling losses is considered too liberal. No loss in calorific value should be permitted between "GCV as billed" and "GCV as received" for both imported and indigenous coal.
- The DISCOMs' claim that SEIL's power is essential for a reliable and economical base load is baseless, as other plants may offer similar benefits, and competitive bidding could ensure reliability and better tariffs. If the procurement from this Unit is required to meet anticipated summer demand as contended by APDISCOMs, they should have opted for competitive bidding to procure limited power for a limited period and sought approval of the Commission under Section 63 of the Electricity Act, 2003.
- APDISCOMs have not confirmed the availability of the State Transmission Utility (STU) evacuation facility for this Unit, nor have they specified when it might be available. As a result, APDISCOMs will be required to pay Central Transmission Utility (CTU) charges and absorb associated transmission losses until the STU evacuation facility is established.
- The proposed PPA's Exit Clause (10.2) allows SEIL to continue if APERC sets the AFC for the first year between Rs. 1.68–1.72/kWh. If unacceptable, SEIL can terminate the agreement within 30 days, effective on the 7th day post-notice, with Pre-termination supply to be billed at an interim tariff agreed between the parties. This should be amended to adjust the interim tariff per APERC's final

approved tariff, as no tariff is valid without Commission approval.

- Clause 15.7.2 of the PPA requires SEIL to notify APDISCOMs of primary fuel shortages and propose supplementary fuel (domestic/imported coal). If APDISCOMs decline (e.g., due to high variable costs), the power is deemed unavailable, with two options: (a) DISCOMs pay 70% of fixed charges for non-availability up to normative availability yearly, or (b) SEIL sells capacity to others, with APDISCOMs not liable for those fixed charges. In this regard, it is suggested that if APDISCOMs decline supplementary fuel power, no fixed charges (full or partial) should apply, as they should not pay for unsupplied power. If power is sold to other buyers, proportionate depreciation and other PPA-permitted expenses should be deducted from fixed and variable costs. Any gain from third-party sales (selling price minus supplier's costs, including fuel, transport, and transmission, etc) should be shared, but recovery of fixed charge shortfalls should be limited to the power sold, not the full annual fixed cost, to ensure APDISCOMs benefit. If SEIL fails to sell to other buyers, recovering fixed charges for unsupplied power equates to paying for deemed generation, which is unjustifiable.
- Clause 15.7.3 of the PPA stipulates that if APDISCOMs fail to respond within the specified time to SEIL's offer of supplementary fuel under Clause 15.7.2, or SEIL's fuel shortage notification under Clause 15.6, and the Minimum Fuel Stock is exhausted, preventing the Unit from operating as per CEA guidelines, the DISCOMs must pay 70% of the fixed charges for such non-availability up to the normative availability at the end of each Financial Year. However, this burden of 70% fixed charge payment should not be passed on to consumers through true-up mechanisms, as it penalises consumers for the DISCOMs' failure to respond within time. The Commission should clarify in its order that

such charges cannot be recovered from consumers.

- Clause 15.7.4 of the PPA states that if SEIL fails to respond or offer supplies with supplementary fuel within the time specified in Clause 15.7.2, APDISCOMs are not obligated to pay fixed charges for the resulting non-availability. However, this non-payment is not considered a penalty. If SEIL fails to supply power, APDISCOMs may need to procure power from other sources at potentially higher costs or resort to power cuts. To address this, it is suggested that the PPA include a Clause imposing a specific penalty on SEIL for such failures, as a reciprocal measure to the fixed charges APDISCOMs pay when SEIL declares capacity availability but APDISCOMs do not utilise it or back down the capacity.
- Article 19.7(b) of the PPA states that the APDISCOMs must reimburse the SEIL for all Force Majeure Costs caused by a Political Event. However, since neither the SEIL nor APDISCOMs are responsible for Political Events or their consequences, both parties should bear their own Force Majeure Costs. The Clause should be amended to ensure that, upon a Political Event, neither party is obligated to pay the other's costs, and each bears their respective expenses.

Reply of SEIL:

- As regards the CERC Benchmark Capital Cost, the WPI has increased by 51.4% between FY 2011-12 and FY 2023-24. After adjusting the CERC Benchmark of Rs.5.37 Crores/MW for this WPI increase, the computed Benchmark as of March 2024 becomes Rs.8.13 Crores/MW, which is higher than SEIL's claimed Capital Cost of Rs.7.29 Crores/MW.
- SEIL has calculated the RoCE in accordance with Clause 12.1 of the APERC Tariff Regulations 2008. The GFA as of 01.04.2024 is based on the audited closing GFA for FY 2023-24, apportioned to Unit-2 (Project-1). The opening GFA for subsequent years in the Control Period is calculated by adding the proposed

additional capitalisation for each year. The actual debt-to-equity ratio of 32.27%:67.73% as of 31.03.2024 is used for WACC computation, with additional capitalisation for subsequent years based on a normative debt-to-equity ratio of 70:30, as per Clause 10.13 of the APERC Tariff Regulations 2008.

- The 570 MW Power Supply Agreement (PSA) with Telangana State DISCOMs, based on the DBFOO model under Section 63 of the Electricity Act, expired on 29.03.2024. Until 31.03.2024, SEIL supplied power to Telangana DISCOMs under this PSA. The present petition, filed under Section 62 of the Act and the APERC Tariff Regulations 2008, seeks tariff determination for the Control Period from FY 2024-25 to FY 2028-29. Therefore, any revenue adjustments before 31.03.2024 do not come under the ambit of this petition.
- All four Units of both Projects are similar in nature and technology, and they are adjacent to one another. The total cost of the four Units as of 31.03.2024, as per audited accounts, has been equally apportioned to determine the Capital Cost of Unit-2 (Project-I). The cost of common infrastructure is also equally divided among the Units.
- SEIL claimed additional capitalisation as per Clause 10.9(iv) of the APERC Tariff Regulations 2008, with item-wise details included in the petition. Actual additional capitalisation will be submitted during the true-up for the respective year(s). The financing of this additional capitalisation follows a normative debt: equity ratio of 70:30, as per Clause 10.13 of the APERC Tariff Regulations 2008.
- SEIL has secured coal through SHAKTI B(iii) auctions to meet its coal requirements for supplying power to APDISCOMs. This coal covers 85% of the normative energy requirement. Any fuel shortage will be addressed as per Article 15.7.2 of the PPA.
- As per Clause 12.5 of APERC Tariff Regulations 2008, SEIL is entitled to claim

income tax on actuals, limited to the tax on the RoE component of RoCE. SEIL has not claimed any income tax in the current petition but requests the Commission to permit billing of income tax based on actuals for the contracted capacity to APDISCOMs at the end of each Financial Year, in line with the APERC Tariff Regulations 2008. SEIL clarifies that it claims only the tax on RoE and no other taxes or duties.

- Where operational norms are not specified in the APERC Tariff Regulations 2008, the norms in the CERC Tariff Regulations have been used for computation. SEIL requests the Commission to adopt a holistic approach by approving parameters specified in the CERC Tariff Regulations, rather than selectively applying only the lower values.
- Water charges, security expenses, ash transportation expenses, and capital spares should be allowed as separate charges, as per Clause 36(1)(6) of the CERC Tariff Regulations 2024, in addition to the normative O&M expenses. These charges, as stated in the petition, are subject to a prudence check based on actual costs during the true-up process.
- The normative transit loss is calculated as 0.8% for coal sourced indigenously, in line with Clause 11.1.5 of the APERC Tariff Regulations 2008, for the computation of the energy charge. Regarding GCV, Article 15.3.1 of the PPA stipulates that the weighted average GCV of coal received at the project shall be considered as the Average GCV.

Reply of APDISCOMs:

- The Commission may consider any additional profit accrued by SEIL from the COD up to March 2024 when computing the Capital Cost, if such a provision for consideration exists.
- APDISCOMs, in their counter, have strongly objected to SEIL's methodology of

equally apportioning the completed Capital Cost among all generating Units.

- APDISCOMs have challenged the SEIL's proposed Capital Cost, as it exceeds the Benchmark set by CERC Regulations and the CERC Order of June 4, 2012. The Commission will ultimately determine whether this CERC Benchmark applies to the current case and, if so, whether any adjustments are warranted. Further, since the PPA for Unit-2 of Project-I, from its COD, was governed by Section 63 of the Electricity Act, 2003, the question of computing the Capital Cost by the respective ERCs does not arise.
- SEIL proposed a debt-to-equity ratio of 32.27%: 67.73% for the ROCE calculation, which deviates from the CERC norm of 70%:30%. The Commission may take an appropriate decision regarding the equity exceeding 30% to ensure that a fair interest rate is adopted for that portion, thereby safeguarding the interests of both APDISCOMs' consumers and SEIL.
- APDISCOMs have strongly objected to SEIL's proposed additional Capital Cost for the period from FY 2024-25 to FY 2028-29, as there is a lack of justification in the petition for these additional capitalisations. However, the Commission may conduct a prudent check on the necessity and cost of this equipment, with any adjustments to be made based on the Auditor's report.
- APDISCOMs have included specific Fuel Charge Clauses in the PPA with the primary goal of reducing fuel costs for state consumers. These Clauses are based on the availability and allocation of primary fuel from Mahanadi Coalfields Limited (MCL) and Coal India Limited (CIL).
- APTRANSCO studies anticipate a power deficit of 200-500 MW from FY2024-25, escalating to a base power requirement of 700 MW from FY2026-27. This deficit is exacerbated by real-time generation often falling short of installed capacity due to issues like fuel supply and Unit breakdowns. To address this, a long-term

PPA for 660 MW has been signed with SEIL to meet base load power needs, and approval for this PPA is pending before the APERC (O.P. No. 2 of 2025). To alleviate immediate summer demand, a temporary arrangement has been requested, allowing SEIL to supply power from 01.03.2025, using "zero premium" coal, which would align the variable cost with the RSTO for FY 2025-26.

- Evacuating 660 MW from SEIL's Unit-2, Project-I requires bifurcating the Unit and isolating the two generator Units to connect to the STU network. APTRANSCO is currently studying the feasibility and connectivity for this STU work and plans to commence it promptly. In the interim, and based on APDISCOMs' needs, power will be evacuated via the CTU network until the STU network is completed. APDISCOMs acknowledge the General Network Access (GNA) provisions and their implications when transitioning from CTU to STU connectivity.
- The Commission's approval dated 07.11.2023, for power sale was conditional on SEIL's acceptance that the tariff for 570/625 MW would be determined by APERC under Section 62 of the Electricity Act, 2003, based on mutually agreed terms. The order also stipulated that any interim tariff payments would be adjusted following the SEIL's consistent insistence on an "Exit Clause" in the agreement, which APDISCOMs sought to delete, but the SEIL refused. The final decision on this Clause rests with SEIL, as the Commission will ultimately determine the fixed cost.
- APDISCOMs are not obligated to pay 70% of fixed charges in case of fuel shortage, as per Clauses 15.7.2 and 15.7.3. This will be decided based on the APERC's directions.
- Currently, the existing PPAs under Section 62 lack a penalty Clause for failing to

meet the normative availability of 85%. Consequently, such a Clause was not included in the present PPA. However, the suggestion from the objector to impose a penalty on SEIL, if it fails to respond or offer supplies with supplementary fuel within the timeframe specified in Clause 15.7.2, may be considered.

- Regarding the proposed amendment to Clause 19.7(b) of the PPA concerning Force Majeure due to a Political Event, which suggests that "both the Parties shall bear their respective Force Majeure Costs and neither Party shall be required to pay to the other Party any costs thereof," the Commission may take an appropriate decision.

Sri Ninad Naik/Power Economics Analysis Forum

- SEIL's submitted Capital Cost of Rs. 1,272.46 Crores is higher than the Benchmark set by CERC (Order No. L-1/103/CERC/2012, dated 04.06.2012). Clause 20.3 of CERC's (Terms and Conditions of Tariff) Regulations, 2024 states as follows:
"Where the power purchase agreement entered into between the generating company and the 44 beneficiaries provides for the ceiling of actual capital expenditure, the Commission shall take into consideration such ceiling for prudence check."
- SEIL's energy charge calculation contains an error, which indicates Rs.3.049/kWh instead of the correct figure of Rs. 2.865/kWh.
- SEIL used a debt-equity ratio of 32.27%:67.73% for RoCE, instead of the standard 70%:30% as per CERC Tariff Determination Guidelines (dated 15.03.2024, Clause 18.4).
- SEIL's equivalent coal grade to the declared coal GCV does not match. The corrections, including adjusted GCV and average representative coal prices from

April 2024 to January 2025, are based on data from the MOP and the Ministry of Coal. Using actual coal prices yields a lower energy charge of Rs. 2.693/kWh, compared to the originally claimed Rs. 3.049/kWh.

Reply of SEIL:

The replies from SEIL and APDISCOMS regarding Capital Cost and debt-to-equity ratio are similar to their replies furnished to other objectors. Regarding the other views/objections, the replies of SEIL and APDISCOMS are as follows:

- The Objector's calculation of the energy charge rate at Rs.2.865/kWh is flawed because it fails to incorporate auxiliary consumption (5.25%) and coal transit loss (0.80%). Clause 11.1.5, read with Clause 13.1 of the APERC Tariff Regulation, 2008, explicitly mandates the inclusion of these factors in the computation of energy charges.
- SEIL has secured coal through SHAKTI B(iii) Auctions to meet the coal requirements for supplying power to APDISCOMs. The tentative GCV and associated costs were detailed in letters dated 11.09.2024 and 17.09.2024, within the Petition. The cost of coal, including all charges to deliver it to the plant periphery (such as transportation), is determined by the FSA between SEIL and the supplier. Based on the average GCV from MCL Talcher from February 2023 to December 2024, SEIL has considered the average GCVs as G12 at 3307 Kcal/Kg, G13 at 3007 Kcal/Kg, and G11 at 3607 Kcal/Kg.

Reply of APDISCOMs:

- The actual cost of coal will be determined by the weighted average "GCV as Billed." Additionally, in their counter, APDISCOMs explicitly stated their non-acceptance of SEIL's average GCV (As Received Basis) for G12 (3,307 kcal/Kg), G13 (3,007 kcal/Kg), and G11 (3,607 kcal/Kg).

Commission's Analysis and Decision

22. Having meticulously considered the submissions of the SEIL, APDISCOMs and objectors, the following key points warrant determination in these Petitions:

A. Point No.1: Should the quantum of power specified in the PPAs be required by APDISCOMs?

B. Point No.2: Should the Commission grant its approval to the proposed PPA? If the answer is yes, then does the PPA require any amendments? And

C. Point No.3: If the PPA is approved, what constitutes a just and appropriate tariff for the power procurement under this PPA?

Re: Point No.1

23. As per the Commission's Order dated 27.06.2024, on Load Forecasts, Resource Plans, and the State Electricity Plan for the 5th (FY2024-25 to FY2028-29) and 6th (FY2029-30 to FY2033-34) Control Periods, the projected annual incremental generation capacity needed for meeting base load ranges from 507 MW to 719 MW during the 5th Control Period. Consequently, additional base load generation is essential to meet this demand, and SEIL's Unit-2 of Project-I is well-positioned to fulfil this requirement, especially given the anticipated retirement of older APGENCO thermal power plants in the future. Moreover, base load generation is crucial as it forms the foundation of the electricity grid, providing indispensable stability, reliability, and balancing capabilities that variable renewable energy sources like solar and wind cannot currently offer.

Point No.1 is accordingly answered.

Re: Point No.2

24. One of the key objections is regarding the procurement of power under Section 62 instead of Section 63 of the Electricity Act, 2003. While Section 63 enables

APDISCOMS to procure power through competitive bidding as per the Guidelines issued by the MOP, Section 62 provides for the determination of the Tariff based on the relevant Tariff Regulations issued by the appropriate Commission under Section 61. In this regard, it is pertinent to note that in the Hon'ble Supreme Court's judgement dated 23.11.2022 in Civil Appeal No. 1933 of 2022 in the case of the TATA Power Company Limited Transmission Versus Maharashtra Electricity Regulatory Commission & Ors, it was held that Sections 62 and 63 stipulate the modalities of tariff determination. That the non-obstante Clause in Section 63 cannot be interpreted to mean that Section 63 would take precedence over Section 62 at the stage of choosing the modality to determine the tariff. That the criteria or guidelines for the determination of the modality of tariff determination ought to be notified by the Appropriate State Commission either through Regulations under Section 181 of the Act or Guidelines under Section 61 of the Act.

APERC (Terms and conditions for determination of tariff for supply of electricity by a generating company to a distribution licensee and purchase of electricity by distribution licensee) Regulation, 2008, does not bar the Commission from granting approval under Section 62 for procurement of power by APDISCOMS. After examining all the relevant aspects including the need for long-term power requirements from such intra-state Units, the energy security of the State, and the readily available resources for the commencement of supply from 01.04.2024, the Commission had given conditional approval in its letter dated 07.11.2023 to procure power from this Unit, subject to final tariff determination under Section 62. O.P.No.2 of 2025 has been filed by APDISCOMS for approval of the PPA, based on the above conditional approval, subject to tariff determination under Section 62 of the Electricity Act, 2003. Therefore, the contention that the power should be procured under only Section 63 has no merit as long as the Tariff determined under

Section 62 is competitive. The other key objections regarding the PPA are: the Exit Clause (10.2) is flawed because any interim tariff should be subject to final approval by APERC; for primary fuel shortages (Clause 15.7.2), APDISCOMs should not be liable for any fixed charges, if they decline supplementary fuel; for DISCOMs' failure to respond to fuel shortage notifications (Clause 15.7.3), the 70% fixed charge burden should not be passed on to consumers; for SEIL's failure to supply power (Clause 15.7.4), a reciprocal penalty clause should be incorporated to ensure accountability; and for Force Majeure due to Political Events (Article 19.7(b)), each party should bear its own costs, as neither is responsible for such occurrences.

After thoroughly reviewing the objections and conducting a detailed examination of the PPA, the Commission approves the PPA for the full contracted capacity of 660 MW, subject to the amendments outlined in Annexure-II.

Point No.2 is accordingly answered.

Re:Point No.3

25. Determination of Tariff

After thoroughly reviewing the objections regarding the tariff claims, the Commission now determines the tariff as outlined in the subsequent paragraphs. There were objections regarding the fixed cost claim by SEIL for FY2024- 25 as SEIL's Unit-2 of Project-I did not supply power during FY 2024-25. Since the power supply from the Unit commenced only from 06.05.2025, the Commission decides to determine the tariff for the remainder of the 5th control period only, i.e., from **FY 2025-26 to FY 2028-29**, based on the Capital Cost approved as of COD of the Unit as detailed below.

A. Capital Cost and Additional Capital Expenditure

SEIL claimed a Capital Cost of Rs. 4,816.66 Crores in its filings. The breakdown

of this Capital Cost is shown in the table below:

Table No. 1
Capital Cost (Rs. Crores) filed by SEIL

S.No.	Description	Rs(Crores)
1	Land Cost	66.18
2	Roads	59.89
3	Office Buildings	32.70
4	Factory Building	25.01
5	Furniture and Fixtures	2.03
6	Vehicles	2.34
7	Office Equipment	3.04
8	Plant and Machinery	4,601.27
9	Computers	2.85
10	ROU Assets	18.11
11	Computer Software	3.22
	Total Capital Cost	4,816.66

SEIL mainly relied on the following in support of its claim.

- I. Second proviso to Clause 10.8 of APERC Regulation 1 of 2008 specifies that in the case of the existing generating stations, the actual original cost of project recorded in the books of account of the Generating Company, subject to prudence check by the Commission, shall be considered as the original cost of project for the purpose of this Regulation.
- II. The books of accounts are being prepared and maintained by SEIL for both Project-I (comprising two Units) and Project-2 (comprising two Units), i.e. for all 4 Units put together. All these Units are similar in nature, adjacent to one another, and are of the same technology. Hence, the total cost of the 4 Units as of 31.03.2024, as per audited accounts, has been equally apportioned to derive the Capital Cost of Unit-2 of Project-I as of 31.03.2024.

Further, SEIL projected additional capital expenditure for the 5th control period, i.e., FY 2024-25 to FY 2028-29, as shown in the following table.

Table No.2
Additional capital expenditure projected by SEIL (Rs. Crores)

Financial Year	Amount
2024-25	22.4
2025-26	110.03
2026-27	44.47
2027-28	41.77
2028-29	35.66
Total	254.32

Commission's decision:

As the four Units were commissioned on different dates, factors such as variations in material and labour costs, differences in financing structures, technological advancements, and Interest During Construction (IDC) significantly impact the Capital Cost of each Unit. Therefore, SEIL's approach of equally apportioning the total Capital Cost across the four Units lacks rationality and goes against sound financial principles. Without item-wise details of the Capital Cost for each Unit, the Commission cannot undertake a prudent check of the Capital Cost incurred for the Unit in question. Determining fixed costs based on such apportionment would be prejudicial to the interests of APDISCOMs and, ultimately, the consumers. Even if the term "project" in the second proviso to Clause 10.8 of APERC Regulation 1 of 2008 is interpreted to encompass multiple Units, it does not imply that the Capital Cost should be derived on an apportionment basis. Financial prudence, as practised by Central and State Electricity Regulatory Commissions, dictates that actual Unit-specific Capital Costs should form the basis for tariff determination. Furthermore, since "project" isn't defined in Regulation 1 of 2008, it could reasonably refer to a single Unit.

Therefore, in the absence of the actual Capital Cost incurred for this Unit, the Commission decides to determine the Capital Cost based on the Benchmark Capital Cost specified in the CERC order dated 04.06.2012 on "Benchmark Capital Cost (Hard cost/Mandatory Package) for Thermal Power Stations with Coal as Fuel". The Commission adopted a similar approach while determining the Capital Costs of similarly placed thermal projects in its earlier orders.

The Unit achieved its COD on 15.09.2015. To determine the Hard Cost as of COD, the Commission adopts the CERC Benchmark Hard Cost of Rs. 5.01 Crores per MW for a 660 MW Unit as of Dec 2011, as the basis for calculating the Capital Cost. This Hard Cost excludes permissible additional expenses for items such as Merry-Go-Round (MGR), Railway Siding, Unloading Equipment at Jetty, Rolling Stock, Locomotive, Transmission Line up to the Tie Point, Taxes and Duties, Financing, Interest During Construction, Right of Way, and Rehabilitation & Resettlement. SEIL submitted details of costs incurred for certain permissible items that can be added to the CERC Benchmark Hard Cost, supported by an Auditor's Certificate (for the combined two Units in Project-1), as detailed below:

Table No.3 (Rs. Crores)

S.No.	Description of item	Amount for Project-1 (2x660 MW Units)	Amount for Unit-2 of Project-1
1	Financing Cost	217.72	108.86
2	Cost of Rehabilitation & Resettlement	36.31	18.155
3	Transmission Line to Tie Point	36.37	18.185
5	Coal Conveying System (External) from Krishnapatnam Port to Tie Plant	286.87	143.435
6	Sea Water Intake System	302.96	151.48
7	Desalination Plant	43.75	21.875
Total		923.98	461.99

The CERC Benchmark costs order does not include the costs for items 5, 6, and 7 listed in the table. Additionally, SEIL apportioned the total costs for Project-I equally between the two Units. Ideally, SEIL should have claimed costs based on the actual expenses incurred for each Unit. However, at the same time, it would be unfair to disallow the costs SEIL incurred for the admissible items. Moreover, the impact of equally apportioning these costs between the two Units has an insignificant effect on the fixed costs. Consequently, the Commission includes the costs for items 1, 2, and 3 as submitted by SEIL for Unit-2 in arriving at the Capital Cost.

Accordingly, the cost incurred towards transmission line up to the tie point has been added to the base CERC Benchmark hard cost as of Dec 2011 and then the total escalated by 5% annually (consistent with previous orders for similar thermal projects) until the COD, resulting in a Hard Cost of Rs. 4,003.05 Crores as of COD. Then the cost of Rs.127.02 Crores incurred towards Financing and Rehabilitation & Resettlement has been added to the above cost of Rs. 4,003.05 Crores to arrive at a total cost of Rs.4,130.07 Crores. For the normative computation of IDC, this total Hard Cost of Rs. Rs.4,130.07 Crores has been divided into a 70:30 debt-to-equity ratio, in accordance with APERC Regulation 1 of 2008. This yielded a normative loan component of Rs.2,891.05 Crores. This amount has then been proportionally spread across the 50-month scheduled completion period for a 660 MW coal-based thermal extension unit, as per CERC Tariff Regulations. Each year's loan drawl has been assumed to occur in the middle of that year. Using an interest rate of 9.99% (SEIL's weighted average interest rate including the Corporate Guarantee Fee), the normative IDC on these drawls works out to Rs. 662.36 Crores. The IDC computations are shown below:

Table No. 4
IDC approved by APERC (Rs. Crores)

Description	1st year	2nd year	3rd year	4th year	5th year (2 months)	Total
Loan drawals	693.85	693.85	693.85	693.85	115.64	2891.05
Cumulative loan (including interest)	693.85	1422.36	2223.65	3104.99	3496.16	-----
IDC	34.66	107.44	187.48	275.53	57.25	662.36

After incorporating the above calculated IDC, the Capital Cost of the Unit works out to Rs. 4,792.46 Crores as of COD. The specifics of this Capital Cost computation are indicated in the table below:

Table No. 5
Capital Cost approved by APERC (Rs. Crores)

S.No.	Description	Amount
1	CERC Benchmark Hard Cost as of Dec 2011 for 660 MW brownfield extension Unit	3306.60
2	Transmission Line Cost till Tie Point	18.185
3 = (1)+ (2)	CERC Benchmark Hard Cost as of Dec 2011, including Transmission Line Cost till Tie Point	3324.79
4	CERC Hard Cost as of COD (S.No.3 escalated by 5% per Annum up to COD)	4003.05
5	Financing and Rehabilitation & Resettlement Costs	127.02
6=(4)+(5)	Capital Cost excluding IDC	4130.07
7 = 0.7*(6)	Normative loan	2891.05
8	IDC	662.36
9 =(6)+(8)	Capital Cost including IDC	4792.43

As regards the additional capitalisation of Rs. 254.32 Crores, SEIL has claimed it based on projections without having actually incurred the costs. Moreover, SEIL

has not demonstrated how this proposed capitalisation would enhance the Unit's efficient and successful operation. Consequently, the Commission is not inclined to approve the claim at this stage. However, SEIL is permitted to file a petition with the Commission once the expenditure is actually incurred, supported by appropriate documentation and justification.

B. Depreciation

SEIL has claimed depreciation in line with the rates outlined in the CRERC Tariff Regulations, 2024. The depreciation amounts claimed by SEIL are shown in the following table:

Table No. 6
Depreciation amounts filed by SEIL (Rs. Crores)

Financial Year	Amount
2024-25	249.23
2025-26	253.19
2026-27	258.19
2027-28	261.33
2028-29	264.49
Total	1286.43

Commission's decision

Clause 12.2(b) of APERC Regulation 1 of 2008 stipulates that depreciation shall be determined based on the Ministry of Power (MOP) rates. However, in order to avoid front-loading of tariff, the Commission has previously adopted a depreciation rate of 3.6% in its latest tariff orders dated 28.10.2024 for Dr.NTTPS Stage-V(1x800 MW) and SDSTPS Stage-II (1x800 MW) for the 5th control period. This rate is lower than that of MOP. Accordingly, the Commission adopts the same rate of 3.6% for depreciation calculations. This depreciation rate is applied to the entire assets, excluding land cost, since land is not a depreciable asset and shall not be included in the Capital Cost for computation of depreciation as per Clause

12.2 of APERC Regulation 1 of 2008 and also CERC Tariff Regulations. Further, the depreciation shall be allowed up to a maximum of 90% of the Capital Cost, excluding land cost. The depreciation amounts calculated by the Commission based on the above are shown in the following table:

Table No.7
Depreciation approved by APERC (Rs. Crores)

S.No.	Description	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Depreciation	170.14	170.14	170.14	170.14
2	Accumulated Depreciation	1623.81	1793.96	1964.10	2134.25

C. Operation & Maintenance(O&M) Charges

SEIL has claimed Operation and Maintenance (O&M) charges in accordance with the norms outlined in the CERC Tariff Regulations, 2024. The details of the O&M charges claimed by SEIL are indicated in the table below:

Table No.8
O&M charges filed by SEIL (Rs. Crores)

Description	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Unit Size(MW)	660	660	660	660	660
Norm (Rs.Lakhs/MW)	25.78	27.13	28.56	30.06	31.64
O&M charges	170.15	179.06	188.50	198.40	208.82

Commission's decision

The Commission approved the O&M charges for APGENCO's thermal stations for the 5th control period by adopting the norms outlined in the CERC Tariff Regulations, 2024. Further, since APERC Regulation 1 of 2008 does not specify O&M norms for 660 MW units, the Commission decides to calculate the O&M

charges based on the norms provided in the CERC Tariff Regulations, 2024. The O&M charges determined by the Commission, which match those claimed by SEIL, are shown in the table below:

Table No.9
O&M charges approved by APERC (Rs. Crores)

Description	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
O&M charges	179.06	188.50	198.40	208.82

Working Capital

SEIL has claimed Working Capital in accordance with Clause 12.4 of APERC Regulation 1 of 2008 as shown below:

Table No.10
Working Capital filed by SEIL (Rs. Crores)

S.No.	Description	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Cost of Primary Fuel	233.79	233.79	233.79	234.43	233.79
2	Cost of secondary Fuel	2.86	2.86	2.86	2.87	2.86
3	O&M charges	14.18	14.92	15.71	16.53	17.40
4	Maintenance Spares as % of O&M expenses	1.70	1.79	1.88	1.98	2.09
5	Receivables	408.19	405.05	404.22	402.19	398.78
6	Less: Cost of Primary and Secondary fuel	118.33	118.33	118.33	118.65	118.33
Total Working Capital (1+2+3+4+5-6)		542.40	540.09	540.14	539.36	536.59

Commission's decision

As stipulated in Clause 12.4 of APERC Regulation 1 of 2008, Working Capital comprises the cost of coal and oil for one month at target availability, O&M

charges for one month, maintenance spares at 1% of the historical cost escalated by a 4% indexation of O&M norms, and receivables for electricity sales equivalent to two months of the combined annual fixed charges and energy charges calculated at target availability. The Commission has consistently applied the norms of APERC Regulation 1 of 2008 for determining Working Capital, including for various APGENCO thermal stations in the latest MYT Tariff Order dated 09.09.2024 (O.P. No. 79 of 2023) for the 5th control period. Accordingly, the Commission adopts the same methodology to compute the Working Capital for this Unit. The computed Working Capital amounts are indicated in the table below:

Table No.11
Working Capital approved by APERC (Rs. Crores)

S.No.	Description	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Cost of Fuel for 1 month, including oil	109.8	109.8	109.8	109.8
2	O&M charges for 1 month	14.92	15.71	16.53	17.40
3	Spares @1% of CC with 4% Escalation	70.94	73.78	76.73	79.8
4	Receivables equivalent to 60 days	349.77	348.08	346.47	344.95
Working Capital per Annum (1+2+3+4)		545.39	547.32	549.49	551.91

D. Weighted Average Cost of Capital (WACC)

SEIL claimed a Weighted Average Cost of Capital (WACC) of 13.72% as per the formula outlined in Clause 12.1.b of APERC Regulation 1 of 2008, calculated using a Debt/Equity ratio of 32.27%:67.73%, a Return on Equity of 15.5%, and an Interest on Debt of 9.99%

Commission's decision

Clause 12.1.b. of APERC Regulation 1 of 2008 specifies the following formula

for Weighted Average Cost of Capital (WACC).

$$WACC = [D/E/(1+D/E)] rd + [1/(1+D/E)]re$$

Where

'D/E' is the Debt to Equity Ratio and shall be determined at the beginning of the Control Period after considering the Generating Company's previous years' D/E mix, market conditions and other relevant factors.

'rd' is the Cost of Debt and shall be determined at the beginning of the Control Period after considering the Generating Company's proposals, present cost of debt, market conditions and other relevant factors.

're' is the Return on Equity and shall be determined at the beginning of the Control Period after considering CERC norms, Generating Company's proposals, previous years' D/E mix, risks associated with generating business, market conditions and other relevant factors.

As per Clause 10.13 of APERC Regulation 1 of 2008, the debt-equity ratio as of COD shall be fixed at 70:30 for tariff determination, regardless of the actual debt and equity proportions. Further, the Debt-to-Equity Ratio is to be determined at the start of the Control Period, taking into account the Generating Company's historical Debt/Equity mix, market conditions, and other relevant factors. Further, Clause 18 of CERC Tariff Regulations, 2024 caps equity at 30% of the Capital Cost, treating any equity exceeding 30% as a normative loan. After considering the above provisions, the Commission adopts a Debt/Equity ratio of 70:30, consistent with its practice for all thermal stations, both at the time of COD and at the beginning of the Control Period.

For the Return on Equity (ROE), the Commission adopts the rate of 15.5% as specified in Clause 30 of CERC Tariff Regulations, 2024, in line with its consistent adoption of CERC norms for ROE. For the interest on debt, the

Commission adopts SEIL's actual weighted average interest rate of 9.99% for the loans availed (including Corporate Gurantee Fee). Based on these adopted figures and the specified formula, the WACC works out to 11.64%.

E. Return on Capital Employed (RoCE)

SEIL has calculated the Return on Capital Employed (ROCE) in accordance with Clause 12.1 of APERC Regulation 1 of 2008. The ROCE amounts claimed by SEIL are indicated in the table below:

Table No.12
Return on Capital Employed (RoCE) filed by SEIL (Rs. Crores)

S.No.	Description	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Original Capital Cost	4816.66	4839.06	4949.08	4993.55	5035.31
2	Less Accumulated Depreciation	1391.70	1640.93	1894.12	2152.31	2413.65
3	Working Capital	542.403	540.09	540.14	539.36	536.59
4	Total (1-2+3)	3967.35	3738.21	3595.10	3380.60	3158.26
5	WACC (%)	13.72	13.72	13.72	13.72	13.72
RoCE per Annum		544.45	513.01	493.37	463.93	433.42

Commission's decision

As per Clause 12.1 (a) of APERC Regulation 1 of 2008, RoCE is equal to the sum of

- I. Original Capital Cost less Accumulated depreciation, and;
- II. Working Capital approved by the Commission as per this Regulation, multiplied by the Weighted Average Cost of Capital (WACC).

In para 25(A), the Commission determined the Capital Cost for the Unit as Rs. 4,792.43 Crores as of COD, i.e., 15.09.2015. Additionally, the Commission has disallowed the additional capital expenditure of Rs. 254.32 Crores projected by SEIL for the 5th control period (FY 2024-25 to FY 2028-29). The components of

the RoCE formula—Gross Fixed Asset (Original Capital Cost), Depreciation, Working Capital, and WACC—have been determined by the Commission *supra*. Using these components and the specified formula, the Commission has computed the RoCE amounts, which are shown in the table below:

Table No.13
Return on Capital Employed (RoCE) approved by APERC (Rs. Crores)

S.No.	Description	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Original Capital Cost	4792.43	4792.43	4792.43	4792.43
2	Less Accumulated Depreciation	1623.81	1793.96	1964.10	2134.25
3	Working Capital	542.403	540.09	540.14	539.36
4	Total (1-2+3) (Net asset Base)	3,714.00	3,545.79	3,377.81	3,210.09
5	WACC (%)	11.64	11.64	11.64	11.64
RoCE per Annum = (4)*(5)		432.31	412.73	393.18	373.65

F. Fixed Charges

The Fixed Charges claimed by SEIL, along with those calculated by the Commission by aggregating the ROCE, O&M charges, and Depreciation as determined earlier, are presented in the tables below:

Table No.14
Fixed Charges filed by SEIL(Rs.Crores)

S.No.	Description	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Depreciation	249.23	253.19	258.19	261.33	264.49
2	O&M charges (including water charges, etc)	235.55	244.20	253.86	264.10	274.84
3	ROCE	544.45	513.01	493.37	463.93	433.42

Fixed Cost (1+2+3)	1029.23	1010.40	1005.41	989.36	972.75
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Table No.15
Fixed Charges approved by APERC (Rs.Crores)

S.No.	Description	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Depreciation	170.14	170.14	170.14	170.14
2	O&M charges	179.06	188.50	198.40	208.82
3	ROCE	432.31	412.73	393.18	373.65
Fixed Cost (1+2+3)		781.51	771.37	761.72	752.62

The fixed charges approved above are for a contracted capacity of 660 MW at 85% availability. The per unit fixed charges approved by the Commission work out to Rs.1.68, Rs.1.66, Rs.1.64 and Rs.1.62 per unit for FY 2025-26, FY 2026-27, FY 2027-28, and FY 2028-29, respectively. These are lower than SEIL's claimed charges of Rs. 2.17, Rs. 2.16, Rs. 2.12, and Rs. 2.09 per unit for the same years, respectively. Additionally, the approved fixed charges for this Unit are competitive when compared to those being paid by APDISCOMs for the 625 MW capacity (500 MW + 125 MW open access) of another SEIL Unit located in the same premises w.e.f. 13.12.2023, as well as other new APGENCO stations whose tariffs have been approved recently.

G. Income Tax and Incentives

SEIL requested the Commission to allow it to bill income tax from APDISCOMs based on actuals.

Commission's decision

As per Clause 12.5 of APERC Regulation 1 of 2008, Income Tax claims shall be limited to the tax on the Return on Equity component of the Return on Capital

Employed (RoCE), excluding any tax on profits exceeding such return, penalties, interest on delayed tax payments, and shall be adjusted for any refunds received for prior periods. Accordingly, SEIL is directed to claim Income Tax in compliance with this provision.

As per Clause 15.1.b of APERC Regulation 1 of 2008, an Incentive shall be payable at a flat rate of 25.0 paise/kWh for ex-bus scheduled energy corresponding to scheduled generation exceeding the ex-bus energy associated with the target Plant Load Factor. Therefore, SEIL is permitted to claim the Incentive as per this provision, based on a target Plant Load Factor of 85%.

H. Ash Transportation Charges, Water Charges, Capital Spares, and Security Expenses

SEIL has requested the Commission to allow, in addition to the normative O&M expenses, separate amounts for water charges, capital spares, and security expenses. The details are as follows:

Table No.16 (Rs. Crores)

Description	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Water Charges	4.03	4.03	4.03	4.03	4.03
Security Expenses	55.00	55.00	55.00	55.00	55.00
Capital Spares	6.37	6.37	6.37	6.37	6.37

Additionally, SEIL stated that it will claim the ash transportation expenses at actuals, at the time of truing up, based on the CERC norms.

Commission's decision

Regarding the ash transportation charges, water charges, and security expenses, the Commission is not inclined to approve these as separate

components. Consistent with its approach for all Intra-State GENCOs, the Commission includes water charges and security expenses within the approved O&M costs, based on the applicable CERC Tariff Orders for the respective years, even though the CERC Tariff Regulations permit these expenses over and above the O&M costs. However, SEIL is at liberty to file a True-Up petition if the actual O&M expenses exceed the approved amounts due to water or security-related costs. In such a case, the Commission will examine the petition and, upon prudent scrutiny and verification of the expenditure's genuineness, will issue an appropriate Order.

As regards the capital spares, the Commission has calculated the Capital Cost based on the CERC Benchmark cost, which already includes provisions for initial/ capital spares. Consequently, the Commission is not inclined to accept SEIL's request for additional capital spares.

As for the Ash transportation charges, the SEIL may file a petition before the Commission based on the actual expenditure incurred, and the Commission will allow the appropriate amounts based on a prudent check and MoP & MoEF Orders in this regard.

I. Variable/Energy Charges

SEIL claimed a base Variable Charge (energy charge) of Rs.3.05/kWh, calculated using the normative parameters outlined in the CERC Tariff Regulations, 2024, and fuel values as shown below.

Table No.17
Normative Parameters used by SEIL

S.No.	Description	Units	Values
1	Station Heat Rate	kCal/Kg	2246.75
2	Auxiliary Power Consumption	%	5.25
3	Specific Oil Consumption	ml/kWh	0.5
4	Windage & Transit Losses	%	0.8
5	Availability	%	85

Table No.18
Fuel Values used by SEIL

S.No.	Description	Units	Values
1	GCV of Coal	Kcal/Kg	3368
2	Landed Cost of Coal	Rs/MT	4288.79
3	GCV of Oil	Kcal/Kg	10523
4	Landed Cost of Oil	Rs/KL	69830

To determine the GCVs and Landed Costs of Fuels, SEIL utilised the weighted average values derived from multiple fuel sources.

Commission's decision

Clause 13.1.a. of APERC Regulation 1 of 2008 specifies the formula for calculating Variable Charges (Rs./kWh). The formula includes components such as the landed cost of fuel, GCV of fuel, and normative values for specific oil consumption, auxiliary consumption, and Station Heat Rate. As APERC Regulation 1 of 2008 does not specify the norms for the 660 MW Units, the Commission accepts the CERC norms adopted by SEIL for calculating the base Variable Charge.

As per Clause 13.1.b of the APERC Regulation 1 of 2008, the initial/base Variable Charge (Rs./kWh) for the Unit shall be determined based on the actual gross calorific value of coal, lignite, gas, or liquid fuel from the preceding three months. However, the GCV values used by SEIL for base rate computation are not the GCV values of coal for the three months preceding the commencement of supply to APDISCOMs from this Unit on 06.05.2025. Instead, SEIL based its calculation on weighted average prices and GCVs of coal and oil during Feb '23 to Dec'24 and Jan '24 to Aug '24, respectively.

Given the GCV ranges for these grades (G-13: 3401-3700 kcal/kg, G-12: 3701-4000 kcal/kg, and G-11: 4001-4300 kcal/kg), the weighted average GCV that SEIL used for claiming Variable Charge of Rs.3.05/kWh appears to be low, even after accounting for grade slippage between as-billed and as-received coal. A letter from APDISCOMs on 23.05.2025 informed the Commission that SEIL has secured an additional 0.152 Million Tons per Annum (MTPA) of zero-premium coal from MCL Talcher. This brings the total coal secured for this Unit to 3.04 MTPA, which is sufficient to generate approximately 654 MW, as per APDISCOM's estimates.

Based on the latest allocations, the coal supplies secured by SEIL under the Shakti B(iii) scheme are as follows:

- 2.332 MTPA of zero-premium G-12 coal from MCL Talcher
- 0.648 MTPA of premium G-11 coal from CCL
- 0.060 MTPA of premium G-13 coal from MCL IB Valley

Article 10.1.2 of the PPA specifies that if coal is not allocated under the existing FSA dated 22.06.2013 and/or SHAKTI B(ii) by MCL/CIL within one month from the approval of the PPA by the Commission, APDISCOMs will permit the use of SHAKTI B (iii) coal (including premium coal), subject to the Commission's

approval.

However, in the letter dated 23.05.2025, APDISCOMs submitted that 494 MW of power can be generated from the Unit with 2.332 MTPA of zero premium coal secured by SEIL from MCL-Talcher. They further stated that they will approach the MOP/GOI to increase the zero-premium coal allocation from 2.332 MTPA to 3.116 MTPA under SHAKTI B(iii), and also the balance of zero-premium coal required to generate the full contracted capacity. That if the MoP does not approve the increase in allocation, they will seek Commission approval to use SEIL's premium coal for the remaining Contracted Capacity, citing it is a cost-effective option besides being cheaper than APGENCO's SDSTPS Stage-II Variable Cost at the same location. After stating the above, they requested the Commission to pass an appropriate order keeping the above in view. It is evident from the letter that APDISCOMs are now opting to secure zero-premium coal under the SHAKTI B(iii) scheme, continuing to pursue coal under the existing FSA dated 22.06.2013 and/or SHAKTI B(ii) from MCL/CIL.

Further, SEIL in the counter to O.P.No. 2 of 2025, stated that Coal allocation under SHAKTI B(ii) does not apply to the present PPA, as SHAKTI B(ii) is meant for PPAs executed before May 2017. That, therefore, the only primary coal available for this PPA is that secured by SEIL under SHAKTI B(iii).

Considering the above submissions, the Commission allows APDISCOMs to procure energy generated using zero-premium coal of 2.332 MTPA (494 MW effective capacity) at a Variable Charge of Rs. 2.83/kWh. This Charge has been determined based on the lowest Gross Calorific Value (GCV) for G12 grade zero premium coal, adjusted for a one-grade slippage to account for the difference between as-billed and as-received GCV, resulting in a GCV of 3400 kCal/kg. The Normative Parameters (as per CERC) and Fuel Values adopted by the

Commission for the determination of Variable Cost of Rs.2.83 per unit are as follows:

Table No.19**Normative Parameters used by APERC**

S.No.	Description	Units	Values
1	Station Heat Rate	kCal/Kg	2246.75
2	Auxiliary Power Consumption	%	5.25
3	Specific Oil Consumption	ml/kWh	0.5
4	Windage & Transit Losses	%	0.8
5	Availability	%	85

Table No.20**Fuel Values used by APERC**

S.N o.	Description	Units	Values (zero premium coal)	Values (Premium + zero premium coal)
1	GCV of Coal	Kcal/Kg	3400	3458
2	Landed Cost of Coal	Rs/MT	4015.12	4275.10
3	GCV of Oil	Kcal/Kg	10523	10523
4	Landed Cost of Oil	Rs/KL	69830	69830

Point No.3 is accordingly answered.

- 26.** The energy charge determined above is only indicative, and APDISCOMS shall pay the energy charges as per Clause 13.1 of APERC Regulation 1 of 2008.
- 27.** As regards the energy generation from premium coal secured under SHAKTI B(iii), APDISCOMS may procure this energy under the present PPA, subject to prior approval from the Commission, based on their power requirement. Alternatively, APDISCOMS shall permit SEIL to sell any surplus capacity exceeding 494 MW to third parties through open access after exercising the first right of refusal. For the

above sale, SEIL is not required to obtain any permission from APDISCOMS/APTRANSCO. APDISCOMs are given liberty to approach the Commission to seek approval for full capacity utilisation of the Unit by making use of the entire coal allocation under SHAKTI B(iii).

28. In this regard, APDISCOMs are directed to actively pursue with the Ministry of Power and the Ministry of Coal (through the Government of Andhra Pradesh) to increase the allocation of zero premium coal from MCL-Talcher to the required quantity to operate the Unit at full capacity, taking into account its lower price and lower transportation cost.

29. When SEIL submits bills to APDISCOMs, it shall provide all necessary information using the format in Annexure-III of this Order. If the information isn't submitted in the specified format, the bill will be considered incomplete, and APDISCOMs may withhold payment until SEIL provides the required details. The **SEIL must submit an annual performance petition to the Commission each year once its audited financial figures become available.**

30. The following CERC directions regarding the sampling and testing of GCV at the receiving end of generating stations must be strictly adhered to.

“As per the directions of the Hon'ble High Court of Delhi, the CERC vide its order dated 25.1.2016 in Petition No. 283/GT/2014 has decided as under:

(a) There is no basis in the Indian Standards and other documents relied upon by NTPC etc. to support their claim that GCV of coal on as received basis should be measured by taking samples after the crusher set up inside the generating station, in terms of Regulation 30(6) of the 2014 Tariff regulations.

(b) The samples for the purpose of measurement of coal on an as-received basis should be collected from the loaded wagons at the generating stations

either manually or through the Hydraulic Auger in accordance with provisions of IS 436(Part 1/Section 1)-1964 before the coal is unloaded. While collecting the samples, the safety of personnel and equipment as discussed in this order should be ensured. After collection of samples, the sample preparation and testing shall be carried out in the laboratory in accordance with the procedure prescribed in IS 436(Part 1/Section 1)-1964, which has been elaborated in the CPRI Report to PSERC.”

31. The GCV shall be calculated at the receiving generating station for the computation of energy charge/variable charge, following the above sampling procedure duly considering the minimum margin recommended in the MoP notification dated 18.10.2017, to account for the loss of GCV from the wagon top at the unloading point to the point of firing in the boiler.
32. APDISCOM shall approve the third-party sampling agency for assessing the coal quality as per the PPA provisions within one month from the date of this Order.
33. APDISCOMs shall expedite the completion of the evacuation facility for this Unit through the STU network in coordination with APTRANSCO. However, if the currently available GNA is sufficient to draw power from this Unit through the CTU network, evacuation via the STU network may be deferred to avoid incurring evacuation costs. The need for evacuation through the STU network shall be reviewed periodically, and the Commission shall be kept informed of any developments. As regards the installation of FGDs by SEIL, if any, the Office Memorandum issued by NITI Aayog dated 24.09.2024 shall be duly taken into consideration.
34. The fixed charges determined in this Order are for the full capacity of 660 MW at a target availability of 85%. Since the zero premium coal cannot generate

full capacity, APDISCOMs shall pay the fixed charges proportional to the Capacity corresponding to the zero premium coal at 85% availability. If the actual availability falls below this threshold, payments shall be claimed and paid on a pro rata basis every month, subject to annual reconciliation. Further, since SEIL commenced power supply on 06.05.2025, the fixed charges payable for FY 2025-26 shall be claimed and paid on a pro-rata basis. If the Commission grants approval for the use of premium coal under SHAKTI B(iii) for any additional capacity that is over and above the Capacity generated using zero premium coal, APDISCOMs shall pay the fixed charges for that capacity.

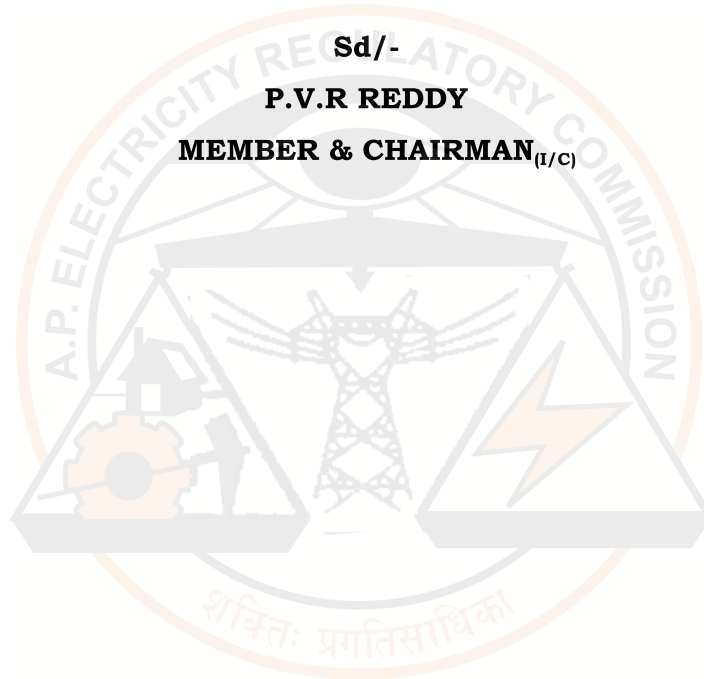
35. In line with the directions issued for APGENCO/APPDCL thermal stations, the Commission directs APDISCOMs to deduct five paise per unit from the variable cost if the actual monthly availability is up to 5% below the normative/target level; ten paise per unit if the shortfall is between 5% and 15%; and fifteen paise per unit if the shortfall exceeds 15%. SEIL may seek the release of any amount withheld by APDISCOMs in this regard by filing an appropriate petition, providing reasons for the shortfall and demonstrating that the non-performance was due to uncontrollable factors.

36. Any violation of the directions issued by the Commission in this Order will result in the Commission taking *suo motu* action under Sections 142 and 146 of the Electricity Act, 2003.

37. SEIL is entitled to recover the tariff as determined in this order from APDISCOMs in proportion to the power supplied to them.

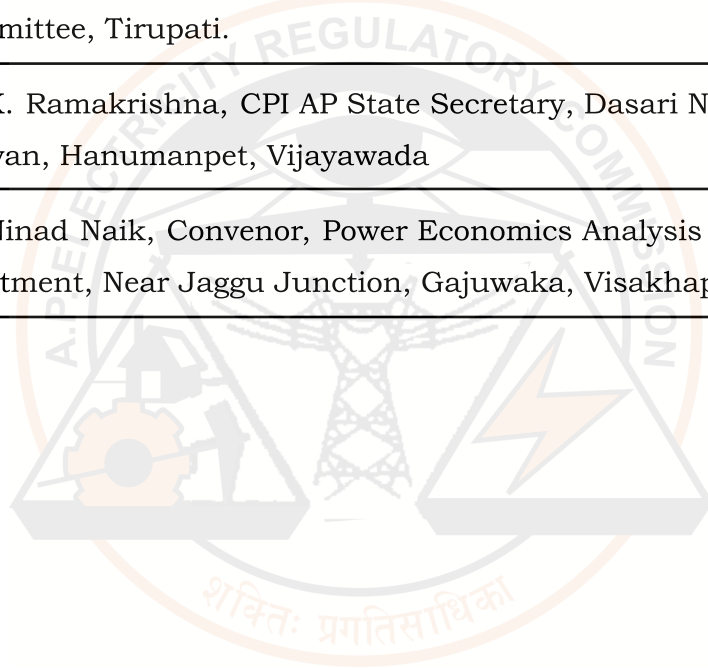
38. In light of the foregoing discussion, the Commission grants consent to the PPA, with the tariff and conditions as determined and modified above. Therefore, APDISCOMs are hereby directed to incorporate all specified amendments shown in Annexure II and submit the amended PPA, signed by all parties, within 120 days from the date of this Order for the Commission's final approval. APDISCOMS are directed to incorporate any additional amendments necessary in line with the directions issued by the Commission in this Order.

The OPs and IAs accordingly stand disposed of.



ANNEXURE-I
(LIST OF OBJECTORS)

S.No	Name of the Objector
1	Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, H.No.1-100/MP/101, Monarch Prestige, Journalists' Colony, Serilingampally Mandal, Hyderabad.
2	Sri Ch. Baburao, State Secretariat Member, AP Committee, CPI (M), H.No.27-30-9, Akulavari Street, Governorpet, Vijayawada.
3	Sri Kandharapu Murali, Secretariat Member, CPI(M), Tirupati District Committee, Tirupati.
4	Sri K. Ramakrishna, CPI AP State Secretary, Dasari Nagabhushana Rao Bhavan, Hanumanpet, Vijayawada
5	Sri Ninad Naik, Convenor, Power Economics Analysis Forum, G K Royal Apartment, Near Jaggu Junction, Gajuwaka, Visakhapatnam.



ANNEXURE-II
AMENDMENTS TO THE PPA

Article No.	Existing	Amendments to be carried out	Reasons for the amendment
10.1.2	The Parties agree that if in the event of non-allocation of coal under existing FSA dated 22-06-2023 and/or SHAKTI B (ii) by MCL/CIL, after one month from the approval of this Agreement by the Hon'ble APERC, the Utility will permit usage of coal as specified in ANNEXURE-II with due permission of APERC.	The Parties agree that if zero-premium coal is not allocated in place of the premium coal specified in Annexure-II of the PPA within four months from the approval of this Agreement by the Hon'ble APERC, the Utility shall permit the use of the premium coal specified in Annexure-II of the PPA, subject to APERC's approval.	The amendment is necessitated in view of the reasons explained under the Commission's decision in this order.
10.2	Notwithstanding anything contained in this Agreement, if, in the event, AFC determined by Hon'ble APERC for the first Accounting Year, is unacceptable to Supplier according to Clause 10.2.2, then, it may, at its sole discretion, issue a Termination Notice to the Utility within 30 days from the issuance of such order. Termination of this Agreement shall take effect on the day after the date of such notice. The	Notwithstanding anything contained in this Agreement, if, in the event, AFC determined by Hon'ble APERC for the first Accounting Year, is unacceptable to Supplier according to Clause 10.2.2, then, it may, at its sole discretion, issue a Termination Notice to the Utility within 30 days from the issuance of such order. Termination of this Agreement shall take effect on the day after the date of	Only APERC has the authority to fix the tariff.

	Parties agree that the Termination right contained herein is a fundamental premise of entering into this Agreement, and any appeal preferred by either Party against the said order shall not be construed as a waiver of the Termination right contained herein. Further, Electricity supplied prior to the date of Termination shall be billed and paid as per the interim Tariff agreed between the Parties.	such notice. The Parties agree that the Termination right contained herein is a fundamental premise of entering into this Agreement, and any appeal preferred by either Party against the said order shall not be construed as a waiver of the Termination right contained herein. Further, Electricity supplied prior to the date of Termination shall be billed and paid as per the Tariff approved by APERC.	
15.7.2.ii	<p>If, in the event, the utility informs the Supplier of non-requirement of the power offered using the Supplementary Fuel, then such power will be treated as Non-Availability. However, the Utility has the sole discretion to exercise the following options, so as to ensure full Annual Fixed Cost to the Supplier.</p> <p>a) The Utility shall pay 70% of the Fixed Charge for such Non-Availability up to the Normative Availability at the end of each Accounting Year.</p>	<p>If, in the event, the utility informs the Supplier of non-requirement of the power offered using the Supplementary Fuel, then such power will be treated as Non-Availability. Then the Utility shall allow the Supplier to offer such offered Capacity for sale to Buyers. The Utility shall not be obligated for payment of Fixed Charges in respect of such offered Capacity.</p>	Paying fixed charges without taking power is detrimental to the interests of APDISCOMs.

	<p>and/or</p> <p>b) The Utility may allow the Supplier to offer such offered Capacity for sale to Buyers. The Utility shall not be obligated for payment of Fixed Charges in respect of such offered Capacity.</p>		
15.7.3	<p>Provided further, if in event, the Utility does not communicate its decision within time specified against the offer of Supplier in terms of Clause 15.7.2 and/or in case the Utility does not respond to the intimation communicated by the Supplier in terms of Clause 15.6 (Fuel Shortage) till Minimum Fuel Stock gets exhausted and unable to run the Unit for want of Coal as per the guidelines of CEA in a day, then from that day onwards to the day of further Instructions of the Utility, the Utility shall pay 70% of the Fixed Charge for such Non-Availability up to the Normative Availability at the end of each Accounting Year.</p>	<p>Provided further, if in event, the Utility does not communicate its decision within time specified against the offer of Supplier in terms of Clause 15.7.2 and/or in case the Utility does not respond to the intimation communicated by the Supplier in terms of Clause 15.6 (Fuel Shortage), then it shall be treated as deemed approval by APDISCOMs to the Supplier to offer such Capacity for sale to Buyers. In that case, the gains from the sale of such capacity shall be adjusted as specified under para (ii) of Clause 15.7.2.</p>	<p>Consumers should not suffer due to lapses on the part of APDISCOMs.</p>

19.7.1.b	<p>(a) Upon occurrence of a Non-Political Event and Indirect Political Event, the Parties shall bear their respective Force Majeure Costs and neither Party shall be required to pay to the other Party any costs thereof; and</p> <p>(b) Upon occurrence of a Political Event, all Force Majeure Costs attributable to such Political Event shall be reimbursed by the Utility to the Supplier.</p>	<p>Upon occurrence of a Non-Political Event and Direct or Indirect Political Event, the Parties shall bear their respective Force Majeure Costs, and neither Party shall be required to pay to the other Party any costs thereof</p>	<p>APDISCOMs are not responsible for the Political Events, Direct or Indirect.</p>
30.1	<p>"Primary Fuel" shall mean Concessional/ existing FSA Coal already had by M/s SEIL/ SHAKTI B(ii) Fuel which is to be procured by the Supplier through concessional, preferential sale of such Fuel by a Government Instrumentality or an entity owned or controlled by the Central Government or the State Government as the case may be. Provided in the event of non-allocation/supply of FSA Coal/SHAKTI B(ii) Coal, other type of Coal with due permission of APERC as stated in Clause 10.1.2;</p>	<p>"Primary Fuel" shall mean Concessional/ existing FSA Coal already had by M/s SEIL/ SHAKTI B(ii) Fuel which is to be procured by the Supplier through concessional, preferential sale of such Fuel by a Government Instrumentality or an entity owned or controlled by the Central Government or the State Government as the case may be. Provided in the event of non-allocation/supply of FSA Coal/SHAKTI B(ii) Coal, Coal already secured by SEIL with zero premium and premium coal as</p>	<p>The amendment is necessitated in view of the reasons explained under the Commission's decision in this order.</p>

		approved by APERC under SHAKTI B(iii) as specified in Annexure-II of this PPA.																																												
Annexure-II	<p>Existing content under Annexure-II shall be replaced with the following:</p> <p>“(see Clause 10.1.2)</p> <p>Details of SHAKTI B(iii) Coal</p> <table><tr><th>S.No.</th><th>Coal Source</th><th>Grade</th><th>Base Coal Cost(Rs./Ton)</th><th>Premium (Rs./Ton)</th><th>Total base Cost including premium (Rs./Ton)</th><th>Allocated Coal (MTPA)</th></tr><tr><td>1</td><td>MCL-Talcher</td><td>G-12</td><td>896</td><td>0</td><td>896</td><td>2.18</td></tr><tr><td>2</td><td>MCL-Talcher</td><td>G-7 to G-14</td><td>896</td><td>0</td><td>896</td><td>0.152</td></tr><tr><td>3</td><td>CCL</td><td>G-11</td><td>965</td><td>75</td><td>1040</td><td>0.648</td></tr><tr><td>4</td><td>MCL-IB Valley</td><td>G-13</td><td>827</td><td>150</td><td>977</td><td>0.060</td></tr><tr><td colspan="6">Total</td><td>3.04</td></tr></table> <p>The agreement towards allocation of above shall be firmed up for the period of PPA, subject to submission of PPA with the subsidiaries of CIL.”</p>			S.No.	Coal Source	Grade	Base Coal Cost(Rs./Ton)	Premium (Rs./Ton)	Total base Cost including premium (Rs./Ton)	Allocated Coal (MTPA)	1	MCL-Talcher	G-12	896	0	896	2.18	2	MCL-Talcher	G-7 to G-14	896	0	896	0.152	3	CCL	G-11	965	75	1040	0.648	4	MCL-IB Valley	G-13	827	150	977	0.060	Total						3.04	The amendment is necessitated in view of the reasons explained under the Commission’s decision in this order.
S.No.	Coal Source	Grade	Base Coal Cost(Rs./Ton)	Premium (Rs./Ton)	Total base Cost including premium (Rs./Ton)	Allocated Coal (MTPA)																																								
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4	MCL-IB Valley	G-13	827	150	977	0.060																																								
Total						3.04																																								

Annexure-III**Information to be furnished by SEIL at the time of submission of the monthly FCA bill to APDISCOMS**

Sr. No.	Month-wise	Unit	----
A)	OPENING QUANTITY		
1	Opening Quantity of Coal	(MMT)	
2	Value of Stock		
B)	QUANTITY		
3	The quantity of Coal supplied by the Coal Company for the particular month, giving complete details of the mode of transportation used, along with the quantity.	(MMT)	
	By Rail		
	By Road		
	By Ship		
	By MGR		
	By any other mode (specify)		
4	Adjustment (+/-) in quantity supplied made by the Coal Company *	(MMT)	
5	Coal supplied by Coal Company (3+4)	(MMT)	
6	Actual Transit & Handling Losses specify the source	(MMT)	
7	Actual coal received	(MMT)	
C)	PRICE		
8	The amount charged by the Coal Company	(Rs.)	
9	Adjustment (+/-) in the amount charged by Coal Company *	(Rs.)	
10	Unloading, Handling and Sampling charges.		

	Unloading charges		
	Handling charges		
	Sampling charges		
11	Total amount Charged (8+9+10)	(Rs.)	
D)	TRANSPORTATION		
	Transportation charges by rail/ship/road transport	(Rs.)	
	By Rail		
	By Road		
	By Ship		
	By MGR		
13	Adjustment (+/-) in the amount charged made by Railways/Transport Company	(Rs.)	
14	Demurrage Charges, if any	(Rs.)	
15	Cost of fuel in transporting coal through the MGR system, if applicable	(Rs.)	
16	Total Transportation Charges (12+13+14+15)	(Rs.)	
17	Total amount charged for coal supplied, including Transportation (11+16)	(Rs.)	
E)	TOTAL COST		
18	Landed cost of coal (2+17)/(1+7)	Rs./MT	
19	Blending Ratio (Domestic/Imported)		
20	Weighted average cost of coal for the preceding twelve months	Rs./MT	

F)	QUALITY		
21	GCV of Domestic Coal of the opening coal stock as per Bill of the Coal Company	(kCal/Kg)	
22	GCV of Domestic Coal supplied as per the bill of the Coal Company	(kCal/Kg)	
23	GCV of the Imported Coal of the opening stock as per the Bill of the Coal Company	(kCal/Kg)	
24	GCV of Imported Coal supplied as per the bill of the Coal Company	(kCal/Kg)	
25	Weighted average GCV of coal as billed	(kCal/Kg)	
26	GCV of Domestic Coal of the opening stock as received at Station	(kCal/Kg)	
27	GCV of Domestic Coal supplied as received at the Station	(kCal/Kg)	
28	GCV of Imported Coal of opening stock as received at the Station	(kCal/Kg)	
29	GCV of Imported Coal supplied as received at the Station	(kCal/Kg)	
30	Weighted average GCV of coal as received	(kCal/Kg)	
31	Actual Station heat rate achieved	(kCal/kWh)	
32	Actual Auxiliary Consumption	%	
33	Actual Specific Oil Consumption	ml/kWh	

(*specifying the period of adjustment along with reason and support document for the adjustment)

Note:

- SEIL must submit the as-billed and as-received GCV, coal quantity, and price, duly certified by the statutory auditor.
- A report detailing the measures taken to address the discrepancy between as-billed and as-received GCV must be submitted.
- Details of source-wise fuel used for computing energy charges must be provided in the format specified in Annexure-III, with separate details for each fuel source. If multiple sources are used, an additional column should be included for each source.
- A separate break-up statement of the amounts charged by the coal company must be provided.

