BEFORE THE HARYANA ELECTRICITY REGULATORY COMMISSION AT PANCHKULA
Case No. HERC/Petition No. 69 of 2024
(Remand back Petition No. 59 of 2020)
Date of Hearing : 21.05.2025
Date of Order : 12.082025

In the matter of:
Judgement dated 25.10.2024 passed by Hon'ble APTEL in Appeal No. 326 of 2021 (Amplus Vs. HERC, HPPC and HAREDA) and Appeal No. 149 of 2021 (HPPC vs. Amplus, HERC and HAREDA)
And
In the matter of:
Petition under section 62 of the Electricity Act, 2003 read with Regulation 6 (1) of the Haryana Electricity Regulatory Commission (Terms and Conditions for determination of Tariff from Renewable Energy Sources, Renewable Purchase Obligation and Renewable Energy Certificate) Regulations, 2017 for determination of Tariff of 50 MW Power Project of Amplus Sun Solutions Private Limited located at village Khanak, Tehsil, Tosham, District Bhiwani (HERC/ Petition No. 59 of 2020).

Petitioner
M/s. Amplus Sun Solutions Pvt. Ltd (Amplus)

Respondents
1. Haryana Power Purchase Centre, Panchkula (HPPC)
2. Haryana Renewable Energy Development Agency (HAREDA)

Present on behalf of the Petitioner
1. Mr. Amit Kapur, Advocate
2. Mr. Aditya Ajay, Advocate
3. Mr. Rahul Kinra, Advocate
4. Mr. Ayush Prasad, Vice-President
5. Mr. Vivek Ranjan, Sr. Manager

Present On behalf of the Respondents
1. Mr. Shubham Arya, Advocate, HPPC
2. Ms. Reeha Singh, Advocate, HPPC
3. Mr. Harshvardhan Singh, Advocate, HPPC
4. Mr. Gaurav Gupta XEN, HPPC
5. Mr. Ravinder Singh, Project Officer, HAREDA

Quorum
Shri Nand Lal Sharma **Chairman**
Shri Mukesh Garg **Member**

ORDER

Brief Background of the case

1. The present proceedings have arisen, consequent to the judgement of the Hon'ble Appellate Tribunal for Electricity (APTEL) dated 25.10.2024, wherein the APTEL has observed as under:-

"40. In view of the above deliberations, we set aside the impugned order to the limited extent and remand the matter in both the appeals (APL 326 of 2021 & APL 149 of 2021) to State Commission for redetermination of tariff after prudence check of Capital

cost including related issues raised and considering the feasible CUF corresponding to the capital cost of AC: DC module allowed. We make it clear that the issues with regard to Interest on term loan and working capital, Interest During Construction and O & M expenses shall not be opened for reconsideration, as admitted by learned counsel of Amplus. In the interregnum, Amplus is allowed a tariff of Rs 3.03/Kwh from the date of their order till the matter is finally decided by the State Commission upon remand, which needs to be decided expeditiously by State Commission. Both the appeals and associated IAs are disposed of in view of the above-mentioned terms".

2. Upon giving a preliminary hearing to the parties on 11.12.2024, the petitioner was directed to file its detailed written submissions including the year-wise CUF w.r.t. generation achieved since the date of CoD and the complete record of competitive bidding held to select the vendor of major items of the project. In absence of the same, the details of financial prudence exercised by the developer in awarding the tender, be provided.

3. Petitioner's reply affidavit dated 24.12.2024:-

In response to the Interim Order of the Commission, M/s. Amplus filed its reply pleading therein as under:-

3.1 That the present Affidavit has been filed: -

a) in compliance with the Order dated 12.12.2024 passed by this Hon'ble Commission directing the Petitioner *"to file its detailed written submissions including the year-wise CUF and generation achieved, since the date of CoD and the complete record of competitive bidding held to select the vendor of major items of the project. In absence of the same, the details of financial prudence exercised by the developer in awarding the tender, may be provided."*

b) to place on record subsequent developments since the passing of the Order dated 18.01.2021 and in light of directions contained in the common Judgment dated 25.10.2024 ("Remand Order*")* passed by the Hon'ble Tribunal in IA No. 1357 of 2024 *("*IA 1357*")* and Appeal Nos. 326 of 2021 filed by the Petitioner and Appeal No. 149 of 2021 filed by Respondent No. 1 – HPPC.

3.2 That the petitioner's project was originally designed as an open access project to supply power to High Tension *(**"**HT**"**)* consumers under captive or third-party sale. While the Project was ready for commissioning by 30.06.2020, the refusal of the transmission licensee – Haryana Vidyut Prasaran Nigam Ltd. *("*HVPNL***"****)*, to execute the connection agreement led to a delay of 11 months in commissioning.

3.3 That to address this issue, the Petitioner filed a Petition PRO No. 25 of 2020 *(*"Petition PRO 25"*)*, on 02.05.2020, for execution of the connection agreement.

3.4 That the Petition PRO 25 was listed before the Hon'ble Commission on 30.07.2020. On 24.08.2020, the Hon'ble Commission by its Order observed and held as under: -

"4. …Commission feels that it would be a positive development if this long pending issue could be resolved amicably through mutual consultations because the ultimate aim of all stakeholders is to achieve the national target of 100 GW Solar Power by 2022."

3.5 That pursuant to discussions between Petitioner and HPPC as recorded in correspondences dated 27.08.2020 and 07.09.2020 (issued by the Petitioner) and e-mail 06.09.2020 (issued by HPPC), the petitioner without prejudice to its rights and contentions: -

a) Consented for sale of power from its Project to the Haryana Distribution Companies *("*Discoms"*)* including determination of project-specific tariff under the applicable regulations, subject to fulfilment of conditions and necessary regulatory approval by this Hon'ble Commission; and

b) Initialed the Power Purchase Agreement ("PPA") provided by HPPC.

3.6 That on 09.09.2020, HPPC filed a Petition (PRO No. 45 of 2020) before this Hon'ble Commission seeking *"…To approve source and draft PPA to be executed with M/s Amplus Sun Solutions Private Limited for purchase of 50 MW Solar Power from grid interactive solar PV based power project located at Village, Khanak, Tehsil, Tosham, District Bhiwani at a Tariff determined by the Hon'ble Commission under Section 62 of The Electricity Act, 2003, in terms of HERC Regulations in vogue."*

3.7 That on 14.09.2020, Hon'ble Commission by its Order *inter alia* approved the procurement of power from the Project as well as the Draft PPA and directed the Petitioner to file a separate petition under Section 62 of the Electricity Act for determination of tariff for the Project.

3.8 That on 13.10.2020, the Petitioner filed a Petition before this Hon'ble Commission under Section 62 of the Electricity Act read with Regulation 6(1) of the RE Regulations, 2017 for determination of project-specific tariff of its Project.

3.9 That on 18.01.2021, this Hon'ble Commission passed the Order dated 18.01.2021 disallowing over 35% of the Petitioner's claim of Rs. 3.86 / kWh while determining a levelized tariff as Rs. 2.48 / kWh, since: -

a) **Capital Cost:** Hon'ble Commission reduced the Project Cost, disallowing module cost and cost of civil works to the extent of Rs. 44 Crores and Rs. 6.81 Crores respectively relatable to 25 MW DC capacity. *[Para 5 (a)]*

b) **Interest on Term Loan and Working Capital:** Hon'ble Commission considered Rate on Term Loan and Working Capital as 9% instead of 9.91% claimed by the Petitioner. *[Para 5 (e)]*

c) **IDC**: Hon'ble Commission disallowed IDC of Rs. 9.59 Crores holding that the Petitioner has not borrowed funds for the Project. *[Para 5 (a)]*

d) **O&M Expenses:** Hon'ble Commission benchmarked O&M Expenses by applying BHEL Ltd.'s price quotes for 50 MW Solar Power Plant of NTPC Ltd. in Andhra Pradesh. *[Para 5 (c)]*

e) **Project Management Expenses:** Hon'ble Commission disallowed Rs. 23.75 Crores as Project Management Expenses. *[Para 5 (a)]*

3.10 That on 08.03.2021, HPPC filed Appeal No. 149 of 2021 before the Hon'ble Tribunal against Order dated 18.01.2021 raising the following issues: -

a) Capital Cost allowed is higher than other solar projects.

b) CUF of 25.91% allowed instead of 27.17% as per generation data in Petitioner's PPA with a captive user.

c) Degradation of 0.5% in CUF has not been allowed by other State Electricity Regulatory Commissions ("SERC").

d) Escalation rate of 5.72% p.a. allowed for O&M Expenses should be reduced.

3.11 That on 15.03.2021, the Petitioner, aggrieved by certain findings in Order dated 18.01.2021, filed Appeal No. 326 of 2021 before the Hon'ble Tribunal challenging disallowances in respect of Capital Cost, Interest on Term Loan and Working Capital, IDC, O&M Expenses and Project Management Expenses.

3.12 That the Petitioner approached its lender – NIIF Infrastructure Finance Ltd. *(*"NIIF") to avail term loan facilities to reduce the Project's equity exposure sourced from its parent company due to a sub-par return on equity and decrease the cost of capital. On 05.12.2022, NIIF approved a term loan facility of Rs. 190 Crores for the Project, out of which only Rs. 109 Crores was available for disbursement citing inadequate cash flow to service the debt obligations. NIIF imposed the following two (2) conditions for availing the remaining amount of Rs. 81 Crores of the term loan, the Petitioner has to:-

a) seek a favourable order from the Hon'ble Tribunal for a higher tariff than the tariff of Rs. 2.48 per kWh approved by the Hon'ble Commission.

b) achieve Debt Service Coverage Ratio *(**"**DSCR**"**)* of 1.20 at the revised tariff.

3.13 That on 05.08.2024, during the pendency of the Appeals before the Hon'ble Tribunal, the Petitioner was constrained to filed IA No. 1357 of 2024 seeking stay of the Order dated 18.01.2021 and grant of a pro-tem tariff of 3.03 per kWh.

3.14 That on 10.09.2024, 11.09.2024 and 18.10.2024, IA No. 1357 of 2024 and Appeal Nos. 326 and 149 of 2021 were heard by the Hon'ble Tribunal. The Petitioner restricted its claim on issues of Capital Cost only, and did not press claims in respect of Interest on Term Loan and Working Capital, IDC and O&M Expenses.

3.15 That on 25.10.2024, the Hon'ble Tribunal passed the Remand Order.

3.16 That the petitioner is seeking re-determination of tariff of the Project in terms of the Remand Order on the following issues, based on principles laid down by the Hon'ble Tribunal, viz.: -

(A) Capital Cost and CUF: -

i. Given the benefit of higher CUF of 25.91% proposed by the Petitioner, the Capital Cost needs to consider the cost of DC modules corresponding to higher CUF, subject to prudence check.

ii. On one hand, extra cost on account of additional DC modules has been disallowed but, on the other hand, CUF of 25.91%, which is possible with 75 MW DC module capacity for 50 MW AC capacity, has been considered for working out per unit cost. This, in the Hon'ble Tribunal's opinion, is not rational.

iii. Entire energy at the tariff so determined by using CUF of 25.91% is being sold to HPPC and there is no scope / provision for the Petitioner to earn extra revenue by sale of extra energy so generated by having higher CUF, to compensate for the extra cost deployed in DC modules.

iv. Benefit of higher CUF so achievable by overloading of DC capacity used in determination of tariff, with cost of additional DC modules being disallowed, also needs reconsideration.

v. Ratio of AC:DC module, associated Capital Cost and resultant CUF are interlinked. Disallowance of Capital Cost for higher DC module capacity while considering the higher CUF, which can possibly be achieved with higher AC:DC, ratio needs prudence check and re-consideration by the Hon'ble Commission.

(B) **Project Management Expenses:** Since the issue is integrally connected with the issue of Capital Cost, Hon'ble Commission to consider the issue along with the issue of Capital Cost in respect of disallowance of Rs. 23.75 Crores incurred towards Project Management Expenses, as: -

i. Petitioner had availed consultancy services from group companies for activities such as monitoring of project quality, management of Project's risk, financing of the Project and maintenance of IT infrastructure of the Project. These services were procured at an arm's length basis and on commercial terms.

ii. Petitioner has complied with the provisions of Companies Act, 2013, which is also recorded in the Internal Auditor's Report dated 24.09.2020, which was placed on record by way of an Affidavit dated 22.12.2020.

A. Capital Cost and CUF

A.1 Capital Cost

3.17 That this Hon'ble Commission in Order dated 18.01.2021 had inter alia disallowed Capital Cost i.e., module cost of 44 Crores and cost of civil works of Rs. 6.81 Crores, relatable to 25 MW DC capacity installed by the Petitioner (from total of 75 MW DC capacity), while holding as under: -

"The Commission observes that the Petitioner has stated that normative capital cost should be Rs. 36.70 Million/MW. However, the Petitioner has claimed the same for DC capacity of 75 MW, as against the contracted AC capacity of 50 MW. The Commission has perused the CERC Order dated 23.03.2016, in the matter of determination of Benchmark Capital Cost Norm for Solar PV power projects and Solar Thermal power projects applicable during the FY 2016-17, wherein the Central Commission has decided that capital cost has to be reckoned with on AC capacity and not on DC capacity, as additional modules are deployed by some developers to optimize the performance of the plant, especially the inverters and additional units of electricity are generated with the extra module capacity, resulting in higher earnings from feed-in-tariff. The remuneration due to additional units generated sufficiently covers additional costs in such a case. Accordingly, the module & related cost amounting to Rs. 132 crore for 75 MW is reduced to proportionate cost for 50 MW, which comes to Rs. 88 Crore (reduced by Rs. 44 Crore).

Similarly, Civil work cost amounting to Rs. 20.41 crore for 75 MW is reduced to proportionate cost for 50 MW, which comes to Rs. 13.60 Crore (reduced by Rs. 6.81 Crore)."

3.18 That Hon'ble Tribunal has directed the Hon'ble Commission to re-consider the issue since the ratio of AC:DC modules, associated Capital Cost and resultant CUF are interlinked. Higher CUF considered by the Hon'ble Commission can possibly be achieved only with a higher AC:DC ratio.

3.19 That actual cost of civil works incurred by the Petitioner amounts to Rs. 19.06 Crores as against the provisional estimate of Rs. 20.41 Crores submitted at the time of filing of the present Petition. Out of this, this Hon'ble Commission has approved Rs. 13.60 Crores as cost of civil works. Accordingly, while determining the tariff of Rs. 3.26 per kWh, the Petitioner has considered the actual incremental cost of civil works as Rs. 5.46 Crores instead of Rs. 6.81 Crores.

3.20 That in the Order dated 18.01.2021, this Hon'ble Commission had considered Capital Cost corresponding to a DC module capacity of 50 MW only, while the actual installed module capacity is 75 MW DC, corresponding to 50 MW AC capacity. As also noted by the Hon'ble Tribunal in the Remand Order at Para 33, DC Overloading is an accepted industry-standard practice i.e., to overload DC module capacity to increase generation during non-peak hours using the same AC infrastructure, which optimizes overall performance leading to lower cost of energy.

3.21 That DC Overloading is recognized even in bid documents issued by the Solar Energy Corporation of India as also in Ministry of New and Renewable Energy's *("MNRE")* *'Advisory / Clarification w.r.t. D.C. Capacity of Solar PV Power Plants'* dated 05.11.2019, as under: -

"i. As long as the solar PV power plant is in accordance with the contracted AC capacity and meets the range of energy supply based on Capacity Utilisation Factor (CUF) requirements, the design and installation of solar capacity on the DC side should be left to the generator / developer.

ii. Even if the installed DC capacity (MWp) [expressed as the sum of the nominal DC rating (Wp) of all the individual solar PV modules installed] in a solar PV power plant, is in excess of the value of the contracted AC capacity (MW), it is not violation of PPA or PSA, as long as the AC capacity of the solar PV power plant set up by the developer corresponds with the contracted AC capacity and that, at no point, the power (MW) scheduled from the solar PV power plant is in excess of the contracted AC capacity, unless there is any specific clause in the PPA restricting such D.C. capacity."

3.22 That Hon'ble Tribunal in *Nisagara Renewable Energy Private Ltd. v. MERC & Anr.*, *2021 SCC OnLine APTEL 81 [Para 1, 33-36]* has recognized that DC overloading is an accepted industry practice for solar projects and the beneficiary cannot claim that DC overloading is high while reaping the benefits thereof such as optimization of the AC infrastructure, as under: -

"33. Juniper has installed DC capacity of 43.72 MW (146%- or 1.457-times overloading) and Nisagra set up its projects with DC capacity of 101.79 MW (145%- or 1.454-times overloading). As against the minimum CUF of 19%, declared CUF is 25.16%, 24.92% and 25.29% in the case of Juniper and at 25.40%, 25.00%, 25.66%, 25.37%, 25.15%, 25.69% and 25.05% in the case of Nisagra. The appellants have only exercised the right given by RfS and PPA to design their projects in a manner that can deliver the Contracted Capacity and achieve declared CUF. In this view, we find nothing remiss when it is asserted by the appellants that the projects were accordingly set up and it was declared that CUF in the range of 24.9%-25.7% would be offered.

34. The State Commission had approved the procurement and adopted tariff by Order dated 27.11.2018 in case No. 277 of 2018. The Tariff Order further records the submissions whereby MSEDCL acknowledged that these projects were differently placed due to the geographic spread and smaller size of Solar Power units and included distribution losses up to 11kV level. It is not disputed that the appellants had declared their CUF in terms of PPA, the said Declared CUF for the respective projects having been accepted by MSEDCL. We hold, on the given facts, that once the RfS and PPA have been approved by the Commission and the declared CUF has been accepted by the parties and the Commission, it (the Declared CUF) cannot be questioned.

35. There can be no quarrel with the proposition that Article 9.2.1 of the PPAs dealing with Change in Law envisages restoration of the affected party to the same financial position. Accordingly, Change in Law impact ought to be computed on actuals. While granting in-principle approval for change in law, the MERC, by its Order dated 18.07.2019, unequivocally held that compensation is to be determined on actuals. The said order having attained finality, the MERC was expected to consider determination of compensation on actual DC installed capacity. By the impugned order, the

Commission has limited the compensation by restricting the project DC capacity to 39.67 MW as against the total DC capacity of 43.72 MW for Juniper and to 93.33 MW as against the total DC capacity of 101.79 MW for Nisagra. Such an approach is contrary to the terms of the PPAs as well as settled law on the subject, particularly because it is based on normative/arbitrary formula different from the actuals. Juniper and Nisagra have already incurred the full cost for the Project and additional cost on account of imposition of Safeguard Duty, which is a part of the project cost. The claim for compensation under change in law provision is limited to the additional burden of taxes and duties. There is no basis for the assumption at the stage of scrutiny of such claim that the projects have been designed sub-optimally. Relief sought pertains to reimbursement of additional cost on account of Change in Law and not the full cost for the modules.

36. In our view, under the PPAs, there is no restriction on the DC capacity to be set up or the maximum declared CUF. The CUF as declared by the appellants has been accepted by MSEDCL. The higher installed DC capacity results in higher generation from the Project while using the same AC infrastructure, thereby optimizing the utilization of the AC infrastructure, leading to a lower cost of energy, benefits of which have statedly been passed on to MSEDCL as lower tariff in terms of the PPAs. DC overloading is accepted as an industry practice for Solar Projects. MSEDCL has already taken the benefit of higher generation at a lower tariff. MSEDCL cannot claim that DC overloading is high. Accordingly, there is no escape from the full DC capacity of the Projects being considered while computing the Change in Law compensation."

3.23 That once benefit of a higher CUF has been passed on to the procurers by the Hon'ble Commission, the corresponding Capital Cost must be allowed to the Petitioner.

3.24 That based on the aforesaid, the details of the Project for the purpose of re-determination of tariff by the Hon'ble Commission, are set out hereinbelow: -

a) Details of key components used in the Project: -

S. No.	Item	Specification	Status
1.	Modules	(a) Adani – 340 W – 97560 Nos. (b) Adani – 335 W – 12930 Nos. (c) Trina – 345 W – 71730 Nos. (d) Trina – 340 W- 37530 Nos.	Modules equivalent to DC capacity of 75 MWp are installed at the site as per the design specifications
2.	Inverters	(a) Sungrow Central Inverters - 3125 kW – 10 Nos. (b) Huawei String Inverters - 160kW 117 Nos.	50 MW AC capacity has been installed
3.	Evacuation Infrastructure	(a) Bharat Bijlee Transformers – 33 kV/132 kV – 1 Nos. (b) Transmission Line – 1.5 KM single circuit transmission line on double circuit tower	The transmission line from the solar project isconnected to the terminal bay of Khanak, HVPNL grid substation

b) Petitioner has invested approximately Rs. 2,754 million towards the construction of the Project.

c) As per the First Proviso to Regulation 11 of the RE Regulations, 2017 for project-specific tariff determination, the generating company shall submit the break-up of capital cost items along with the Petition. Further, as per Second Proviso, in case where land is on lease basis, the cost of land to be taken as part of capital cost shall be determined as per the Land Lease Agreement. Petitioner re-submits the relevant details including break-up of capital cost items as well as cost of land as per lease agreement, as under: -

S. No.	Head	Rs. Million
1.	Capital work incl. plant and machinery	1,983.0
2.	Civil Works, erection and commissioning	227.6
3.	Financing Cost	32.7
4.	Interest during construction	95.9
5.	Evacuation infrastructure upto interconnection point including GSS bay in the HVPNL substation	152.9
6.	Land lease rentals capitalized during the construction phase as per lease agreement	24.4
7.	Project Management Expenses	237.5
	Total	**2,754**

d) Breakup of the Capital Cost was provided in the certificate from the Chartered Accountant. Documentary evidence such as invoices and purchase orders that have been used to arrive at the project cost is annexed.

A.2 CUF

3.25 That Hon'ble Commission in Order dated 18.01.2021, on the issue of CUF, had held as under: -

"The Petitioner has submitted that based on the PVSYST simulations for the Project, CUF is estimated to be 17.27% DC (25.91% CUF AC). The CUF is further adjusted for 0.5% of plant unavailability and 1% of grid unavailability leading to a CUF of 17.01% (25.52% CUF AC) which is used for tariff determination. The Petitioner has claimed that higher CUF claimed by it is due to the efficient design capabilities of the Petitioner. The Commission observes that HERC RE Regulations, 2017, specifies the minimum acceptable capacity utilization factor for solar PV power projects. Thus, there is no bar on the claim of the Petitioner of higher CUF @ 25.91% AC, due to its efficient design. Accordingly, the Commission approves CUF @ 25.91% AC, as proposed with annual degradation of 0.50%."

3.26 That the Petitioner, in its Appeal 326 of 2021, had not questioned the CUF of 25.91% for the Project approved by this Hon'ble Commission in Order dated 18.01.2021. The Petitioner in its Appeal on the issue of Capital Cost had *inter alia* stated that CUF of 25.91% is only achievable by installing 75 MW DC module capacity corresponding to 50 MW AC module capacity. The Petitioner in this regard has provided detailed justification for allowing the cost of total installed 75 MW DC module capacity in terms of directions of the Hon'ble Tribunal at Paras 9.2 to 9.13, which are not being repeated for the sake of brevity and to avoid prolixity.

3.27 That HPPC in its Appeal No. 149 of 2021 against Order dated 18.01.2021 had challenged the CUF of 25.91% allowed by this Hon'ble Commission. HPPC had *inter alia* contended that the Hon'ble Commission has erred in: -

a) Allowing the CUF of 25.91% without considering that CUF is 27.17% as per the Petitioner's PPA dated 03.07.2020 with Sandhar Technologies Ltd. for the sale of 9.40 MW (DC Capacity) generated from the Project.

b) Considering the degradation of 0.5% in the CUF when the Capital Cost is inclusive of the monetized value attributed to the degradation of solar panels. Hon'ble Commission had compared the Capital Cost of the Petitioner with the costs considered in other orders but failed to consider that such orders had included the cost of degradation in the Capital Cost and had not provided it separately.

c) Not considering HPPC's reference to the case of M/s. LR Energy Pvt. Ltd. located at Bhiwani, Haryana which has in its detailed project report for a 20 AC / 24 DC MW solar PV generation plant envisaged specific generation per kWh as 1646 units, which works out to a DC CUF of 18.80% i.e., AC CUF of 28.2% assuming DC:AC capacity ratio of 1.50 similar to the Petitioner's Project.

d) Proceeding only based on the alleged PVsyst simulations reports which provide statistical estimates under different probabilities.

3.28 That in response to the contentions of HPPC, it is submitted that: -

a) **Re. Sandhar PPA:** HPPC's contention that as per the Sandhar PPA dated 03.07.2020, the CUF of the Petitioner's Project was 27.17% (AC) is incorrect. HPPC cannot consider the said PPA as the same is extraneous to the present case. As per the provisions of the PPA, the CUF of the Plant could be anywhere between 23.99% (assured CUF) and 26.66% (i.e. estimated CUF).

b) **Re. LR Energy's Project:** CUF of different projects depends on many factors such as plant design considerations, parameters considered for energy simulation analysis, location etc. Therefore, it is irrelevant to compare CUF of two different projects. DC:AC ratio for the Petitioner's Project is 1.50 whereas that for the plant of LR Energy is 1.20. It may be noted that the solar power plants with a higher DC:AC ratio have comparatively higher inverter overload losses and grid limitation losses which will result in a lower DC CUF but a higher AC CUF of the plant.

c) **Re. PVsyst Report:** Accuracy of the PVsyst simulation report depends on many factors especially the quality of irradiation data, which is available through various sources. Petitioner had considered the purchased irradiation data of 3Tier for projecting the CUF of 25.91%. Data accuracy of 3Tier is higher as compared to that offered by Meteonorm v7.2 (previously used data).

3.29 That the Commission may re-determine the tariff of the Project considering the installed 75 MW DC capacity of the Project as the CUF of 25.91% is only achievable by installing 75 MW DC module capacity corresponding to 50 MW AC module capacity, along with carrying cost.

B. Project Management Expenses

3.30 That the Commission in Order dated 18.01.2021 had disallowed the claim of the Petitioner in respect of Project Management Expenses amounting to Rs 23.75 Crore, as under: -

"5…

a) Capital Cost

…

Further, the capital cost claimed by the Petitioner includes Project management expenses of Rs. 23.75 crore, which has been paid to its group companies/ related parties i.e. M/s. Amplus KN one Power Pvt. Ltd. and M/s. Amplus Management Services Pvt. Ltd., having the same address as that of the Petitioner. The Commission does not find any convincing reason to incur such huge amount on Project Management, that too by making payment to its group companies, when it admittedly already owns and manages a portfolio of 800+ MWp of operational and under construction solar assets across 24 States of India with projects spread over more than 400 locations. The claim to this effect of the Petitioner is not justified and the Petitioner should have exercised due diligence including leveraging its expertise and vast experience in avoiding such expenses. Therefore, the Commission is not inclined to accept the Project Management expenses of Rs. 23.75 Crore as part of capital cost."

3.31 That the Petitioner's grievance before the Hon'ble Tribunal in its Appeal was that the Hon'ble Commission while rejecting the claim of the Petitioner qua Project Management Expenses in Order dated 18.01.2021 had not considered the Affidavit dated 22.12.2020 as part of prudence check.

3.32 That by the Affidavit dated 22.12.2020, the Petitioner had categorically stated that consultancy service from group companies was availed towards activities such as monitoring of project quality, management of the project's risk, financing of the Project and maintenance of IT infrastructure of the Project. The services have been procured at arm's length basis and on commercial terms which have been disclosed under applicable laws pertaining to related party transactions. To substantiate the same, the Petitioner had: -

a) annexed the relevant extracts of the Auditors' report, wherein the Auditors had categorically observed as under:

"(xiii) The Company is a private limited company and accordingly, the requirements as stipulated by the provisions of section 177 of the Act in respect of related party transactions is not applicable to the Company. Further, in our opinion and according to the information and explanations given to us and on the basis of our examination of the records of the Company, the transactions with the related parties are in compliance with section 188 of the Companies

Act, 2013, where applicable and the details have been disclosed in the financial statements as required by the accounting standards."

b) submitted that the total value of the payments to be made for Project Management is Rs. 237.5 Million of which Rs. 194.9 Million has been paid at the time of filing of the present Petition before the Hon'ble Commission. Invoices pertaining to cost incurred at the time of filing of the Petition has been already provided to the Hon'ble Commission. The same are annexed hereto and marked as Annexure A/18 (Colly.).

3.33 That disallowance on account of taking services from one of the group companies has no legal basis and it is a standard practice as long as it is done at arm's length and prudency is established. Even otherwise, without prejudice to the above, it is submitted that there is no law or regulation that prohibits the Petitioner from not taking consultation services from its group companies at commercial terms as long as the same is done as per the provisions of the Companies Act, 2013 which has been confirmed by the Internal Auditor's Report.

3.34 That at the time of filing of the present Petition on 13.12.2020 before the Hon'ble Commission, the estimated expense for Project Management based on the invoices pertaining to cost incurred was Rs. 23.75 Crores. Upon reconciliation, the Project Management Expenses as on date stand at Rs. 22.78 Crores out of the initially budgeted amount of Rs. 23.75 Crores.

3.35 That the Petitioner has calculated the revised tariff of Rs. 3.26 per kwh as per the Remand Order and the detailed calculations are annexed hereto and marked as Annexure A/19.

3.36 That the compliance of the Interim Order dated 12.12.2024 passed by the Hon'ble Commission, is as under:-

a) The year-wise annual generation from the project from CoD is as under: -

FY	Annual Generation (MUs)	Remarks
2020-21	22.30	Generation from the date of CoD i.e., 12.01.2021 till March 2021
2021-22	107.48	
2022-23	109.15	
2023-24	104.07	
2024-25	71.69	Generation data from April 2024 to November 2024

b) The year-wise CUF from the project from CoD is as under: -

FY	CUF	Remarks
2020-21	23.83%	CUF from the date of CoD i.e., 12.01.2021 till March 2021
2021-22	24.54%	
2022-23	24.92%	
2023-24	23.69%	
2024-25	24.49%	CUF data from April 2024 to November 2024

c) As regards the complete record of competitive bidding held to select the vendor of major items of the project and/or details of financial prudence exercised by the developer in awarding the tender, the Petitioner seeks liberty of this Hon'ble

Commission to place the same on record within two (2) weeks as the same is taking additional time to collate.

3.37 That the following prayers have been made: -

a) Re-determine tariff for the Project under Section 62 of the Electricity Act in terms of the Remand Order of the Hon'ble Tribunal considering the Capital Cost of Rs. 49.46 Crores (module cost of Rs. 44 Crores and cost of civil works of Rs. 5.46 Crores) and Project Management Expenses of Rs. 22.78 Crores and allow a tariff of Rs. 3.26 per kWh for 25 years from the date of commissioning of the Project.

b) Allow recovery of carrying cost on the re-determined tariff from 12.01.2021 upto the disposal of the present Petition to be computed at Weighted Average Cost of Capital (WACC).

c) Pass such other orders and/or directions as may be deemed fit and necessary in the interests of justice.

4. Petitioner's rejoinder under affidavit dated 21.01.2025 to the reply of HPPC dated 14.01.2025:-

Re. Capital Cost and CUF for the 25 MW additional DC capacity over and above the 50 MW AC capacity

A. Capital Cost corresponding to additional DC capacity over and above 17.3% AC CUF till 19% CUF cannot be considered

4.1 That submissions in response to the contentions regarding accuracy of PVSYST simulation reports, are as under: -

(a) Project has a total AC capacity of 50 MW and a total module capacity of 75 MW DC. Based on the PVSYST simulations for the Project, the estimated CUF is 17.3% DC corresponding to 25.91% AC.

(b) Computation of tariff at CUF of 17.3% was provided by the Petitioner in terms of directions of the Hon'ble Tribunal during the hearing in IA No. 1367 of 2024 in Appeal No. 326 of 2021. This computation was sought from the Petitioner in a hypothetical scenario, where the installed capacity of the plant in AC:DC ratio would have been 1:1.

(c) CUF obtained from PVSYST simulations considers parameters specific to the Project. Detailed PVSYST simulation reports containing details of parameters considered have been submitted to the Hon'ble Commission along with the present Petition.

(d) Solar Photovoltaic *("PV")* industry across the world uses simulations tools to estimate the project-specific CUF that any solar PV project is expected to generate during operation. PVSYST is one of the oldest simulation tools developed by the University of Geneva.

(e) Accuracy of the PVSYST simulation report depends on several factors, especially the quality of irradiation data, available from various sources. Petitioner had considered the purchased irradiation data of 3Tier for projecting the CUF of 25.91%. Data accuracy of 3Tier is higher as compared to that offered by Meteonorm v7.2.

(f) Furthermore, Hon'ble Commission in the Order dated 18.01.2021 accepted the PVSYST simulation reports provided by the Petitioner and observed as under: -

"The Commission observes that HERC RE Regulations, 2017, specifies the minimum acceptable capacity utilization factor for solar PV power projects. Thus there is no bar on claim of the Petitioner of higher CUF @ 25.91% AC, due to its efficient design. Accordingly, the Commission approves CUF @ 25.91% AC, as proposed with annual degradation of 0.50%"

(g) Data from PVSYST simulation reports are reinforced from the fact that the CUF of the Petitioner's plant has been in the range of 23.83% to 24.92% from the financial years from 2020-21 to 2024-25 (from April 2024 to November 2024) as stated in the Submissions of the Petitioner dated 24.12.2024.

(h) Without prejudice to the above, even if the Hon'ble Commission does not consider the PVSYST reports and instead considers actual CUF from the Project as submitted along with the Submissions dated 24.12.2024, the Petitioner would still be entitled to incremental capital cost of Rs. 49.46 Crores for the additional 25 MW DC capacity (module cost of Rs. 44 Crores and cost of civil works of Rs. 5.46 Corers).

4.2 That submissions in response to the HPPC's reliance on Regulation 48 of the RE Regulations, 2017 to contend that capital cost of additional DC capacity installed to achieve 19% AC CUF ought not to be considered, are as under: -

(a) Regulation 48 provides for a CUF of 19%, however allows the Hon'ble Commission to deviate from above norm in case of project-specific tariff determination, which is the case of the Petitioner.

(b) In its Order dated 18.01.2021, Hon'ble Commission has already held that there is no bar on claim of the Petitioner of higher CUF @ 25.91% AC, due to its efficient design. Therefore, the Hon'ble Commission has already exercised the discretion provided under Regulation 48 to deviate from the norm of 19% and allow the higher CUF of 25.91% during project-specific tariff determination for the Project.

(c) Without prejudice, if HPPC's contention were to be considered to limit the CUF of the Project to 19%, then the tariff of the Project would be increased to Rs. 4.45 per kWh.

B. CUF proposed by Amplus corresponding to AC:DC ratio of 1:1.50 is lower as compared to another Power Purchase Agreement *("PPA")* entered by Amplus and other Projects.

4.3 That submissions in response to the HPPC's Contentions reliance on Sandhar PPA, are as under:-

(a) HPPC's reliance on the Sandhar PPA is misplaced and is irrelevant to the facts of the present Petition. HPPC cannot contend that as per the Sandhar PPA, the CUF of the Petitioner's project was 27.17% (AC). As per Sandhar PPA, the CUF of the Project could range between 23.99% (assured CUF) and 26.66% (i.e. estimated CUF).

(b) Without Prejudice to the above, HPPC has ignored the following facts in relation to initial conceptualization of the Project: -

   (i) Project was initially envisaged and conceptualized as an Open Access Project to supply power to High-Tension *("HT")* Consumers under Captive / Third Party Sale. The Petitioner entered the Sandhar PPA for supply of 9.402 MW (equivalent to 6.24 MW AC) power at the base tariff of Rs. 4.05 per kWh.

   (ii) In Annexure I to the Sandhar PPA, the Year-1 Generation was mentioned as 1,45,73,100 kWh. By grossing up this Year-1 Generation mentioned in the Sandhar PPA with transmission losses @ 2.5% to work out the generation available at the inter-connection point / pooling sub-station, HPPC has incorrectly contended that the CUF for the Project works out to be 27.17% AC.

   (iii) Year 1 Generation as mentioned in Annexure I of Sandhar PPA had been calculated to the *"Delivery Point"*, i.e., inter-connection point connecting dedicated transmission line from the Project switchyard to pooling substation of Haryana Vidyut Prasaran Nigam Limited *("HVPNL")*. Accordingly, the only losses incurred in transmission of power from the project to the inter-connection point is that of dedicated transmission line established by the Petitioner. Therefore, grossing up generation by adding back 2.5% transmission losses (i.e. Losses of HVPNL's Transmission System) from the inter-connection point by HPPC is incorrect.

   (iv) The dedicated transmission line from project switchyard to interconnection point of the HVPNL transmission system is approximately 1.90 Km. Corresponding actual losses in this system are less than 0.03% only (for period from 01.01.2022 to 31.01.2023). The Year-1 Generation of 1,45,73,100 kWh corresponds to a CUF of 26.66%, while the assured generation in the Sandhar PPA for Year-1 is 1,31,15,790 kWh corresponding to CUF of 23.99%.

4.4 That submissions in response to the HPPC's reliance on LR Energy's Project, are as under: -

(a) CUF of different projects depend on various factors such as plant design considerations, parameters considered for energy simulation analysis, location, etc. Therefore, comparing CUF of two different Projects is irrelevant.

(b) DC:AC ratio for the Petitioner's Project is 1.50, whereas for LR Energy's plant it is 1.20. Solar power plants with a higher DC:AC ratio have comparatively higher inverter overload losses and grid limitation losses resulting in a lower DC CUF but a higher AC CUF.

(c) Although Petitioner's DC CUF is lower due to higher inverter overload losses, its AC CUF is higher compared to that of LR Energy's plant. This is due to better utilization of inverter capacity and AC transmission infrastructure.

(d) The AC CUF for the Project is 25.71% which is higher than 22.55% of LR Energy's plant. Therefore, HPPC's contention that DC CUF of 18.80% of LR Energy's plant should be considered as a reference for computing AC CUF of 28.20% for the Project is devoid of any merit and should be rejected.

4.5 That the Petitioner denies HPPC's contention that is has used substandard equipment or is inefficient in managing the Plant. On the contrary, the Petitioner has been utilizing the best equipment for the Plant and has been managing it very efficiently. In fact, the Petitioner from this Financial Year has increased the module cleaning cycles from 24 to 30 cycles per year. As a result, the Project is operating efficiently, with its CUF aligning with the projections in the PVSYST report.

Re. Capital Cost

4.6 That the Hon'ble Tribunal at Para 34 of the Remand Order had:

(i) noted the inconsistency in disallowing the extra cost on account of additional DC modules while considering CUF of 25.91%, which is possible with 75 DC module capacity for 50 MW AC capacity for working out per unit cost and held that in Hon'ble Tribunal's opinion, the same is not rational.

(ii) Entire energy at the tariff so determined by using CUF of 25.91% is being sold to HPPC and there is no scope / provision for the Petitioner to earn extra revenue by sale of extra energy generated by having higher CUF, to compensate for the extra cost deployed in DC modules.

(iii) Benefit of higher CUF is achievable by overloading of DC capacity used in determination of tariff, with cost of additional DC modules being disallowed, also needs re-consideration.

4.7 That in view of the above principle laid down by the Hon'ble Tribunal, if the Hon'ble Commission allows a CUF of 25.91%, the same is only achievable on account of additional DC capacity of 25 MW, then it must allow the associated capital cost incurred by the Petitioner.

4.8 That actual cost of civil works incurred by the Petitioner amounts to Rs. 19.06 Crores, against the provisional estimate of Rs. 20.41 Crores submitted at the time of filing of the present Petition.

A. Amount of Rs. 49.40 Crores allegedly proposed to be incurred after filing of the Petition No. 59 of 2020 had no basis and ought to be disallowed

4.9 That the petitioner in response submits that it has placed on record all the documents / invoices / proofs to justify and support the Cost incurred by it in Petitioner's Additional Affidavit dated 22.12.2020 in Petition No. 59 of 2020 and Submissions dated 24.12.2024 and requests the Hon'ble Commission to allow the cost claimed by the Petitioner based on the documents on record, subject to prudence check.

B. Excessive Capital Cost claimed by Amplus ought to be disallowed

4.10 That the petitioner in response submits as under:-

a) Capital Cost claimed by the Petitioner is prudent and is in accordance with Regulation 11 of the RE Regulations, 2017, in terms of which the Petitioner has placed on record all the documents / invoices / proofs to justify the Capital Cost claimed by it. Petitioner had also filed Additional Affidavit dated 22.12.2020 to place on record summary of Capital Cost already incurred under different heads before the Hon'ble Commission. These documents have been re-submitted by the Petitioner along with the Submissions dated 24.12.2024.

b) HPPC's reliance on various orders of SERCs is misplaced and erroneous. Generic tariff orders are based on a normative parameter and assumptions. Principles and processes followed for a generic tariff order cannot be compared to project-specific tariff determination, the said carve out is itself provide in the Regulation 6 (1) (h) of the RE Regulations, 2017. This is so since every project is distinct in terms of various technical parameters, like equipment configuration, transmission evacuation infrastructure, land cost, financing cost, duties and taxes, foreign exchange rates, etc. Reliance is also placed on MSPGCL v. MERC & Ors., 2011 ELR (APTEL) 0594.

c) That the orders of various SERCs relied upon by HPPC are distinguishable since: -

(a) **Order dated 20.12.2019 of this Hon'ble Commission:** -

(i) Approved Capital Cost in the said order is for the limited purpose of the said Order as held by this Hon'ble Commission: *"…Further, as the relevant Orders of the Ld. KERC and Ld. RERC are more recent,* ***the Commission has accordingly pegged the Capital Cost, for the limited purpose of the present Order at Rs. 3.40 Crore I MW.****"*

(ii) Order dated 20.12.2019 as well as Orders of Hon'ble RERC and Hon'ble KERC (referred to in the said Order) do not include the impact of Safeguard Duty and GST on modules, equipment, etc. in the Capital Cost. However, in the present case, the Petitioner has paid Safeguard Duty and GST on modules, equipment, etc.

(iii) HPPC's submission that the Capital Costs inclusive of land cost is erroneous since under PM-KUSUM Scheme, solar projects are to be established by farmers on their own barren land, to be taken on lease or other leased out land, therefore the cost of land has been dealt with separately.

(b) **Order dated 07.06.2019 of Hon'ble UERC: -**

(i) Hon'ble UERC approved the Capital Cost of Rs 3.56 Crore per MW considering the DC:AC ratio of 1:1 and corresponding CUF of 19%. **In the present case, Petitioner's Project has a higher CUF of 25.91% with a DC:AC ratio of 1.50:1.**

(ii) Hon'ble UERC considered the exchange rate of Rs. 70.735 / USD whereas in the present case, the Petitioner has procured modules at an exchange rate of Rs. 73 / USD.

(c) **Order dated 01.08.2019 of Hon'ble KERC: -**

(i) Hon'ble KERC's Order dated 01.08.2019 does not include the impact of Safeguard Duty and GST on modules, equipment, etc. Further, Hon'ble KERC has observed that if the impact of Safeguard Duty and GST is considered then the Capital Cost will rise to Rs 3.733 Crore per MW from Rs 3.14 Crore per MW.

(ii) Hon'ble KERC approved the Capital Cost of Rs 3.14 Crore per MW, considering the DC:AC ratio of 1:1 and corresponding CUF of 19%. In the present case, Petitioner' s Project has a higher CUF of 25.91% with a DC:AC ratio of 1.50:1.

(d) **Office Memorandum dated 21.07.2020 issued by MNRE: -**

(i) Office Memorandum is applicable to Rooftop Solar PV and not Ground Mounted Solar PV Projects. The cost involved in setting up a Ground Mounted Solar PV Project is not comparable to the cost of setting up Rooftop Solar PV.

(ii) Without Prejudice, the Petitioner had firmed up and procured major capacity of modules in the 3rd and 4th quarter of FY 2019-20, therefore the Capital Cost is to be compared with the Benchmark cost specified by MNRE for FY 2019-20 which is Rs 4.50 Crore per MW.

(iii) Further, cost Rs 4.50 Crore per MW does not include the impact of Safeguard Duty and GST. Moreover, the Capital Cost approved in Office Memorandum is considering the AC:DC ratio of 1:1. In the present case, the Petitioner's Project has a higher CUF of 25.91% with AC:DC ratio of 1: 1.50.

(e) **Order dated 11.02.2020 passed by Hon'ble RERC: -**

(i) Hon'ble RERC in its Draft Order dated 06.09.2019 had relied upon Hon'ble KERC's Order dated 01.08.2019, wherein the impact of Safeguard Duty and GST on modules, equipment, etc. had not been considered while approving the Capital Cost of Rs. 3.40 Crores per MW.

(ii) Therefore, Hon'ble RERC's Draft Order dated 06.09.2019 as well as the Final Order dated 11.02.2020 do not include the impact of Safeguard Duty and GST on modules, equipment, etc. in the Capital Cost.

(iii) Final Order passed by Hon'ble RERC does not include IDC and cost of land while approving the Capital Cost and has approved Capital Cost for projects having DC:AC ratio of 1:1 with corresponding CUF of 19%-20%. Whereas, in case of the Petitioner's Project the DC:AC ratio is 1.50:1 with a corresponding CUF of 25.91%.

d) That the reliance by HPPC on the above orders is erroneous, lack merit and is liable to be ignored. Further, the above Orders do not consider the impact of Safeguard Duty and GST on modules, equipment, etc in the Capital Cost, in addition to the fact that these costs are not reflective of the parameters specific to the Petitioner's Project.

e) That HPPC's reliance on order dated 11.11.2021 (Petition No. PRO 16 of 2021) and Order dated 17.09.2021 (Petition No. PRO 70 of 2020), is misplaced and wrong, as submitted here under:-

i. Order dated 11.11.2021 of the Hon'ble Commission in Petition No. PRO 16 of 2021, concerns determination of tariff for supply of power from M/s. Avaada Green HN Project Pvt. Ltd. *("Avaada")* from its 50MW Solar Power Project located in District Sirsa, Haryana. The Hon'ble Commission in the aforementioned Order approved capital cost at Rs. 3.245 Crore per MW corresponding to CUF @ 17.292% based on PVSYST simulations for its 50 MW AC capacity project with module capacity of 50 MW DC i.e. AC:DC ratio of 1:1.

ii. Order dated 17.09.2021 of the Hon'ble Commission in Petition No. PRO 70 of 2020, concerns determination of tariff for supply of power from L.R. Energy from its 20 MWp (AC) Solar Power Project at Bhiwani district. In the said Order, the Hon'ble Commission approved capital cost of Rs. 3.574 Crore per MW corresponding to the CUF of 22.14% AC with AC:DC ratio of 1:1.2.

iii. In the present scenario the Petitioner's project is 50 MW solar power project with the CUF of 25.91% corresponding to AC:DC ratio of 1:1.5 as per the PVSYST simulation reports. Therefore HPPC's reliance on Order dated 11.11.2021 and Order dated 17.09.2021 is misplaced and liable to be ignored as the aforementioned Orders substantially differ from the Project of the Petitioner in terms of the size of the project as well as the AC:DC ratio and cannot be a valid grounds for comparison for determination of capital cost.

f) That every project is different in terms of various technical parameters, like equipment configuration, transmission evacuation infrastructure, land cost, financing costs, duties and taxes, foreign exchange rates and the timing of incurring the cost. Apart from the above, Capital Cost of a project is a function of the following parameters: -

(i) Size of the Project

(ii) Length of transmission line

(iii) Cost of Land

(iv) Duty rates applicable on the PV modules

(v) Project construction timeline

g) That this Hon'ble Commission while re-determining the tariff in terms of the Remand Order has to take into account reasonable costs and expenditure incurred for setting up the project, which varies from project to project. Comparison of Capital Cost of the Petitioner's Project with the other solar projects is incorrect.

Re Annual Degradation in CUF at 0.5%

4.11 That the submissions of the petitioner in response to the contentions raised by HPPC, are as under:-

a) That the petitioner had filed Petition PRO-59 of 2020 before this Hon'ble Commission and had claimed capital cost of Rs. 275.40 Crores. The said Capital Cost does not include any provision towards monetized value of degradation of CUF of the Project.

b) That without prejudice, even though the Hon'ble Commission in the Order dated 18.01.2021 considered and compared the capital cost with Orders of other SERCs, the approved capital cost was arrived at considering the actual capital cost claimed.

c) That based on above, this Hon'ble Commission approved the degradation in CUF by 0.50% separately as under: -

"The Petitioner has submitted that based on the PVSYST simulations for the Project, CUF is estimated to be 17.27% DC (25.91% CUF AC). The CUF is further adjusted for 0.5% of plant unavailability and 1% of grid unavailability leading to a CUF of 17.01% (25.52% CUF AC) which is used for tariff determination. The Petitioner has claimed that higher CUF claimed by it is due to the efficient design capabilities of the Petitioner. The Commission observes that HERC RE Regulations, 2017, specifies the minimum acceptable capacity utilization factor for solar PV power projects. Thus, there is no bar on the claim of the Petitioner of higher CUF @ 25.91% AC, due to its efficient design. Accordingly, the Commission approves CUF @ 25.91% AC, as proposed with annual degradation of 0.50%."

Re Project Management Expenses

4.12 That the petitioner's response to the contentions raised by HPPC in respect of disallowance of Project Management Expenses are as under: -

a) Petitioner's grievance before the Hon'ble Tribunal was that the Hon'ble Commission while rejecting the claim of the Petitioner in terms of Project Management Expenses in Order dated 18.01.2021 had not considered Petitioner's Affidavit dated 22.12.2020.

b) Petitioner in its Affidavit had categorically stated that the Petitioner has availed consultancy services from group companies towards activities such as monitoring of project quality, management of project's risk, financing of the Project and maintenance of IT infrastructure of the Project. The services have been procured at arm's length basis and on commercial terms which were disclosed under applicable laws pertaining to related party transaction.

c) To elaborate on the above, the Petitioner had: -

(i) annexed the relevant extracts of the Auditors' report, wherein the Auditors had categorically observed as under:

"(xiii) The Company is a private limited company and accordingly, the requirements as stipulated by the provisions of section 177 of the Act in respect of related party transactions is not applicable to the Company. Further, in our opinion and according to the information and explanations given to us and on the basis of our examination of the records of the Company, the transactions with the related parties are in compliance with section 188 of the Companies Act, 2013, where applicable and the details have been disclosed in the financial statements as required by the accounting standards."

(ii) submitted that the total value of the payments to be made for Project Management is Rs. 237.5 Million of which Rs. 194.9 Million has been paid at the time of filing of the present Petition before the Hon'ble Commission. Invoices pertaining to cost incurred at the time of filing of the Petition has been already provided to the Hon'ble Commission.

d) That there is no legal basis to disallow the expenses incurred by the Petition solely for the reason that the Petitioner had sought consultancy services from one of the group companies.

4.13 That the petitioner is compiling the complete records of the competitive bidding process conducted to select the vendor for major Project items, in compliance with the Interim Order dated 12.12.2024 in the present Petition, for which Petitioner would require an additional time i.e. till 30.01.2025.

5. Petitioner's additional affidavit dated 07.02.2025:-

M/s. Amplus has filed an additional affidavit pleading therein as under:-

5.1 That the present Affidavit is being filed in terms of the Interim Order dated 12.12.2024 of this Hon'ble Commission to place the complete record of the competitive bidding held by the Petitioner to select the vendor for the Project and details of financial prudence exercised in awarding tenders.

5.2 That the Petitioner by way of the Additional Affidavit dated 23.12.2020 submitted before the Hon'ble Commission had estimated a total expenditure of Rs. 260 Crores, however the actual expenditure incurred for the Project is Rs. 241 Crores i.e., approximately 19 Crores less than the estimated expenditure towards major components of the Project. Brief summary of the comparison between estimated expenditure as per the Additional Affidavit dated 23.12.2020 and the actual expenditure is as follows: -

S. No.	Capex Items	Amount (Rs. Cr.)	
		Estimated	Actuals
1.	Capital works including Plant and Machinery.	198	185
2.	Civil works, erection and commissioning.	23	19
3.	Evacuation infrastructure upto interconnection point including GSS bay in the HVPNL substation	15	14
4.	Project Management Expenses	24	23
	Total	**260**	**241**

5.3 That a brief chronology in respect of the procurement process undertaken by the Petitioner for the Project is as under: -

Re. EPC – PV Plant Supply & Civil Services

a) In June 2019, the Petitioner floated Request for Proposal *("RfP")* to M/s. Sterling & Wilson Pvt. Ltd. *("Sterling & Wilson")*, Tata Power Solar Systems Ltd. *("Tata Solar")*, Mahindra Susten Pvt. Ltd. *("Mahindra Susten")* and Vikram Solar Ltd. *("Vikram Solar") (collectively "EPC Bidders")*. The Petitioner in September 2019 – October 2019 received quotations from the EPC Bidders. On 22.10.2019, Sterling & Wilson was appointed as the EPC Partner by the Petitioner.

b) In October 2019, Sterling & Wilson decided to pass on the work of Civil Services to M/s. Perfect Rays Technologies Pvt. Ltd. *("Perfect Rays")*. On 23.10.2019, Perfect Rays was appointed for providing Civil Services by the Petitioner.

Re. PV Solar Modules Supply & Related Costs

c) In October - November 2019, the Petitioner floated RfP to M/s. Mundra Solar PV Ltd. *("Mundra Solar")*, Trina Solar Energy Development Pte. Ltd. *("Trina Solar")*, Astroenergy (Chint New Energy Technology Co. Ltd), Canadian Solar Energy Pvt. Ltd. and Talesun Solar Co. Ltd. for supply of PV Modules.

d) In November 2019, the Petitioner received commercial offers from Mundra Solar and Trina Solar and the Petitioner entered into Module Supply Agreements with Mundra Solar and Trina Solar.

e) On 22.11.2019, the Petitioner decided to assign the Module Supply Agreements with Mundra Solar and Trina Solar to Sterling & Wilson since Sterling & Wilson was already appointed as the Petitioner's EPC Partner. In December 2019, Sterling & Wilson entered into separate Module Supply Contracts with Mundra Solar and Trina Solar.

Re. Evacuation Infrastructure & Others:

f) In June 2019, the Petitioner issued RfP to M/s. Bharat Bijlee Ltd. *("Bharat Bijlee")*, Absolute Projects (India) Ltd. *("Absolute Projects")* and Srex Power India Pvt. Ltd. *("Srex Power") (collectively "Evacuation Infrastructure Bidders")*. In July 2019 - August 2019, the Petitioner received quotations from the Evacuation Infrastructure Bidders. In September 2019, the Petitioner entered into a contract with Srex Power for the required Evacuation Infrastructure.

Re. Power Transformer

g) In July 2018, the Petitioner issued RfP to CG Power & Industrial Solutions Ltd. *("CG Power")*, Bharat Bijlee and Hammond Power Solutions Pvt. Ltd. *("Hammond Power")* *(collectively "Power Transformer Bidders")* for procuring the Power Transformer for two of its similarly placed solar power projects having capacity of 50 MW AC and 75 MW DC i.e., project located in Mirza, Uttar Pradesh *("Mirza Project")* and the present Project.

h) In March 2019, the Petitioner received quotations from Power Transformer Bidders. In June 2019, the Petitioner issued RfP to Bharat Bijlee for the present Project based on financial prudence since the technical specifications of the Power Transformer for both Mirza Project and the present Project were identical. On 11.07.2019, the Petitioner issued the Purchase Order for Power Transformer to Bharat Bijlee for the present Project.

Re. Project Management Expenses

i) Petitioner entered into consultancy contract with its group companies namely Amplus KN One Power Pvt. Ltd. and Amplus Management Services Pvt. Ltd. *("Group Companies").*

A. Capital Works including Plant and Machinery

5.4 **Capital Works** for the Project included works in respect of PV Module Supply, PV Plant Supply and Civil Services. Accordingly, the Petitioner had issued Purchase Orders amounting to Rs. 186 Crores for PV Module and PV Plant supplies to Sterling & Wilson and Purchase Order amounting to Rs. 15.52 Crores to Perfect Rays. Details of financial prudence exercised by the Petitioner is set out hereinbelow: -

Re. EPC – PV Plant Supply & Civil Services:

5.5 The scope of the PV Plant Supply and Civil Services Contract apart from PV Solar Module supply comprises of the following: -

a) String and Central Inverters
b) Mounting structures
c) Cables and accessories
d) 33 kV transmission line
e) IDT's
f) Pannels
g) Scada system
h) Module Cleaning System & RO
i) Roads Drains & Fencing

5.6 Accordingly, the Petitioner floated RfP for the aforesaid items to the following bidders for selection for PV Plant Supply & Civil Services:-

a) Sterling & Wilson
b) TATA Power Solar
c) Mahindra Susten
d) Vikram Solar

5.7 That the Petitioner also received quotations from the abovementioned bidders. Commercial quotation excluding taxes received from the aforesaid bidders for PV Plant supply and Civil Services is as under: -

S. No	Description	Sterling & Wilson	Mahindra Susten	Vikram Solar	Tata Power Solar
1	Supply Works of Project Neo, Khanak (Excluding Modules) 75 MWp / 50 MW	62,25,00,000	67,85,25,000	69,37,50,000	79,08,23,774
		L-1	L-2	L-3	L-4

5.8 That the Petitioner exercised financial prudence and identified Sterling & Wilson as the L-1 bidder and awarded the contract for a total amount of Rs. 62.25 Crores + GST, for PV Plant Supply & Civil Services.

5.9 That Sterling & Wilson bifurcated the total amount of Rs. 62.25 Crores + GST into two parts as under: -

a) PV Plant Supply for Rs. 49.40 Crores + 5% GST (Total – Rs. 51.87 Crores)

b) Civil Services for Rs. 12.84 Crores + 18% GST (Total – Rs. 15.15 Crores), which was passed on to Perfect Rays.

5.10 That PV Plant Supply and PV Module Supply were integrated under a single Purchase Order for an amount of Rs. 185.68 Crores (including PV Plant Supply for Rs. 51.87 Crores) issued to Sterling & Wilson and the Purchase Order for Civil Services for an amount of Rs. 15.15 Crores was issued to Perfect Rays.

5.11 That against the Purchase Order amounting to Rs. 185.68 Crores issued to Sterling & Wilson for PV Module and PV Plant Supplies, the actual cost incurred by the Petitioner is Rs. 183.66 Crore.

5.12 That the Petitioner incurred an actual cost of Rs. 15.52 Crores (Rs. 15.15 Crores & others) in line with the value of the purchase order issued to Perfect Rays for Civil Services.

5.13 That the Petitioner had incurred a cost of Rs. 1.65 Crore towards Civil Services - BOS, pre-operative and temporary fencing. Petitioner also availed a consultancy service of Rs. 0.23 Crore for plant design and construction and Rs. 0.38 Crore towards legal charges for legal advice regarding EPC contracts with various parties.

5.14 That prior to construction of the Project, the Petitioner conducted flood risk assessment of the identified land parcel, load flow assessment for the nearest substation, surveyed the route for transmission line and environmental studies. Petitioner incurred a cumulative cost of Rs. 0.39 Crore towards all the above activities.

5.15 That the petitioner as per industry standards paid a supervision charge of Rs. 0.09 Crore to HVPNL and Rs. 0.17 Crores to Dakshin Haryana Bijli Vitran Nigam ("DHBVN") for providing the approval on drawings and quality inspections and re-routing of the existing 11 kV line respectively.

5.16 That the petitioner incurred a statutory cost of Rs. 0.48 Crores as payments to National Securities Depository Ltd. ("NSDL") and for registration of shares for increasing the authorized share capital, as mandated under the statutory compliance of the Project.

5.17 That the petitioner paid a statutory amount of Rs. 0.09 Crores as premium towards workmen compensation insurance which is mandatorily required under the extant Labour Laws.

5.18 That accordingly, the Petitioner incurred a total of Rs. 3.5 Crores towards all the above expenses in addition to Civil Services amounting to Rs. 15.52 Crores.

***Re. PV Solar Modules Supply & Related Cost*:**

5.19 That the petitioner in October and November 2019 floated RfP to Mundra Solar, Trina Solar, Astroenergy (Chint New Energy Technology Co. Ltd), Canadian Solar Energy Pvt. Ltd. and Talesun Solar Co. for the supply of PV Solar Modules for the Project. Petitioner selected Mundra Solar and Trina Solar as suppliers based on the Petitioner's strategic sourcing process which includes price evaluation, quality and delivery schedules. Accordingly, the Petitioner entered into Module Supply Agreements with Mundra Solar and Trina Solar for supply of PV Modules.

5.20 As stated herein above, the Petitioner had chosen Sterling & Wilson as its EPC Partner and procured the solar modules through Sterling & Wilson. Accordingly, the Petitioner assigned the Module Supply Agreements with Mundra Solar and Trina Solar to Sterling & Wilson. Thereafter, Sterling & Wilson entered into Module Supply Contracts with Mundra Solar and Trina Solar for supply of PV modules for the Project.

5.21 Details of PV Modules procured for the Project are as under: -

Make	Wattage	Quantity	Capacity (MWp)
Mundra Solar	340	97,560	33.2
Mundra Solar	335	12,930	4.3
Trina Solar	345	71,730	24.7
Trina Solar	340	37,530	12.8
Total		**2,19,750**	**75.0**

5.22 The total cost of procuring the above modules was Rs. 126.57 Crore. The cost of procurement for imported modules of Trina Solar included cost of Insurance and Freight ***("CIF")*** till the Indian port for delivery and for Mundra Solar it is for the delivery at the Project site. Break-up of module cost is as under: -

Particulars	Invoice No.	Invoice Date	Invoice Amount (Rs.)
Trina Solar - Imported Modules	19F20630000015	06.03.2020	19,75,65,367.66
Trina Solar - Imported Modules	19F20630000016	06.03.2020	20,98,69,039.80
Trina Solar - Imported Modules	19F20630000017	06.03.2020	12,74,94,622.50
Trina Solar - Imported Modules	19F20630000018	06.03.2020	8,57,56,619
Mundra Solar - Indian Modules	19F20630000029	31.03.2020	64,49,96,038
Total			**1,26,56,81,687**

5.23 Petitioner has paid Rs. 2.66 Crores as logistics cost towards shipping and delivery of the modules at Project Site. Logistics of delivery from the port to the Project Site for Trina Solar was under the scope of Sterling & Wilson, which has been billed separately.

5.24 The Petitioner procured the modules by way of Letter of Credit ("LC") which is a standard practice across the industry. The Petitioner has paid Rs. 0.1 Crore as LC charges.

5.25 The USD-INR exchange rate at the time of opening of LC for the modules was Rs. 71.68, whereas the average exchange rate at the time of importing modules was Rs. 75.68. Therefore, the Petitioner incurred an additional cost of Rs. 2.67 Crores due to depreciation of Rupee on account of the unprecedented Covid – 19 pandemic, which was not a business-as-usual condition, at the time of import of the modules.

B. Evacuation Infrastructure & Others:

5.26 That the Petitioner floated RfP to following bidders for the evacuation infrastructure:-

a) Bharat Bijlee
b) Absolute Projects
c) Srex Power India Pvt. Ltd. ***("Srex Power")***

5.27 Final quotations received form the bidders for Evacuation Infrastructure are as under:-

S N	Item	Absolute Projects		Srex Power India Pvt. Ltd.		Bharat Bijlee	
		Rate	Amount	Rate	Amount	Rate	Amount
1	33/132 KV Substation as per SLD and scope document and 132 KV TLL from PSS to Khanak Substation and Extension of GSS at Khanak	10,01,97,226	10,01,97,226	8,79,00,000	8,79,00,000	9,28,00,000	9,28,00,000
2	Basic Price		10,01,97,226		8,79,00,000		9,28,00,000
3	GST	18.0%	1,80,35,501	8.90%*	78,23,100	18%	1,67,04,000
4	Freight	FOR Site cost	-	FOR Site cost	-	FOR Site cost	-
	Total Amount		11,82,32,727		9,57,23,100		10,95,04,000
	Commercial Ranking		**L3**		**L1**		**L2**

**Based on expected HSN wise item code GST rates*

5.28 That the Petitioner exercised financial prudence and chose Srex Power as L-1 bidder. Accordingly, the Petitioner awarded the contract for Evacuation Infrastructure to Srex Power. Scope of the contract was as under: -

a) Supply, erection and testing of PSS, equipment, GSS Bay equipment and 132 kV transmission line.

b) Re-testing of PSS bay equipment.

c) Forte Panel for communication.

5.29 That total value of the Evacuation Infrastructure Contract was Rs. 11.48 Crores. The Petitioner has made a payment of Rs. 11.29 Crores against the invoices raised by Srex Power. The Petitioner also made a payment of Rs. 0.15 Crore towards transmission lines supervision charges to HVPNL.

Re. Power Transformer

5.30 That the petitioner issued RfP to CG Power, Bharat Bijlee and Hammond Power for two of its similarly placed Solar Power Projects i.e. Mirza Project and the present Project for which construction activities had started in the year 2019. Based on the quotation received from the bidders, the Petitioner chose Bharat Bijlee as L1 bidder. The quotations received are as under: -

Financial Comparison for 40/50 MVA Transformer for UP Mirza							
		CG Power		Bharat Bijlee		Hammond Power	
Sl No	**Items**	**Rate**	**Amount (Rs.)**	**Rate**	**Amount (Rs.)**	**Rate**	**Amount (Rs.)**
1	Basic Price		2,90,00,000		2,43,50,000		2,40,00,000
2	GST	5%	14,50,000	5%	12,17,500	5%	12,00,000
3	Freight	Extra approx	13,00,000	Extra approx	11,25,000	Extra approx	10,00,000
4	**Total Amount (A)**		**3,17,50,000**		**2,66,92,500**		**2,62,00,000**
5	NPV with Technical losses over 25 years (B)		**1,98,42,376**		**1,99,82,853**		**2,75,33,492**
6	**Total cost including Loss Capitalization (C) = (A) + (B)**		**5,15,92,376**		**4,66,75,353**		**5,37,33,492**
7	Spares Price (D)		Extra		12,21,000		7,21,000
8	**Total Cost (E) = (C) + (D)**		**5,15,92,376**		**4,78,96,353**		**5,44,54,492**
9	**Commercial Ranking considering loss Capitalization**	**L3**		**L1**		**L2**	

5.31 That the Petitioner had procured Power Transformer used at the PSS of the Project from Bharat Bijlee as the technical specifications of the Power Transformer for both Mirza Project and the present Project are identical. Details of the power transformer are as under: -

a) One (1) Power Transformer of 50 MVA

b) 132/33 kV, step up transformer working at frequency 50 Hz.

5.32 That the purchase order amounting to Rs. 2.72 Crores was issued to Bharat Bijlee, against which the Petitioner has made a payment of Rs. 2.72 Crores.

C. Project Management Expenses

5.33 That the petitioner availed consultancy services from its Group Companies namely Amplus KN One Power Pvt. Ltd. and Amplus Management Services Pvt. Ltd. towards activities such as monitoring of the project quality, management of Project's risk, financing of the Project and maintenance of IT infrastructure of the Project. Services have been provided on arm's length basis and on commercial terms, for which the Petitioner has already provided Independent Auditor Certificate by way of its Affidavit dated 23.12.2020.

5.34 That total value of the contract entered between the Petitioner and its group companies is Rs. 24.92 Crores towards project management expenses, however the Petitioner incurred an actual cost of Rs. 22.78 Crores.

5.35 That a summary of the suppliers and contractors selected for major items along with actual Capital Expenditure of the Project, is as under: -

SN	CAPEX Items	Supplier / Contractor	Amount (Rs. Cr.)
1.	Capital work including Plant and Machinery (Module Cost Supply and PV Plant Supply)	<u>Module Cost Supply</u>- Trina & Mundra Solar via M/s Sterling & Wilson Pvt. Ltd. <u>PV Plant Supply</u> – M/s Sterling & Wilson Pvt. Ltd.	185

SN	CAPEX Items	Supplier / Contractor	Amount (Rs. Cr.)
2.	Civil works, erection and commissioning	Civil Works (Service) – M/s Perfect Rays Pvt. Ltd. And Other vendors for small items	19
3.	Evacuation Infrastructure (PSS, TL & GSS) & Power Transformer	Evacuation Infrastructure – M/s Srex Power India Pvt. Ltd. Power Transformer – M/s Bharat Bijlee Ltd.	14
4.	Project Management Expenses	Amplus KN One & Amplus Mgmt.	23

6. Petitioner's additional affidavit dated 25.03.2025, to the reply dated 13.03.2025 filed by HPPC:-

6.1 That the Petitioner has exercised highest level of prudence to ensure that the costs incurred for the Project are justifiable. Petitioner had also submitted a table to show a comparison of the estimated expenditure (as submitted in Additional Affidavit 23.12.2020) and the actual expenditure (as submitted in Additional Affidavit 07.02.2025), and *bona fide* disclosed that it had incurred approximately Rs. 19 Crores less than the estimated expenditure towards major components of the Project, as reproduced below: -

S. No.	Capex Items	Amount (Rs. Cr.)	
		Estimated	**Actuals**
1.	Capital works including Plant and Machinery.	198	185
2.	Civil works, erection and commissioning.	23	19
3.	Evacuation infrastructure upto interconnection point including GSS bay in the HVPNL substation	15	14
4.	Project Management Expenses	24	23
	Total	**260**	**241**

6.2 That HPPC's contention that Petitioner incurred a higher module and related cost of Rs. 1.76 Crores per MW being significantly above the market price at the relevant time, is vague and lacks proper justification. It is noteworthy that, this Hon'ble Commission by its: -

(i) Order dated 17.09.2021 in Petition No. 70 of 2020 titled ***'LR Energy Pvt. Ltd. v. HPPC & Anr.'***, passed in respect of LR Energy's 20 MW AC (24 MW DC) project has allowed module cost of Rs. 1.99 Crores per MW (Rs. 39.85 Crores for 20 MW).

(ii) Order dated 11.11.2021 in Petition No. 16 of 2021 titled ***'Avaada Green HNProject Pvt. Ltd. v. HPPC & Anr.'***, passed in respect of Avaada's 50 MW AC (50 MW DC) project, has allowed solar module and related cost of Rs. 1.966 Crores per MW (i.e., Rs. 98.32 Crores for 50 MW).

Evidently, the module and related cost approved by this Hon'ble Commission for Avaada (Rs. 1.99 Crores per MW) and LR Energy (Rs. 1.966 Crores per MW) are higher than the cost claimed by the Petitioner, i.e., Rs. 1.76 Crores per MW.

6.3 Further: -

(i) As per Hon'ble KERC's Order dated 01.08.2019 in the matter of *'Determination of tariff in respect of Solar Power Projects (including Solar Rooftop Photovoltaic*

Project) for FY 20, Hon'ble KERC has approved module and related cost of Rs. 1.81 Crores per MW (module cost of Rs. 1.48 Crores per MW + 20.79% safeguard duty + 5% GST on total module cost).

(ii) Hon'ble CERC by Order dated 23.03.2016 in Petition No. 17/SM/2015 in the matter of ***'Determination of Benchmark Capital Cost Norm for Solar PV power projects and Solar Thermal power projects applicable during FY 2016-17'*** has approved PV Module and related cost as Rs. 3.28 Crores per MW for Solar PV projects.

6.4 That the aforesaid orders have been relied upon by HPPC itself in its Reply / Submissions dated 11.01.2025. Accordingly, HPPC's contention that several Electricity Regulatory Commissions such as Hon'ble KERC and Hon'ble CERC, have considered a lower module cost than the Petitioner is baseless and liable to be rejected. On the contrary, the module and related costs claimed by the Petitioner of Rs. 1.76 Crores per MW are lower than when compared to cost allowed by Hon'ble KERC (Rs. 1.81 Crores per MW) and Hon'ble CERC (Rs. 3.28 Crores per MW).

6.5 That the principles and processes followed for a generic tariff order cannot be compared to project-specific tariff determination under Regulation 6 (1) (h) of the HERC RE Regulations, 2017.Every project is distinct in terms of technical parameters like equipment configuration, transmission evacuation infrastructure, land cost, financing cost, duties and taxes, foreign exchange rates, etc. Reliance is placed on MSPGCL v. MERC & Ors., 2011 ELR (APTEL) 0594.

6.6 That HPPC is taking inconsistent stands in its Reply: -

(i) On one hand, HPPC contends that any additional documents submitted by the Petitioner, which were not part of the record in Petition No. 59 of 2020, ought not to be considered in the present remand proceedings.

(ii) On the other hand, HPPC argues that the Petitioner has not provided sufficient justification / supporting documents in respect of its claim.

(iii) HPPC cannot simultaneously demand additional documents from the Petitioner and then contend that such documents are not to be considered by this Hon'ble Commission.

6.7 That without prejudice to the above, the Petitioner has already placed on record all relevant documents / invoices / proofs to justify the cost incurred through the (i) Additional Affidavit dated 22.12.2020 filed in Petition No. 59 of 2020, (ii) Submissions dated 24.12.2024, and (iii) Additional Affidavit dated 07.02.2025. Pursuant to which no clarification and / or any deficiency in the data submitted by the Petitioner has been sought by the Hon'ble Commission. As such, the Hon'ble Commission may kindly allow the cost claimed by the Petitioner, based on the documents on record, subject to prudence check.

6.8 That in Petition No. 59 of 2020, the Petitioner had claimed a capital cost of Rs. 275 Crores, out of which:

(i) At the time of filing of said Petition (i.e., 16.10.2020), the Petitioner had already incurred capital cost of Rs. 226 Crores, comprising Rs. 217 Crores towards major items of the Project (i.e., capital works including plant and machinery, civil works, erection and commissioning, evacuation infrastructure, and project management expenses), and Rs. 9 Crores towards minor items (i.e., land cost and IDC).

(ii) Capital cost which was yet to be incurred was Rs. 49 Crores, comprising Rs. 43 Crores towards major items and Rs. 6 Crores towards minor items.

Accordingly, the estimated total capital cost claimed by the Petitioner in Petition No. 59 of 2020 was Rs. 275 Crores i.e., Rs. 260 Crores towards major items and Rs. 15 Crores towards minor items.

6.9 That as stated in the Additional Affidavit dated 07.02.2025, the Petitioner has actually incurred the following expenditure:

(i) Major Items: Rs. 241 Crores was incurred, and the remaining Rs. 19 Crores (i.e., Rs. 260 Crores – Rs. 241 Crores) was not incurred.

(ii) Minor Items: Rs. 20 Crores was incurred, which includes Rs. 15 Crores (estimated at the time of filing of Petition No. 59 of 2020).

6.10 That out of Rs. 241 Crores towards major items, only Rs. 24 Crores (Rs. 43 Crores – Rs. 19 Crores) was incurred after filing of Petition No. 59 of 2020. This is only 10% of the capital cost which was spent between the filing of the Petition (16.10.2020) and the COD of the Project (12.01.2021). Therefore, it is incorrect for HPPC to contend that the Petitioner attempted to build a cushion by claiming that Rs. 49.37 Crores was yet to be incurred. Petitioner has submitted the relevant documents and justifications for the actual cost incurred in the Project.

6.11 That total estimated capital cost which was yet to be incurred towards major items of the Project was Rs. 43 Crores, comprised Rs. 38.91 Crores towards substantial plant and machinery and civil costs and Rs. 4.26 Crores towards project management expenses. Thus, the figure of Rs. 38.91 Crores does not represent the complete scope of major works which was to be executed by the Petitioner.

6.12 That the Petitioner had already incurred an expenditure of Rs. 132 Crores towards module and related costs at the time of filing Petition No. 59 of 2020. This amount is duly included in the capital cost of Rs. 217 Crores incurred towards major items.

6.13 That HPPC's reliance on the delivery timelines of solar modules under the supply agreements is misplaced. As per Clause 4.5(c) of the Module Supply Contract between Sterling & Wilson and Mundra Solar as well as Annexure 3 of the Module Supply Contract between Sterling & Wilson and Trina Solar, the delivery timelines specified for solar modules were clearly tentative in nature. Accordingly, HPPC's contention that module delivery was to be completed by specific dates and that no cost could have been incurred thereafter is irrelevant and misconceived and is liable to be rejected.

6.14 That the petitioner in its Affidavit dated 22.12.2020 had categorically stated that the consultancy services were availed from group companies towards activities such as monitoring of project quality, management of project's risk, financing of the Project and maintenance of IT infrastructure of the Project. The services have been procured at arm's length basis and on commercial terms which were disclosed under applicable laws pertaining to related party transaction. To elaborate on the above, the Petitioner had: -

(i) annexed the relevant extracts of the Auditors' report, wherein the Auditors had categorically observed as under:

"(xiii) The Company is a private limited company and accordingly, the requirements as stipulated by the provisions of section 177 of the Act in respect of related party transactions is not applicable to the Company. Further, in our opinion and according to the information and explanations given to us and on the basis of our examination of the records of the Company, the transactions with the related parties are in compliance with section 188 of the Companies Act, 2013, where applicable and the details have been disclosed in the financial statements as required by the accounting standards."

(ii) submitted that the total value of the payments to be made for Project Management is Rs. 237.5 Million of which Rs. 194.9 Million has been paid at the time of filing of the present Petition before the Hon'ble Commission.

6.15 That the Petitioner had entered into Consultancy Agreement with its group companies to provide in-house, day-to-day services for managing the Project and for carrying out related ancillary services until the commissioning of the Project. Such internal arrangements are standard practice in the industry and form an essential part of project execution and oversight. Additionally, it is a common and prudent industry practice for a developer to engage legal advisors for reviewing and finalizing critical project agreements, including the EPC contract. In line with this, the Petitioner engaged the services of a reputed law firm for legal vetting of the EPC contract. Further, the Petitioner also appointed Spectro Analytical Labs Limited to conduct quality checks, specifically for water testing, as part of the overall quality assurance process for the Project. These services form an integral part of project development and are aligned with standard commercial and regulatory practices.

6.16 That the Petitioner by its Additional Affidavit dated 07.02.2025 has already submitted documents related to the competitive bidding process which was conducted to select vendors for the Project. These documents also include details of the financial prudence exercised in awarding tenders for major project components which make it evident that the Petitioner has adopted a transparent and prudent process for awarding the tenders towards major items of the Project. EPC contracts are awarded for the purposes of completion of capital works and are thus intrinsically linked.

6.17 That the Court Fees was paid towards court fees for filing of OP No. 3 of 2020 before the Hon'ble Tribunal in respect of the *inter alia* praying for listing of Petition No. 25 of 2020 before this Hon'ble Commission, which related to the issues faced by the Petitioner regarding grant of connectivity to Petitioner's Project under Open Access, which later culminated into filing of Petition 45 of 2020 by HPPC for tariff under section 62 of the Electricity Act and Project specific Tariff determination in Petition 59 of 2020.

6.18 That legal charges amounting to Rs. 0.38 Crores, has been paid by the Petitioner towards legal advisors engaged for reviewing and finalizing critical project agreements, including the EPC contract, drafting and filing of representations / Petitions before this Hon'ble Commission and reviewing of land lease documents etc.

6.19 That the actual capital cost incurred by the Petitioner is Rs. 261 Crores out of which: -

(i) Rs. 241 Crores was towards major items of the Project which includes ***(A)*** Capital works including Plant & Machinery; ***(B)*** Civil works, erection and commissioning; ***(C)*** Evacuation Infrastructure & ***(D)*** Project Management Expenses; and

(ii) Rs. 20 Crores towards minor items of the Project which includes ***(A)*** IDC; ***(B)*** financing cost and ***(C)*** Land Lease rentals capitalized during the construction phase as per lease agreement

Tabulated statement is below: -

S. No.	**CAPEX Items**	**Amounts (Rs. Cr.)**	
		Estimated	Actual
1.	Capital works including Plant and Machinery	198	185
2.	Civil works, erection and commissioning	23	19
3.	Evacuation Infrastructure upto interconnection point including GSS bay in the HVPNL substation	15	14
4.	Project Management Expenses	24	23
5.	Financing Cost	3	1
6.	Interest During Construction	10	17
7.	Land lease rentals capitalized during the construction phase as per lease agreement	2	2
8.	**Total**	**275**	**261**

6.20 That the Petitioner has calculated the revised tariff of Rs. 3.06 per kWh considering the actual Capital Cost of Rs. 244 Crores (Total actual Capital Cost of Rs. 261 Crores minus actual Capital Cost of Rs. 17 Crores towards IDC) as per the Remand Order. Detailed calculations in respect of revised tariff of Rs. 3.06 per kWh is annexed.

6.21 That it is prayed to: -

(i) Re-determine the tariff for the Project under Section 62 of the Electricity Act in terms of Remand Order of the Hon'ble Tribunal considering the Capital Cost of

Rs. 244 Crores (Total actual capital cost of Rs. 261 Crores – actual capital cost of Rs. 17 Crores towards IDC) and allow a tariff of **Rs. 3.06 per kWh** for 25 years from the date of commissioning of the project.

(ii) Allow recovery of carrying cost on the re-determined tariff from 12.01.2021 upto disposal of the present Petition to be computed at Weighted Average Capital Cost (WACC).

7. Petitioner's additional affidavit dated 15.05.2025:-

7.1 That the present Additional Affidavit is being filed to place on record data sought by HPPC in its Reply to Additional Affidavit dated 13.03.2025 while *inter alia* contending that: -

a) Petitioner has not given justification as to why two separate tenders for 37.5 MW (DC) were awarded to Mundra Solar and Trina Solar when there was an overall cost difference of Rs. 2,43,10,209/-.

(b) Petitioner has vaguely stated that it has incurred an amount of Rs. 2.67 Crores due to depreciation of INR on account of COVID-19 pandemic. In the absence of any details or justification in regards to the above, the amount of Rs. 2.67 Crores ought to be disallowed.

(c) Petitioner has given vague justifications and has simply placed Purchase Orders without corelating them to the cost incurred qua the Project. Petitioner has not even filed an auditor certificate, certifying the amount allegedly claimed by the Petitioner.

(d) Petitioner has claimed an amount of Rs. 0.48 Crores towards payment to National Securities Depository Ltd. *(**"**NSDL**"**)* for registration of shares for increasing authorised share capital and certain amounts have been claimed for payments made to Ministry of Corporate Affairs *(**"**MCA**"**)*. It is inconceivable as to how such an amount can be a part of capital cost.

Re. Justification for two (2) separate tenders

7.2 That in October - November 2019, the Petitioner floated Request for Proposal *("RfP")* to M/s. Mundra Solar Pvt. Ltd. *("Mundra Solar")*, Trina Solar Energy Development Pte. Ltd. *("Trina Solar")*, Astroenergy (Chint New Energy Technology Co. Ltd), Canadian Solar Energy Pvt. Ltd. and Talesun Solar Co. Ltd. for supply of PV Modules. In November 2019, the Petitioner received commercial offers from Mundra Solar and Trina Solar.

7.3 That the Petitioner selected Mundra Solar and Trina Solar as suppliers based on the Petitioner's strategic sourcing process which included price evaluation, quality and delivery schedules. Petitioner entered into Module Supply Agreements with Mundra

Solar and Trina Solar to ensure that supply of modules would align with Project implementation timelines. Details of PV modules procured for the Project are as under:

Make	Wattage	Quantity	Capacity (MWp)
Mundra Solar	340	97,560	33.2
Mundra Solar	335	12,930	4.3
Trina Solar	345	71,730	24.7
Trina Solar	340	37,530	12.8
Total		2,19,750	75.0

7.4 That the total cost of procuring the above modules was Rs. 126.57 Crores. Cost of procurement for imported modules of Trina Solar was USD 71,26,339.5 which included Cost of Insurance and Freight *("CIF")* till the Indian port for delivery. For Mundra Solar, the cost was for delivery at the Project site. Break-up of module cost is as under: -

Particulars	Invoice No.	Invoice Date	Invoice Amount (Rs.)
Trina Solar - Imported Modules	19F20630000015	06.03.2020	19,75,65,367.66
Trina Solar - Imported Modules	19F20630000016	06.03.2020	20,98,69,039.80
Trina Solar - Imported Modules	19F20630000017	06.03.2020	12,74,94,622.50
Trina Solar - Imported Modules	19F20630000018	06.03.2020	8,57,56,619
Mundra Solar - Indian Modules	19F20630000029	31.03.2020	64,49,96,038
		Total	1,26,56,81,687

7.5 That the petitioner had paid Rs. 2.66 Crores as logistics and testing cost towards testing and delivery of the solar modules procured from Trina Solar at Project Site. Logistics of delivery from the port to the Project Site for Trina Solar was under the scope of work of Sterling & Wilson, which has been billed separately.

7.6 That the Petitioner procured the modules by way of Letter of Credit ("LC"), which is a standard practice across the industry. Petitioner had paid Rs. 0.1 Crore as LC charges. Notably, the USD-INR exchange rate at the time of opening of LC for the modules supplied by Trina Solar was Rs. 71.68, whereas the average exchange rate at the time of importing modules was Rs. 75.60 as on 30.03.2020; Rs. 76.26 as on 13.04.2020 and Rs. 76.85 as on 16.04.2020. Therefore, the Petitioner incurred an additional cost of Rs. 2.99 Crores due to depreciation of INR against USD at the time of import of the modules.

7.7 That the comparison of the total module cost, including delivery to the Project Site as envisaged by the Petitioner at the time of procurement, is as under: -

Particulars	Trina Solar Modules (Rs.)	Mundra Solar Modules (Rs.)
Module Cost	62,06,85,648	64,75,55,546
Forex	-	-
Logistics & Module Testing Cost	2,66,41,323	-
LC Charges for opening of LC	4,99,777	4,99,777
Total Cost	64,78,26,748	64,80,55,323
Difference		2,28,575
Difference as a % of total cost		0.02%

7.8 That Forex charges are not fixed rates and are influenced by various factors and thus could not have been envisaged at the stage of procurement. Accordingly, the total cost of procuring solar modules up to the Project Site was planned to be Rs. 64.78 Crores from Trina Solar and Rs. 64.80 Crores from Mundra Solar, respectively. The difference in cost of modules from Trina Solar and Mundra Solar was merely Rs. 2.29 Lakhs, which is only 0.02% of the total module cost.

7.9 That the Petitioner had incurred an additional cost amounting to Rs. 2.99 Crores towards Forex due to depreciation of INR at the time of import of the modules from Trina Solar, which could not have been known at the time of planning the procurement of solar modules.

Re. Forex charges incurred due to depreciation of INR against USD

7.10 That the cost of procurement for imported modules from Trina Solar including the CIF up to the Indian port of delivery was USD 71,26,339.5. The cost for procurement of these modules was paid through an irrevocable LC.

7.11 That the petitioner incurred an additional cost of Rs. 2.99 Crores due to depreciation of INR at the time of import of the modules. The computation of forex of Rs. 2.99 Crores is as under: -

LC Due Date	Due Amount in US $	Exchange Rate for LC Due Dates (Rs.)	LC Opened with Exchange Rate (Rs.)	Difference (Rs.)	Claim Amount (Rs.)	Remarks
30-03-2020	46,92,468.00	74.92	71.6756	3.244	76,12,121.59	Forward cover booked for 50% amount i.e. US $ 23,46,234
		75.60	71.6756	3.924	92,07,560.71	For balance 50% i.e. US $ 23,46,234
13-04-2020	14,63,418.00	76.26	71.6756	4.584	67,08,893.48	
16-04-2020	9,70,453.50	76.85	71.6756	5.174	50,21,514.59	
Total	71,26,339.50				2,85,50,090.37	
GST @ 5%					14,27,504.52	
Total Forex Amount					2,99,77,594.89	

7.12 That the Petitioner has incurred a Forex variation of Rs. 2.99 Crores instead of Rs. 2.67 Crores for the modules supplied by Trina Solar. Further, Sterling & Wilson by its email dated 25.08.2020, informed that they have received a short payment against the invoicing for the modules. The difference of Rs. 32.40 Lakhs was adjusted in the Forex invoicing. Accordingly, Sterling & Wilson raised a Forex tax invoice for Rs. 2.67 Crores (Rs. 2.99 Crores – Rs. 0.32 Crores) instead of Rs. 2.99 Crores.

Re. Correlation of Purchase Orders with Project Cost and Submission of Auditor Certificate

7.13 That a summary of the suppliers and contractors selected for major items along with details of Purchase Orders correlating with the actual CAPEX incurred by the Petitioner towards major items of the Project are set out below: -

S. No.	CAPEX Items	Supplier / Contractor	Purchase Orders	Actual CAPEX Incurred towards Major Items (Rs. Cr)
1.	Capital work including Plant and Machinery (Module Cost Supply and PV Plant Supply)	Module Supply – Trina & Mundra Solar via M/s Sterling & Wilson Pvt. Ltd. PV Plant Supply – M/s Sterling & Wilson Pvt. Ltd.	Refer Annexure A/4	185
2.	Civil works, erection and commissioning	Civil Works (Service) – M/s Perfect Rays Pvt. Ltd. And Other Vendors for small items	Refer Annexure A/5	19
3.	Evacuation Infrastructure (PSS, TL & GSS) & Power Transformer	Evacuation Infrastructure – M/s Serex Power India Pvt. Ltd. Power Transformer – M/s Bharat Bijlee Ltd.	Refer Annexure A/6	14
4.	Project Management Expenses	Amplus KN One Power Private Limited & Amplus Management Services Private Limited	Refer Annexure A/7	23

7.14 Auditor Certificate certifying the actual CAPEX of Rs. 261 Crores incurred by the Petitioner as on COD (12.01.2021) is annexed.

Re. Payment made to NSDL

7.15 That the Petitioner has incurred a statutory cost of Rs. 0.48 Crores towards payments made to MCA and NSDL for the registration of shares for increasing the authorized share capital of the Petitioner company to facilitate equity infusion into the Project. It is clarified that this statutory cost was incurred specifically for the Petitioner and not for any of the Petitioner's related SPVs. Although a common email was circulated seeking management approval to pay statutory charges for the Petitioner and other related SPVs, the Rs. 0.48 Crore pertains solely to the Petitioner.

8. Petitioner's additional affidavit dated 11.06.2025:-

8.1 That the petitioner in its Additional Affidavit dated 07.02.2025 submitted that: -

I. EPC – Procuring PV Plant Supply & Civil Services

(i) In June 2019, Petitioner floated Request for Proposal *("RfP")* to M/s. Sterling & Wilson Pvt. Ltd. *("Sterling & Wilson")*, Tata Power Solar Systems Ltd. *("Tata Solar")*, Mahindra Susten Pvt. Ltd. *("Mahindra Susten")* and Vikram Solar Ltd. *("Vikram Solar") (collectively "EPC Bidders")*.

(ii) In September 2019 – October 2019, Petitioner received quotations from the EPC Bidders.

(iii) On 22.10.2019, Sterling & Wilson was appointed as the EPC Partner by the Petitioner.

(iv) In October 2019, Sterling & Wilson decided to pass on the work of Civil Services to M/s. Perfect Rays Technologies Pvt. Ltd. *("Perfect Rays").* On 23.10.2019, Perfect Rays was appointed to provide Civil Services by the Petitioner.

II. PV Solar Modules Supply & Related Costs

(v) During October - November 2019, the Petitioner floated RfP to M/s. Mundra Solar PV Ltd. *(“Mundra Solar”)*, Trina Solar Energy Development Pte. Ltd. *(“Trina Solar”)*, Astroenergy (Chint New Energy Technology Co. Ltd), Canadian Solar Energy Pvt. Ltd. and Talesun Solar Co. Ltd. for supply of PV Modules.

(vi) During November 2019, the Petitioner received commercial offers from Mundra Solar and Trina Solar and the Petitioner entered into Module Supply Agreements with Mundra Solar and Trina Solar.

(vii) On 22.11.2019, the Petitioner decided to assign the Module Supply Agreements with Mundra Solar and Trina Solar to Sterling & Wilson, Petitioner’s EPC Partner.

(viii) In December 2019, Sterling & Wilson executed Module Supply Contracts with Mundra Solar and Trina Solar.

III. Evacuation Infrastructure & Others

(ix) In June 2019, the Petitioner issued RfP to M/s. Bharat Bijlee Ltd. *(“Bharat Bijlee”)*, Absolute Projects (India) Ltd. *(“Absolute Projects”)* and Srex Power India Pvt. Ltd. *(“Srex Power”) (collectively “Evacuation Infrastructure Bidders”)*.

(x) During July 2019 - August 2019, the Petitioner received quotations from the Evacuation Infrastructure Bidders.

(xi) In September 2019, the Petitioner entered into a contract with Srex Power for the required Evacuation Infrastructure.

IV. Power Transformer

(xii) In July 2018, the Petitioner issued RfP to CG Power & Industrial Solutions Ltd. *(“CG Power”)*, Bharat Bijlee and Hammond Power Solutions Pvt. Ltd. *(“Hammond Power”) (collectively “Power Transformer Bidders”)* for procuring the Power Transformer for two (2) of its similarly placed solar power project having a capacity of 50 MW AC and 75 MW DC located in Mirza, Uttar Pradesh *(“Mirza Project”),* and the present Project.

(xiii) In March 2019, the Petitioner received quotations from Power Transformer Bidders.

(xiv) In June 2019, the Petitioner issued RfP to Bharat Bijlee for the present Project. On 11.07.2019, the Petitioner issued the Purchase Order for Power Transformer to Bharat Bijlee for the present Project.

V. Project Management Expenses

(xv) The Petitioner executed consultancy contract with group companies namely Amplus KN One Power Pvt. Ltd. and Amplus Management Services Pvt. Ltd. *(“Group Companies”).*

8.2 Revised claim: In Petition No. 59 of 2020, Petitioner had claimed capital cost of Rs. 275 Crores. Actual capital cost incurred by Petitioner is Rs. 261 Crores wherein:

(a) Rs. 241 Crores is towards major items

(b) Rs. 20 Crores is towards minor items

8.3 That the Petitioner has calculated the revised tariff of Rs. 3.06 per kWh considering the actual Capital Cost of Rs. 244 Crores (actual capital cost of Rs. 261 Crores minus actual Capital Cost of Rs. 17 Crores towards IDC) as per the Remand Order.

8.4 That the Hon'ble Tribunal has time and again held that Electricity Regulatory Commissions are bound to undertake a thorough prudence check while determining the actual expenditure incurred in completion of a project, keeping in view the project-specific requirements, and arriving at the Capital Cost, including in: -

(a) *Dodson-Lindblom Hydro Power Ltd. v. MERC, 2009 SCC OnLine APTEL 134*

(b) *Dodson-Lindblom Hydro Power Private Limited v. MERC, 2011 SCC OnLine APTEL 156*

(c) *MSPGCL v. MERC, 2011 SCC OnLine APTEL 65*

8.5 That PVSYST is one of the oldest simulation tools developed by the University of Geneva. Petitioner had considered the purchased irradiation data of 3Tier for projecting the CUF of 25.91%. Data accuracy of 3Tier is higher as compared to that offered by Meteonorm v7.2. Data from PVSYST simulation reports are corroborated by the fact that CUF of the Petitioner's Project is in the range of 23.83% to 24.92% during FY 2021-22 to FY 2024-25 (April 2024 to November 2024). Even if the Hon'ble Commission does not consider the PVSYST reports but the actual CUF from the Project as submitted along with the Submissions dated 24.12.2024, the Petitioner would be entitled to incremental capital cost of Rs. 49.46 Crores for the additional 25 MW DC capacity (module cost of Rs. 44 Crores and cost of civil works of Rs. 5.46 Corers).

8.6 That Regulation 48 provides for a CUF of 19%, but allows the Hon'ble Commission to deviate from above norm in case of project-specific tariff determination. This has also been upheld by the Hon'ble Tribunal at Para 32 and 33 of the Remand Order. Regulation 48 provides as under: -

"Regulation 48. Capacity Utilisation Factor – The Capacity utilisation factor for Solar PV project shall be 19%. Provided that the Commission may deviate from above norm in case of project specific tariff determination."

8.7 That in its Order dated 18.01.2021, Hon'ble Commission has already held that there is no bar on granting higher CUF @ 25.91% AC, due to the Project's efficient design. Hon'ble Commission has already exercised the discretion under Regulation 48 to deviate from the norm of 19% and allow higher CUF of 25.91% during project-specific tariff determination for the Project.

8.8 That the principles and processes followed for a generic tariff order cannot be compared to project-specific tariff determination under Regulation 6 (1)(h) of RE Regulations, 2017 as held by the Hon'ble Tribunal in the Remand Order. Every project is distinct in terms of technical parameters like equipment configuration, evacuation infrastructure, land cost, financing cost, duties and taxes, foreign exchange rates, etc. Reliance is also placed on *MSPGCL v. MERC & Ors., 2011 ELR (APTEL) 0594.*

8.9 That it is permissible to install additional DC capacity and the same is not a violation of the PPA as long as the AC capacity of the solar power plant corresponds with the contracted AC Capacity. In the present case, the contracted AC capacity as well as the AC capacity of the Project is 50 MW *[Clause 2.1.9 of PPA]*, and as such the additional DC capacity of 25 MW installed by the Petitioner is necessary to achieve the approved higher CUF of 25.91%. Clause 2.1.9 of the PPA provides as under: - *"Contracted Capacity" shall mean AC Capacity in 50 MW of Solar Power Contracted with HPPC for supply to HPPC at Delivery Point from Solar Plant."*

Re. Justification for two (2) separate tenders

8.10 In October - November 2019, the Petitioner floated RfP to Mundra Solar, Trina Solar, Astroenergy (Chint New Energy Technology Co. Ltd), Canadian Solar Energy Pvt. Ltd. and Talesun Solar Co. Ltd. for supply of PV Modules. In November 2019, the Petitioner received commercial offers from Mundra Solar and Trina Solar.

8.11 Petitioner selected Mundra Solar and Trina Solar as suppliers based on the Petitioner's strategic sourcing process which included price evaluation, quality and delivery schedules. Petitioner entered into Module Supply Agreements with Mundra Solar and Trina Solar to ensure that supply of modules would align with the Project implementation timelines. Details of PV modules procured for the Project are as under:

Make	Wattage	Quantity	Capacity (MWp)
Mundra Solar	340	97,560	33.2
Mundra Solar	335	12,930	4.3
Trina Solar	345	71,730	24.7
Trina Solar	340	37,530	12.8
Total		**2,19,750**	**75.0**

8.12 That the total cost of procuring the above modules was Rs. 126.57 Crores. Cost of procurement for imported modules of Trina Solar was USD 71,26,339.5 which included Cost of Insurance and Freight ("CIF") till the Indian port for delivery. For Mundra Solar, the cost was for delivery at the Project site. Break-up of module cost is as under: -

Particulars	Invoice No.	Invoice Date	Invoice Amount (Rs.)
Trina Solar - Imported Modules	19F20630000015	06.03.2020	19,75,65,367.66
Trina Solar - Imported Modules	19F20630000016	06.03.2020	20,98,69,039.80
Trina Solar - Imported Modules	19F20630000017	06.03.2020	12,74,94,622.50
Trina Solar - Imported Modules	19F20630000018	06.03.2020	8,57,56,619
Mundra Solar - Indian Modules	19F20630000029	31.03.2020	64,49,96,038
		Total	**1,26,56,81,687**

8.13 That in addition to the above, Petitioner had:

(a) paid Rs. 2.66 Crores as logistics and testing cost towards testing and delivery of the solar modules procured from Trina Solar at Project Site. Logistics of delivery from the port to the Project Site for Trina Solar was under the scope of work of Sterling & Wilson, which has been billed.

(b) procured the modules by way of Letter of Credit ***("LC")***, which is a standard practice across the industry. Petitioner had paid Rs. 0.1 Crore as LC charges. Notably, the USD-INR exchange rate at the time of opening of LC for the modules supplied by Trina Solar was Rs. 71.68, whereas the average exchange rate at the time of importing modules was Rs. 75.60 as on 30.03.2020; Rs. 76.26 as on 13.04.2020 and Rs. 76.85 as on 16.04.2020. Therefore, the Petitioner incurred an additional cost of Rs. 2.99 Crores due to depreciation of INR against USD at the time of import of the modules.

8.14 That the Petitioner had incurred an additional cost amounting to Rs. 2.99 Crores towards Forex due to depreciation of INR at the time of import of the modules from Trina Solar, which could not have been known at the time of planning the procurement of solar modules.

8.15 That had the Petitioner procured 100% of the modules from Trina Solar, the Project would have been exposed entirely to Forex risk and potential hedging costs. On the other hand, procuring solely from Mundra Solar would have involved significant supply-side risks including delivery delays and quality concerns, given that the domestic module manufacturing industry was still in its nascent stages at the relevant point in time, i.e. in 2020. Such risks could have adversely affected Project timelines and quality assurance.

8.16 That the decision to split the procurement between two reliable suppliers i.e., Trina Solar and Mundra Solar, was therefore a prudent business practice and strategic one aimed at mitigating risk and to avoid over-reliance on a single vendor.

9. **<u>HPPC' reply dated 11.01.2025</u>**

HPPC has submitted as under:-

Re: CAPITAL COST AND CUF FOR THE 25 MW ADDITIONAL DC CAPACITY OVER AND ABOVE THE 50 MW AC CAPACITY

CAPITAL COST CORRESPONDING TO ADDITIONAL DC CAPACITY OVER AND ABOVE 17.3% AC CUF TILL 19% CUF CANNOT BE CONSIDERED

9.1 That the Hon'ble Tribunal, vide the judgment dated 25.10.2024 has held that the State Commission ought to have considered the capital cost for the additional DC Capacity installed by Amplus which is linked to the CUF of 25.91% as proposed and accepted by this Hon'ble Commission. Pursuant thereto, Amplus has claimed incremental capital cost of Rs. 49.46 Crores for the 25 MW additional DC capacity (module cost of Rs. 44 Crores and cost of civil works of Rs. 5.46 Crores). The claim of Amplus is that if the AC:DC ratio is considered 1:1 for their project, the CUF would be only 17.3% AC as against the CUF of 25.91% if AC:DC ratio of 1:1.50 is considered. In regard to the above, Amplus has relied on the PYSYST simulations to contend that CUF of 17.3% AC would be achievable if 1:1 ratio is considered for AC:DC. At the outset, it is submitted that PVSYST stimulations cannot be accepted as the sole basis for achievable CUF as PVSYST stimulations provides only indicative statistical estimates under different probabilities. The simulation results thus achieved are dependent upon various presumptions taken at the choice of the entity preparing such report. The radiation data is available from difference sources and varies from source to source. The input solar radiation is a variable factor which impacts the result of the simulation. Therefore, the Net Electrical Energy Generation obtained from PVSYST simulations may not be an effective indicator of the CUF.

9.2 That the minimum benchmark CUF to be considered with 1:1 AC:DC ratio ought to be 19% AC which is the minimum acceptable CUF as per the HERC RE Regulations, 2017 and not 17.3% AC CUF as contended by Amplus. In this regard, Regulation 48 of the HERC RE Regulations, 2017, inter-alia, reads as under:

"48. Capacity Utilisation Factor. – The Capacity utilisation factor for Solar PV project shall be 19%. Provided that the Commission may deviate from above norm in case of project specific tariff determination"

9.3 That the capital cost of additional DC capacity installed to achieve 19% AC CUF ought not to be considered and only the capital cost of additional DC capacity over and above 19% be considered by this Hon'ble Commission. It is submitted that Amplus was required to arrange its affairs and achieve atleast 19% AC CUF as per HERC RE Regulations and the capital cost incurred for installing extra DC Modules to achieve 19% AC CUF is to be borne by Amplus. Therefore, the claim of Amplus to consider the capital cost corresponding to additional DC capacity over and above 17.3% AC CUF till 19% CUF cannot be considered.

CUF PROPOSED BY AMPLUS CORRESPONDING TO AC:DC RATIO OF 1:1.50 IS LOWER AS COMPARED TO ANOTHER PPA ENTERED BY AMPLUS AND OTHER PROJECTS

9.4 That the CUF of 25.91% AC as proposed by Amplus with a ratio of 1:1.50 AC:DC is contradictory and lower to the CUF of 27.17% as worked out in terms of the Power Purchase Agreement dated 23.07.2020 entered with Sandhar Technologies Limited for sale of 9.40 MWp (DC Capacity) generated from the same power project of Amplus.

9.5 That the abovementioned agreement was entered into before the source approval order dated 14.09.2020 was passed by this Hon'ble Commission in relation to supply of power to HPPC. In the said Agreement, Amplus itself had provided for a Generation Schedule for the Project under Annexure-1 of the said Agreement. Amplus had considered annual generation of 14573100 units at sub-station of Haryana State Transmission Utility against the contracted capacity of 9.42 MW (DC). After grossing up the above generation with transmission losses @ 2.5% to work out the generation available at the interconnection point/pooling substation, the same works out to 14947427 units. Considering the estimated generation at interconnection point/pooling substation of Amplus, the CUF works out to 27.17% AC and 18.11% DC, as also recorded by this Hon'ble Commission at Para 4 (vii)(d).

9.6 That the Order dated 18.01.2021 passed by this Hon'ble Commission does not record any finding on this issue even though the same was raised as a specific issue by HPPC. Moreover, Amplus had not even provided any explanation or rationale for the difference in CUF computed based on the Agreement dated 23.07.2020 with Sandhar and the CUF claimed in the present case.

9.7 That HPPC had also referred to the Detailed Project Report (DPR) for 20 AC/24 DC MW solar PV generation Plant of M/s LR Energy Pvt. Ltd., located at Bhiwani, Haryana which envisaged specific generation per kWh as 1646 units [based on Photovoltaic Systems ('PVSYST') report], which works to a DC CUF of 18.80% which translate to an AC CUF of 28.2% assuming DC:AC capacity ratio of 1:1.50 similar to the Project of Amplus.

9.8 That in view of the above, the CUF may be considered as 28.20% AC or at least 27.17% AC, in case the claim of Amplus for allowing capital cost qua the additional DC Capacity for achieving CUF over and above 19% AC CUF, is considered.

9.9 That this Hon'ble Commission may take due cognizance of the fact that Amplus is not even achieving the declared CUF as per the PVSYST Report which may be indicative of the fact that the equipments installed by Amplus are sub-standard or Amplus is not employing prudent practices in operating the Solar Project.

Re. <u>CAPITAL COST</u>:

9.10 That this Hon'ble Commission while passing the Order dated 18.01.2021, had allowed a total capital cost of Rs. 191.25 crores corresponding to 50 MW capacity which amounts to Rs. 3.825 Crores per MW.

9.11 That this Hon'ble Commission while passing the Order had explicitly stated that the capital cost allowed to Amplus is comparatively higher but since the benefit of higher CUF of 25.91% was being made available to the consumers at large without considering the capital cost for the additional 25MW DC capacity, the Hon'ble Commission had not made any reductions in the capital cost proposed by Amplus. This Hon'ble Commission held as under:

"5…..

a) Capital cost:

…..

Resultantly, the Commission approves total cost of 50 MW power plant at Rs. 191.25 Crore (Rs. 275.40 Crore claimed by the Petitioner minus Rs. 44 Crore toward cost of modules of 25 MW, minus Rs. 6.81 Crore towards cost of civil work of 25 MW, minus Rs. 23.75 Crore as Project Management expense, minus Rs. 9.59 Crore as interest during construction period), for the purpose of tariff determination, which works out to Rs. 38.25 Million/MW. ***The capital cost of Rs. 38.25 Million/MW is still comparatively higher, however, given the benefit of higher CUF of 25.91% (AC) proposed by the Petitioner, the Commission considers the same as reasonable****."*

[Emphasis Supplied]

9.12 That this Hon'ble Commission had allowed the entire capital cost of Rs. 3.825 Crores/MW (barring the cost of civil work of 25 MW, Project Management expense and interest during construction period) on the basis that HPPC is benefiting from a higher CUF of 25.91%. However, since the Hon'ble Tribunal had held that the capital cost incurred for additional DC capacity is to be considered, it is incumbent upon this Hon'ble Commission to conduct a thorough prudence check of the capital cost claimed by Amplus.

THE AMOUNT OF RS. 49.40 CRORES ALLEGEDLY PROPOSED TO BE INCURRED AFTER FILING OF PETITION NO. 59 OF 2020 HAD NO BASIS AND OUGHT TO BE DISALLOWED

9.13 That in the original petition, the petitioner had claimed total project cost of Rs. 275.4 Crores for 75 MW DC capacity. Out of said cost of Rs. 275.40 Crores, an amount of Rs. 49.40 Crores was claimed and considered by this Hon'ble Commission which was yet to be incurred by Amplus as on the date of filing of the Petition No. 59 of 2020. The above amount was not expended by Amplus and was an estimate to be incurred for the purposes of commissioning of the Plant. The estimates of cost alleged by the Petitioner to be incurred for the instant Project after the filing of Petition No. 59 of 2020 before commissioning is summarized as under –

Sr. No.	Particulars	Cost alleged to be incurred in future (in crores)	Cost per MW (INR) (in crores)
1.	Module, Plant and Equipment Cost including Land cost capitalized during construction phase as per lease agreement	27.94	0.3725
2.	Civil Work, erection and Commissioning	8.08	0.107
3.	Evacuation Infrastructure	2.89	0.038
4.	Financing, IDC and Pre-operative Expenses	10.46	0.139
TOTAL		**49.37**	**0.654**

9.14 That the petitioner had stated that the project was ready for commissioning and only final quality and commissioning tests are pending at the time of filing of Petition No. 59 of 2020. Considering the status of the project, it was unconceivable that a substantial

Plant and machinery and Civil cost of 38.91 Crore was estimated to be incurred. There was no justification provided for the same and is a strategy to build cushions for increasing the tariff.

9.15 That in view of the above, the cost of Rs. 27.94 Crores which was proposed to be allegedly incurred for 'plant and machinery-others' ought to be disallowed at the threshold as Amplus has provided no justification for the same. Similarly, the civil erection and evacuation infrastructure proposed costs ought not to be also considered. Further, the proposed Financing and Pre-operative Expenses ought to be disallowed on the same basis of IDC being rejected in the Order dated 18.01.2021 passed by this Hon'ble Commission.

9.16 That the cost alleged by the Petitioner to have been incurred for the instant Project till the date of filing of Petition No. 59 of 2020 is summarized as under –

Sr. No.	Particulars	Cost alleged to have been incurred uptill now (in crores)	Cost per MW_{DC} (INR) (in crores)
1.	Module, Plant and Equipment Cost including Land cost capitalized during construction phase as per lease agreement	170.36	2.271
2.	Civil Work, erection and Commissioning	14.68	0.195
3.	Evacuation Infrastructure	12.40	0.165
4.	IDC and Pre-operative Expenses	26.15	0.349
5.	Land cost capitalized during construction	2.38	0.032
	TOTAL	**225.97**	**3.01**

EXCESSIVE CAPITAL COST CLAIMED BY AMPLUS OUGHT TO BE DISALLOWED

9.17 That the capital cost claimed by Amplus is exorbitant and not rationale as compared to the market trend of the prices of the Solar Power Plant. Amplus has not provided the relevant documents in support of its claim and the same was also observed by this Hon'ble Commission in the Order dated 18.01.2021 as under:

Further, the Petitioner could not substantiate that the capital cost of Rs. 2754 Millions claimed by it in its Petition, with respect to 50 MW AC capacity, is the ideal/minimum cost which was essentially required to be incurred backed by quotes from more than three vendors etc. In absence of the same and given the huge capital cost of Rs. 55.08 millions/MW claimed by the Petitioner as against the benchmark capital cost of Rs. 35.62 Millions/MW determined by Hon'ble UKERC and Rs. 34 Million/MW determined by this Commission in its Order dated 20.12.2019 for small projects, the Commission is not convinced regarding its prudence i.e. incurrence of capital cost after taking all economic safeguards and negotiations.

It needs to be noted that while claiming/ determining project specific tariff, the Petitioner as well as this Commission ought not to escape the rigor of prudence check including the market trend in India. The ridiculously low cost offered by the Chinese firm in the global market also needs to be discounted given the inherent disadvantages in India, across the solar value chain.

9.18 That the above finding of this Hon'ble Commission has become final as Amplus cannot be allowed to challenge on the aspects of capital cost. In terms of the judgment passed by the Hon'ble Tribunal, the claims of HPPC for reduction of capital cost are to be looked into by this Hon'ble Commission.

9.19 That in view of the above and in the absence of details from Amplus, HPPC is placing before this Hon'ble Commission the comparable solar prices prevalent at the relevant time approved by the Hon'ble Commissions including this Hon'ble Commission:

a) Order dated 20.12.2019 passed by this Hon'ble Commission in PRO-57 of 2019 for PM – KUSUM scheme which was in fact for capacity of less than 2 MW. In the said scheme, the capital cost as considered and approved by this Hon'ble Commission was Rs. 3.40 crores per MW. The above cost is inclusive of land cost.

b) Order dated 07.06.2019 passed by the Uttarakhand Electricity Regulatory Commission in Petition No. 18 of 2019 considering the cost of Rs. 3.56 crores per MW (out of which Rs. 50 lacs has been considered as the land cost). In the present case, the land cost is not included in the capital cost. Therefore, the corresponding consideration would be around Rs. 3 crores per MW. This is for projects up to 1 MW plants.

c) Order dated 01.08.2019 passed by Karnataka Electricity Regulatory Commission had adopted capital cost of Rs. 3.17 crores per MW. This was for projects of capacity less than 5 MW. This capital cost is exclusive of land cost.

d) Ministry of New and Renewable Energy (MNRE) vide Office Memorandum dated 21.07.2020 has also notified benchmarking cost for Grid connected Rooftop Solar Photo voltaic systems ranging from100 kW to 500 kW for the FY 2020-21 as Rs. 36 per Watt. The cost of solar plant considering this standard is Rs. 3.6 crores per MW and this is for rooftop projects. Considering the increase in capacity (in MW), it shall further decrease the cost of Project substantially. This is exclusive of the land cost/lease rentals. Further, these costs are applicable to less than 1 MW and upto projects of500 kW capacity;

e) Order dated 11.02.2020 passed by Rajasthan Electricity Regulatory Commission for KUSUM Scheme had considered the cost of setting up 1 MW solar plant including the cost of 3km connected 11 kv line as Rs. 3.65 Crores per MW and the cost of project without the cost of 11 kV line/breaker works out to be Rs. 3.40 crores per MW. This is including the land cost.

Further, the costs considered in most of the above Orders passed by the respective State Commissions are usually for projects of less than 2MW and are inclusive of land costs which has to be excluded, as, in the present case, the land lease expenses has been provided separately to Amplus. Therefore, there is no element of land cost in the capital cost. Considering the economies of scale and reduced cost of solar inverter and panels, the capital cost per MW should be much lower for Amplus. Compared to the same, the cost as sought by Amplus is exorbitant and exaggerated.

9.20 That Amplus has wrongly interpreted the various Orders passed by the Hon'ble State Commissions and the Ministry of New and Renewable Energy ('MNRE') with respect to the per/MW capital cost considered at the relevant time is as under:

(a) The Order dated 20.12.2019 passed by this Hon'ble Commission for PM Kusum Projects takes into account the prevailing market trends in terms of Regulation 47 of HERC RE Regulations.

It is denied that the Order dated 20.12.2019 passed by this Hon'ble Commission is exclusive of the cost of Land. In terms of PM KUSUM Scheme, the power plant needs to be set up in the barren land. This Hon'ble Commission has adopted the capital cost in terms of prevailing market trends and the same is inclusive of land cost.

It is submitted that the Amplus has failed to consider that the per MW benchmark cost for small scale solar PV based project as per HERC order dated 20.12.2019 corresponding to 20 % CUF includes the cost of land and evacuation facility whereas Amplus has considered both the aspects separately while computing the capital cost. Thus, the Capital Cost claimed by the Amplus is in no manner aligned to market trend and not worthy of consideration.

(b) The Order dated 07.06.2019 passed by Uttarakhand Commission is correct in law. It is submitted that it is the prerogative of the Solar Power Developer whether to install additional DC modules to increase the CUF. Installation of additional DC capacity is an enabling provision which allows the Amplus to upgrade, install new machines/panels etc. to reach the optimum consistent level of performance. However, the cost of the same has to be borne by the Solar Power Developer at its own risk and cost [Ref. Article 4.7 of the PPA]. In view of the above, this Hon'ble Commission has rightly held the ratio of AC:DC capacity as 1:1.

(c) With regard to MNRE Notification dated 21.07.2020, the submissions made hereinabove are reiterated. It is submitted that the cost of land has to be in line with the prevailing market trends. The cost of land of the Amplus is extremely high and is not in consonance with the prevailing market trends and hence is liable to be rejected.

(d) That the reference made by the HPPC to the capital cost of power projects for comparison to the Amplus are mostly of lower capacity. Therefore, it is reiterated that the capital cost allowed qua 50 MW AC capacity is higher and not in consonance with the prevailing market trend. This Hon'ble Commission has erroneously allowed the exorbitant capital cost of 3.8 crores per MW. The cost allowed ought to be much lower than what this Hon'ble Commission has allowed. There is no element of land cost in the capital cost.

Further, considering the economies of scale and reduced cost of solar inverter and panels, the capital cost per MW should be much lower for power plant of the Amplus and as per the economies of scale.

9.21 That the capital cost of the Plant of Amplus is exclusive of cost of land, downward trend of the prices and applying economies of scale for the capacity of the Plant of Amplus, the capital cost ought to have been reduced by 15-20%. It is relevant to note that the tariff of Amplus is also exclusive of income tax.

9.22 That there has been a significant downward trend in the reduction in the cost of solar modules which is evident even when comparing the 2019 costs, however the Order dated 18.01.2021 does not account for the same, and needs reconsideration. Most of the Order for comparison were passed by the Regulatory Commissions in FY 2019-20 and there has been a downward trend during FY 2020-21 since June, 2019 and therefore, the costs of Amplus ought to be even lower.

9.23 That Uttarakhand Electricity Regulatory Commission in its suo-moto order dated 23.06.2020, has categorically observed that the cost of solar module has decreased to 0.185 USD/Wp as on June 17, 2020 against the average module cost of 0.241 USD/Wp prevailing on June 07, 2019:

"2.5 Some of the Solar PV plant developers requested the Commission for the tariff enhancement of 10% for their Solar Power projects considering that there is an increase in dollar exchange rate vis-à-vis INR and the availability of labour, transportation and allied services has become scarce and thereby increasing the costing of the projects.

In the matter, the Commission observed that while approving the module cost for FY 2019-20, the Commission had considered the average exchange rate of Rs. 70.735/USD which has increased to Rs. 76.216/USD as on June 19, 2020 and cost of labour as well as transportation has also increased, however, it also cannot be denied that the cost of module cost has decreased to $ 0.185/module as on June 17, 2020 (Source http://pvinsights.com/) against average module cost of 0.241 USD/Wp as considered by the Commission in Suo-moto Order dated June 07, 2019 while determining the benchmark capital cost and levelized generic tariff for solar PV plants for FY 2019-20. Further, the Commission had considered the average SBI MCLR of 8.53% for the purpose of Interest on Loan and Interest on Working Capital in Suo-moto Order dated 07.06.2017 which has decreased substantially to 7.00% as on June 10, 2020 (Source:https://www.sbi.co.in/web/interest-rates/interest-rates/mclr-historical-data). Accordingly, there will be a saving to the Solar PV plant developers on account of decrease in module cost as well as interest rates which may compensate the *increase in other costs. Moreover, the tariffs were determined through bidding process and any arbitrary enhancement of tariff would not be appropriate. Accordingly, request for 10% tariff hike on pro-rata basis for respective projects by the Solar PV developers is rejected."*

9.24 That this Hon'ble Commission, in its various Orders, has allowed Capital Cost to similarly placed solar projects as under:

(a) Rs. 3.245 Crores/MW to M/s Avaada Green HN Project (50 MW) [Order dated 11.11.2020 in Petition No. HERC/PRO – 16 of 2021]; and

(b) Rs. 3.574 Crores/MW to M/s LR Energy (20 MW); [Order dated 17.09.2021 in Petition No. HERC/PRO – 70 of 2020]

Re: <u>ANNUAL DEGRADATION IN CUF AT 0.5%</u>:

9.25 That the Order dated 18.01.2021, had considered a degradation of 0.5% in the CUF despite the fact that the capital cost includes the monetised value attributed to degradation of solar panels. In this regard, the reference may be made to the Orders passed by this Hon'ble Commission and Uttarakhand Commission which had included the cost of degradation in the capital cost and had not provided for a separate degradation in the CUF:

(a) Order dated 20.12.2019 passed by this Hon'ble Commission for KUSUM scheme tariff.

(b) Order dated 07.06.2019 passed by Uttarakhand Electricity Regulatory Commission in the matter of review of benchmark cost for solar power plants for FY 2019-20 and onwards.

9.26 That the capital cost approved under KUSUM Scheme in Order dated 20.12.2019 and the benchmark cost approved by other State Regulatory Commissions included in addition to the cost of land, evacuation system, "*monetised value attributed to degradation of solar panels*". Without such degradation, the capital cost would have been much lower. The Net present value cost associated with degradation of solar panel has been specifically worked out as Rs. 8.84 lakhs/MW by the Uttarakhand Electricity Regulatory Commission in its Order dated 07.06.2019. If the cost of degradation is not included in the Capital Cost of Amplus, the benchmark Capital Costs to be considered should be lower. Thus, Capital Cost for the Project would have to be reduced to exclude the degradation cost.

9.27 That, in any event, the HERC RE Regulations, 2017 do not contemplate for or provide for any degradation in the CUF. Without prejudice to the same, no justification/documentary evidence such as the guarantees has been provided by the PV Module Suppliers in the application of 0.5%. Further, Amplus has not provided any documentary evidence such as bills, date of import, etc. with regard to the cost of modules.

9.28 That the PPA provides that the no additional cost shall be provided to the Solar Power Developer on this account. In this regard, Article 4.7 of the PPA reads as under:

*"The Solar Power Developer shall be free to undertake expansion / repowering of the Project including to take care of **module degradation** or any other losses in the Solar Power Project, provided that the rights and obligations of the Parties under this Agreement shall remain unaffected. **However, it is clarified that no additional cost shall be allowed to SPD on this account.**"*

Re: PROJECT MANAGEMENT EXPENSES

9.29 That this Hon'ble Commission has rightly disallowed the amount of Rs. 23.75 Crores allegedly incurred by the Amplus towards Project Management expenses as the same has been paid by the Amplus to its group companies/ related parties i.e., M/s. Amplus KN one Power Pvt. Ltd. and M/s. Amplus Management Services Pvt. Ltd. No additional Project management compensation can be claimed de-hors the admissible tariff without any valid justification, especially when it admittedly already owns and manages a portfolio of 800+ MWp of operational and under construction solar assets across 24 States of India with projects spread over more than 400 locations. It is further submitted that Amplus should have exercised due diligence to avoid such expenses.

10. **HPPC's affidavit dated 13.03.2025, on the petitioner's additional affidavit dated 07.02.2025.**

HPPC has filed its reply on affidavit dated 13.03.2025, in respect of the additional information submitted by the petitioner under its affidavit dated 07.02.2025. HPPC has submitted as under:-

10.1 That as already submitted in the submissions dated 11.01.2025, it is reiterated that the module and related cost of Rs. 131.99 crores for 75 MW (DC) viz. Rs. 1.76 crore/MW as sought for by Amplus is substantially higher than the market price at the relevant time.

10.2 That several states like Karnataka Electricity and Central Electricity Regulatory Commission have considered the cost module lower than that of Amplus.

10.3 That, during the proceedings of Petition No. 59 of 2020, Amplus had claimed total capital cost of Rs. 275.40 crores. Out of Rs. 275.40 crores, except for financing cost and IDC, Rs. 260 crores approx. was claimed towards capital works, Civil Work, erection and Commissioning, Evacuation Infrastructure and Project Management Expenses.

10.4 That out of the said cost of Rs. 260 crores, an amount of Rs. 38.91 crores was claimed and considered by this Hon'ble Commission which was yet to be incurred by Amplus as on the date of filing of the Petition No. 59 of 2020. The above amount was not expended by Amplus and was an estimate to be incurred for the purposes of commissioning of the Plant. In addition thereto, an amount of Rs. 10.46 crores was also considered by this Hon'ble Commission towards Financing, IDC and Pre-operative Expenses claimed by Amplus as a part of 275 Crore. The estimates of cost alleged by Amplus to be incurred for the instant Project after the filing of Petition No. 59 of 2020 before commissioning is summarized as under:

Sr. No.	Particulars	Cost alleged to be incurred in future (in crores)	Cost per MW (INR) (in crores)
1.	Module, Plant and Equipment Cost including Land cost capitalized during construction phase as per lease agreement	27.94	0.3725
2.	Civil Work, erection and Commissioning	8.08	0.107
3.	Evacuation Infrastructure	2.89	0.038
4.	Financing, IDC and Pre-operative Expenses	10.46	0.139
TOTAL		**49.37**	**0.654**

10.5 That M/s. Amplus had stated that the project was ready for commissioning and only final quality and commissioning tests were pending at the time of filing of Petition No. 59 of 2020. Considering the status of the project, it was unconceivable that a substantial Plant and machinery and Civil cost of Rs. 38.91 Crore was estimated to be incurred. There was no justification provided for the same and was only a strategy to build cushions for increasing the tariff.

10.6 In view of the above, the cost of Rs. 38.91 crores which was allegedly proposed to be incurred for 'plant and machinery-others, civil erection and evacuation infrastructure proposed costs' ought to be disallowed at the threshold as Amplus has provided no justification for the same. Further, the proposed Financing and Pre-operative Expenses ought to be disallowed on the same basis of IDC being rejected in the Order dated 18.01.2021 passed by this Hon'ble Commission.

10.7 That in the affidavit dated 07.02.2025, Amplus has now claimed an amount of Rs. 241 crores as against the earlier claimed amount of Rs. 260 crores towards capital cost. It is respectfully submitted that the amount of Rs. 49.37 crores be deducted from Rs. 241 crores as claimed by Amplus at the threshold.

10.8 That Amplus' claim of Rs. 49.37 crores comprising of Module, Plant and Equipment Cost could not have been maintainable even otherwise. A perusal of the agreement between Sterling & Wilson limited and Mundra Solar Limited for supply of 37.5 MW (DC) solar panels shows that the delivery of entire 37.5 MW (DC) had to be completed latest by 10.02.2020 [Pages 915 to 934 @ Page 924]. Similarly solar modules have been supplied by Trina Solar Limited [Pages 935 – 1002 @ Page 975] had to be completed latest by 07.02.2020. Therefore, the prudency of the capital cost should be confined only to Rs. 191.63 crores.

10.9 That the amount of Rs. 23 crores claimed against Project Management Expenses ought to be outrightly disallowed from the above capital cost of Rs. 191.63 crores. It is submitted that this Hon'ble Commission had rightly disallowed the amount of Rs. 23.75 Crores allegedly incurred by Amplus towards Project Management expenses as the same has been paid by Amplus to its group companies/ related parties i.e., M/s. Amplus KN one Power Pvt. Ltd. and M/s. Amplus Management Services Pvt. Ltd. No additional Project management compensation can be claimed de-hors the admissible tariff without any valid justification, especially when it admittedly already owns and manages a portfolio of 800+ MWp of operational and under construction solar assets across 24 States of India with projects spread over more than 400 locations. Amplus should have exercised due diligence to avoid such expenses.

10.10 That a perusal of the Consultancy Agreement [Pages 2173-2177] entered into between Amplus and M/s. Amplus KN one Power Pvt. Ltd. further fortifies that the Agreement between the two group companies did not in any event relate to the PPA entered into between Amplus and HPPC. In this regard, Clause B of the Consultancy Agreement, *inter-alia*, reads as under [[Pages 2173-2182 @ Pages 2173 and 2178]:

> *"B. In order to meet its electrical energy requirement at the Project Site, Project Khanak ("Owner") has entered into a Power Purchase Agreement (the "PPA") with the Developer. Under the PPA, Developer shall install rooftop solar power plant ("Solar Power Generating System ") at the Project Site and generate and supply electrical energy therefrom to the Owner in accordance with the terms of the PPA."*

10.11 That additionally, the agreement is allegedly for the purposes of providing consultancy in regard to business development, quality, legal, facilities and administrative, Human Resource, Capital and Risk Management and IT Support. In this regard, Clause C of the Consultancy Agreement, *inter-alia*, reads as under [Pages 2173-2182 @ Pages 2173-2174 and 2178-2179]:

> *"C. The Developer intends to appoint and is hereby accordingly appointing the Consultant for management of the Solar Power Generating System and to perform such other related and ancillary services till the commissioning of the Solar Power Generating System, including but not limited to:*

- *Business Development;*
- *Quality;*
- *F&A;*

- *Human Resource*
- *Legal*
- *Capital and Risk Management*
- *IT Support*

("Services"), in accordance with the terms and conditions agreed below."

However, a perusal of Page 453 shows that legal services have been directly taken by Amplus and in fact Amplus is claiming tariff in regard to the same also. Further a perusal of Page 447 shows that quality tests have been directly outsourced by Amplus and in fact Amplus is claiming tariff in regard to this as well.

10.12 That in regard to the details provided by Amplus for the contracts awarded for Solar panel, power transformer, power evacuation, etc., it is submitted that Amplus has admitted that a limited tender was floated by Amplus instead of an open tender. It is submitted that Amplus has provided no justification as to why such procedure for limited tender was followed instead of open tender. It is submitted that, better offers could have been received by Amplus if Amplus had gone for an open tender instead of closed tender.

10.13 That Amplus has given no justification as to why two separate tenders for 37.5 MW (DC) were awarded to Mundra Solar and Trina Solar when there was an overall cost difference of Rs. 2,43,10,209 in the purchase of solar modules from Mundra Solar as compared to Trina Solar. In the absence of any details, the amount of Rs. 2,43,10,209 is on account of financial imprudence and ought to be disallowed by this Hon'ble Commission.

10.14 That Amplus has vaguely stated that it has incurred an amount of Rs. 2.67 crores due to depreciation of Indian Rupees on account of COVID-19 pandemic at the time of import of solar modules. It is submitted that in the absence of any details or justification in regard to the above, the amount of Rs. 2.67 crores ought to be disallowed by this Hon'ble Commission.

10.15 That Amplus has given vague justifications and has simply placed Purchase Orders without corelating them to the cost incurred qua the Project. Amplus has not even filed an auditor certificate, certifying the amount allegedly claimed by Amplus qua the Project.

10.16 That Amplus has claimed an amount of Rs. 0.48 crores to payment to National Securities Depository Limited for registration of shares for increasing authorised share capital [Pages 773-784] and certain amounts have been claimed for payments made to Ministry of Corporate Affairs [Pages 764-765 and 770-771]. It is inconceivable as to how such an amount can be a part of capital cost. Further a perusal of Page 782 and 532 shows that amounts have also been claimed for other related companies of Amplus.

10.17 That Amplus has further claimed certain amounts towards payment of court fees in relation to unrelated Court cases. In this regard reference may be made to Pages 607-611 of the Affidavit dated 07.02.2025 filed by Amplus.

10.18 That Amplus has claimed an amount of Rs. 0.38 crores towards legal charges incurred for legal advice pertaining to EPC contracts with various parties ought to be disallowed by this Hon'ble Commission as the same cannot be a part of capital cost. In this regard reference may be made to Pages 453 – 462, 539 – 548, 552 – 562, 607-611.

10.19 That the cost alleged by Amplus to have been incurred for the instant Project towards plant and machinery till the date of filing of Petition No. 59 of 2020 is summarized as under:-

SN	Particulars	Cost alleged to have been incurred till now (in crores)	Cost per MW_{DC} (INR) (in crores)
1.	Module, Plant and Equipment Cost including Land cost capitalized during construction phase as per lease agreement	170.36	2.271
2.	Civil Work, erection and Commissioning	14.68	0.195
3.	Evacuation Infrastructure	12.40	0.165
4.	Land cost capitalized during construction	2.38	0.032
	TOTAL	**199.82**	**2.661**

11. **HPPC's written submissions dated 16.06.2025.**

11.1 That the matter has been remanded to this Hon'ble Commission with respect to the limited issues raised by Amplus and HPPC as under:

(a) The impact of additional DC module installed over and above the AC capacity on capital cost and CUF;

(b) Higher capital cost allowed to Amplus;

(c) 0.5% annual degradation of CUF; and

(d) Project Management Expenses.

11.2 That the Hon'ble Tribunal has made it clear that the issues raised by Amplus with regard to Interest on term loan and working capital, Interest During Construction and O&M expenses shall not be open for reconsideration as admitted by learned counsel of Amplus before the Hon'ble Tribunal

Re: <u>CAPITAL COST AND CUF FOR THE 25 MW ADDITIONAL DC CAPACITY OVER AND ABOVE THE 50 MW AC CAPACITY</u>:

CAPITAL COST CORRESPONDING TO ADDITIONAL DC CAPACITY TILL 19.215% CUF CANNOT BE CONSIDERED

11.3 That the Hon'ble Tribunal, *vide* judgment dated 25.10.2024 has held that this Hon'ble Commission ought to have considered the capital cost for the additional DC Capacity installed by Amplus which is linked to the CUF of 25.91% as proposed and accepted by this Hon'ble Commission.

11.4 That pursuant thereto, Amplus has claimed incremental capital cost of Rs. 49.46 Crores for the 25 MW additional DC capacity (module cost of Rs. 44 Crores and cost of civil works of Rs. 5.46 Crores). The claim of Amplus is that if the AC:DC ratio is considered 1:1 for their project, the CUF would be only 17.3% AC as against the CUF of 25.91% if AC:DC ratio of 1:1.50 is considered.

11.5 That in regard to the above, Amplus has relied on the PYSYST simulations to contend that CUF of 17.3% AC would be achievable if 1:1 ratio is considered for AC:DC. At the outset, it is submitted that PVSYST stimulations cannot be accepted as the sole basis for achievable CUF as PVSYST stimulations provides only indicative statistical estimates under different probabilities. The simulation results thus achieved are dependent upon various presumptions taken at the choice of the entity preparing such report. The radiation data is available from difference sources and varies from source to source. The input solar radiation is a variable factor which impacts the result of the simulation. Therefore, the Net Electrical Energy Generation obtained from PVSYST simulations may not be an effective indicator of the CUF.

11.6 That the CUF of 17.30% is also lower than the CUF of other similarly situated solar power plants, i.e., Greenyana Solar Private Limited which even with a ratio of 1:1 is in a position to achieve a CUF of 19.215%. If the minimum CUF of 19.215% at the AC:DC ratio of 1:1 is applied to the case of Amplus, then Amplus would only need to install 17.48 MW extra DC capacity as against 25 MW sought for by Amplus. It is the submission of HPPC that the said 19.215% as CUF with AC:DC ratio of 1:1 in Greenyana's case is also on the lower side and is not being admitted by HPPC.

11.7 That the above would also be consistent with the minimum benchmark specified by this Hon'ble Commission in Regulation 48 of the HERC RE Regulations, 2017, which reads as under:

"48. Capacity Utilisation Factor. – The Capacity utilisation factor for Solar PV project shall be 19%. Provided that the Commission may deviate from above norm in case of project specific tariff determination"

11.8 That the CUF of 25.91% AC CUF as proposed by Amplus with a ratio of 1:1.50 AC:DC is also contradictory and lower to the CUF of 27.17% as worked out in terms of the Power Purchase Agreement dated 23.07.2020 entered with Sandhar Technologies Limited for sale of 9.40 MWp (DC Capacity) generated from the same power project of Amplus.

11.9 That the abovementioned agreement was entered into before the source approval Order dated 14.09.2020 was passed by this Hon'ble Commission in relation to supply of power to HPPC.

In the said Agreement, Amplus itself had provided for a Generation Schedule for the Project under Annexure-1 of the said Agreement. Amplus had considered annual generation of 14573100 units at sub-station of Haryana State Transmission Utility against the contracted capacity of 9.42 MW (DC). After grossing up the above generation with transmission losses @ 2.5% to work out the generation available at the interconnection point/pooling substation, the same works out to 14947427 units. Considering the estimated generation at interconnection point/pooling substation of Amplus, the CUF works out to 27.17% AC and 18.11% DC, as also recorded by this Hon'ble Commission.

11.10 That the Order dated 18.01.2021 passed by this Hon'ble Commission does not record any finding on this issue even though the same was raised as a specific issue by HPPC. Moreover, Amplus had not even provided any explanation or rationale for the difference in CUF computed based on the Agreement dated 23.07.2020 with Sandhar and the CUF claimed in the present case.

11.11 That this Hon'ble Commission may take due cognizance of the fact that Amplus is not even achieving the declared CUF as per the PVSYST Report which may be indicative of the fact that the equipment installed by Amplus are sub-standard or Amplus is not employing prudent practices in operating the Solar Project.

Re. <u>CAPITAL COST</u>:

11.12 That in addition and without prejudice to the above, this Hon'ble Commission while passing the Order dated 18.01.2021, had allowed a total capital cost of Rs. 191.25 crores corresponding to 50 MW capacity which amounts to Rs. 3.825 Crores per MW.

11.13 That this Hon'ble Commission while passing the Order had explicitly stated that the capital cost allowed to Amplus is comparatively higher but since the benefit of higher CUF of 25.91% was being made available to the consumers at large without considering the capital cost for the additional 25MW DC capacity, the Hon'ble Commission had not made any reductions in the capital cost proposed by Amplus. This Hon'ble Commission held as under:

> *"5…..*
> *a) Capital cost:*
> *…..*
> *Resultantly, the Commission approves total cost of 50 MW power plant at Rs. 191.25 Crore (Rs. 275.40 Crore claimed by the Petitioner minus Rs. 44 Crore toward cost of modules of 25 MW, minus Rs. 6.81 Crore towards cost of civil work of 25 MW, minus Rs. 23.75 Crore as Project Management expense, minus Rs. 9.59 Crore as interest during construction period), for the purpose of tariff determination, which works out to Rs. 38.25 Million/MW.* ***The capital cost of Rs. 38.25 Million/MW is still comparatively higher, however, given the benefit of higher CUF of 25.91% (AC) proposed by the Petitioner, the Commission considers the same as reasonable****."*

[Emphasis Supplied]

11.14 That this Hon’ble Commission had allowed the entire capital cost of Rs. 3.825 Crores/MW (barring the cost of civil work of 25 MW, Project Management expense and interest during construction period) on the basis that HPPC is benefiting from a higher CUF of 25.91%. However, since the Hon’ble Tribunal had held that the capital cost incurred for additional DC capacity is to be considered, it is incumbent upon this Hon’ble Commission to conduct a thorough prudence check of the capital cost claimed by Amplus.

11.15 That, during the proceedings of Petition No. 59 of 2020, Amplus had claimed a total capital cost of Rs. 275.40 crores. Out of Rs. 275.40 crores, except for financing cost and IDC, Rs. 260 crores approx., was claimed towards capital works, Civil Work, erection and Commissioning, Evacuation Infrastructure and Project Management Expenses. Further, out of the said cost of Rs. 260 crores, an amount of Rs. 38.91 crores was claimed and considered by this Hon’ble Commission which was yet to be incurred by Amplus as on the date of filing of Petition No. 59 of 2020. The above amount was not expended by Amplus and was an estimate to be incurred for the purposes of commissioning of the Plant. In addition, thereto, an amount of Rs. 10.46 crores was also considered by this Hon’ble Commission towards Financing, IDC and Pre-operative Expenses claimed by Amplus as a part of 275 Crores. The estimates of cost alleged by Amplus to be incurred for the instant Project after the filing of Petition No. 59 of 2020 before commissioning, as provided in Affidavit dated 22.12.2020 filed by Amplus before this Hon’ble Commission, is summarized as under:

Sr. No.	Particulars	Cost alleged to be incurred in future (in crores)	Cost per MW (INR) (in crores)
1.	Module, Plant and Equipment Cost including Land cost capitalized during construction phase as per lease agreement	27.94	0.3725
2.	Civil Work, erection and Commissioning	8.08	0.107
3.	Evacuation Infrastructure	2.89	0.038
4.	Financing, IDC and Pre-operative Expenses	10.46	0.139
TOTAL		**49.37**	**0.654**

11.16 That Amplus had stated that the project was ready for commissioning and only final quality and commissioning tests were pending at the time of filing of Petition No. 59 of 2020. Considering the status of the project, it was unconceivable that a substantial Plant and machinery and Civil cost of Rs. 38.91 Crore was estimated to be incurred. There was no justification provided for the same and was only a strategy to build cushions for increasing the tariff.

11.17 That in view of the above, the cost of Rs. 38.91 crores which was allegedly proposed to be incurred for ‘plant and machinery-others, civil erection and evacuation infrastructure proposed costs’ ought to be disallowed at the threshold as Amplus has provided no justification for the same. Further, the proposed Financing and Pre-operative Expenses ought to be disallowed on the same basis of IDC being rejected in the Order dated 18.01.2021 passed by this Hon’ble Commission.

11.18 That in the affidavit dated 07.02.2025, Amplus has now claimed an amount of Rs. 241 crores as against the earlier claimed amount of Rs. 260 crores towards capital cost. It is respectfully submitted that the amount of Rs. 49.37 crores be deducted from Rs. 241 crores as claimed by Amplus at the threshold.

11.19 That Amplus' claim of Rs. 49.37 crores comprising of Module, Plant and Equipment Cost could not have been maintainable even otherwise. A perusal of the agreement between Sterling & Wilson limited and Mundra Solar Limited for supply of 37.5 MW (DC) solar panels shows that the delivery of entire 37.5 MW (DC) had to be completed latest by 10.02.2020 [Amplus Additional Affidavit dated 07.02.2025]. Similarly solar modules have been supplied by Trina Solar Limited [Amplus Additional Affidavit dated 07.02.2025] had to be completed latest by 07.02.2020.

11.20 That no invoice after the period from 22.12.2020 till 12.01.2021 (COD) has been provided by Amplus in relation to the alleged cost of Rs. 38.91 Crores.

11.21 That in view of the above, the above costs should be disallowed at the threshold as the claim in regard to the same is legally and factually untenable.

CA CERTIFICATE

11.22 That in the Affidavit dated 15.05.2025, Amplus has provided a CA Certificate giving statement of costs till 12.01.2021 which is contrary to the earlier CA Certificate and the statement of capital costs itself submitted by Amplus for example, the interest during construction as provided in the present Affidavit has been inflated to Rs. 16.8 Crores as against the claim of Amplus of Rs. 9.59 Crores in the Affidavit dated 22.12.2020 as reiterated in the Submissions dated 07.02.2025. In view of the above, the CA Certificate provided by Amplus cannot be relied upon as a proof of Capital Cost incurred.

Note: The example of IDC is only provided to highlight the discrepancies in the statement of costs and should not be understood as admission of liability towards IDC. It is reiterated that IDC has been rightly rejected in the Order dated 18.01.2021 passed by this Hon'ble Commission and cannot, in any event, be reopened in the present proceedings pursuant to the judgment dated 25.10.2024 passed by the Hon'ble Tribunal.

11.23 That in view of the above, the prudency of the capital cost should be confined only to Rs. 191.63 crores.

PROJECT MANAGEMENT EXPENSES

11.24 That the amount of Rs. 23 crores claimed against Project Management Expenses ought to be outrightly disallowed from the above capital cost of Rs. 191.63 crores. Hon'ble Commission had rightly disallowed the amount of Rs. 23.75 Crores allegedly incurred by Amplus towards Project Management expenses as the same has been paid by Amplus to its group companies/ related parties i.e., M/s. Amplus KN one Power

Pvt. Ltd. and M/s. Amplus Management Services Pvt. Ltd. No additional Project management compensation can be claimed *de-hors* the admissible tariff without any valid justification, especially when it admittedly already owns and manages a portfolio of 800+ MWp of operational and under construction solar assets across 24 States of India with projects spread over more than 400 locations. It is further submitted that Amplus should have exercised due diligence to avoid such expenses.

11.25 That a perusal of the Consultancy Agreement entered into between Amplus and M/s. Amplus KN one Power Pvt. Ltd., further fortifies that the Agreement between the two group companies did not in any event relate to the PPA entered into between Amplus and HPPC. In this regard, Clause B of the Consultancy Agreement, *inter-alia*, reads as under:

"B. In order to meet its electrical energy requirement at the Project Site, Project Khanak ("Owner") has entered into a Power Purchase Agreement (the "PPA") with the Developer. Under the PPA, Developer shall install rooftop solar power plant ("Solar Power Generating System ") at the Project Site and generate and supply electrical energy therefrom to the Owner in accordance with the terms of the PPA."

11.26 That in addition to the above, the agreement is allegedly for the purposes of providing consultancy in regard to business development, quality, legal, facilities and administrative, Human Resource, Capital and Risk Management and IT Support. In this regard, Clause C of the Consultancy Agreement, *inter-alia*, reads as under:

"C. The Developer intends to appoint and is hereby accordingly appointing the Consultant for management of the Solar Power Generating System and to perform such other related and ancillary services till the commissioning of the Solar Power Generating System, including but not limited to:

- *Business Development;*
- *Quality;*
- *F&A;*
- *Human Resource*
- *Legal*
- *Capital and Risk Management*
- *IT Support*

("Services"), in accordance with the terms and conditions agreed below."

However, a perusal of the Additional Affidavit dated 07.02.2025 shows that legal services have been directly taken by Amplus and forms part of the capital cost. Further a perusal of the Additional Affidavit dated 07.02.2025 shows that quality tests have been directly outsourced by Amplus and in fact Amplus is claiming tariff in regard to this as well. Reference in this regard may be made to the following table:

S. No.	Services Rendered/Billing Head	Company Name	Page No.

1.	Business Management Consultancy Fees	Billed directly to Amplus Sun Solutions Private Limited	2183
2.	Business Management Consultancy Fees	Billed directly to Amplus Sun Solutions Private Limited	2184
3.	Business Support Service Income	Billed directly to Amplus Sun Solutions Private Limited	2185
4.	Business Management Consultancy Fees	Billed directly to Amplus Sun Solutions Private Limited	2186
5.	Business Management Consultancy Fees	Billed directly to Amplus Sun Solutions Private Limited	2187

11.27 That a perusal of the aforesaid would clearly show that Amplus has included a significant component of Rs. 23 Crores under project management expenses in the capital cost of the solar project. It has been submitted that these expenses arise out of a consultancy arrangement with its group entity, M/s. Amplus KN one Power Pvt. Ltd. However, the actual execution of project-related services, namely, legal, technical, financial, and administrative has been outsourced entirely to another entity, Amplus Sun Solutions.

11.28 That when the Petitioner- Amplus Sun itself has directly engaged with the services falling within the purview of Consultancy Agreement, there was no need of the Consultancy Agreement. The above only results in artificial inflation of capital cost.

11.29 That there is no demonstrable evidence that M/s. Amplus KN One Power Pvt. Ltd. has actually executed any part of the project management scope for which it has been contracted. On the contrary:

(a) Every function has been handled by Amplus directly.

(b) No output, report, or deliverable has been placed on record to establish the role or involvement of M/s. Amplus KN One Power Pvt. Ltd. in the management of the project.

11.30 That the consultancy agreement with M/s. Amplus KN One Power Pvt. Ltd. appears to be a form-over-substance arrangement to allocate costs internally without actual project-level involvement. It is not enough to merely appoint a related party through a contract; it must be shown that:

- The party actually performed the contracted work;
- The services were not performed by someone else; and
- The cost was commensurate with the market value of such services.

OTHER ASPECTS RELATED TO PRUDENCY OF CAPITAL COST

11.31 That in regard to the details provided by Amplus for the contracts awarded for Solar panel, power transformer, power evacuation, etc., attention is invited to the fact that Amplus has itself admitted that a limited tender was floated by it instead of an open tender. Amplus has provided no justification as to why such procedure for limited tender was followed instead of open tender. It is submitted that, better offers could have been received by Amplus if Amplus had gone for an open tender instead of closed tender.

11.32 That Amplus has given no justification as to why two separate tenders for 37.5 MW (DC) were awarded to Mundra Solar and Trina Solar when there was an overall cost difference of Rs. 2,43,10,209 in the purchase of solar modules from Mundra Solar as compared to Trina Solar. In the absence of any details, the amount of Rs. 2,43,10,209 is on account of financial imprudence and ought to be disallowed by this Hon'ble Commission. This is specifically when the delivery timelines of both- Mundra Solar and Trina Solar were similar i.e., February 2020.

11.33 That in addition to the above, in the Affidavit dated 07.02.2025, Amplus has vaguely stated that it has incurred an amount of Rs. 2.67 crores due to depreciation of Indian Rupees on account of COVID-19 pandemic at the time of import of solar modules. Amplus has failed to provide any justifiable reason as to why the procurement of solar modules was preferred from two different vendors, i.e., domestic and Chinese vendors. The above splitting of quantum between two vendors has led to an additional cost of Rs. 2.67 Crores towards forex variation and cannot be passed on to the consumers in the State of Haryana.

11.34 That Amplus, in its Additional Affidavit dated 07.02.2025, has claimed an amount of Rs. 0.48 crores to payment to National Securities Depository Limited for registration of shares for increasing authorised share capital and certain amounts have been claimed for payments made to Ministry of Corporate Affairs. It is inconceivable as to how such an amount can be a part of capital cost. Further, a perusal of details attached shows that amounts have also been claimed for other related companies of Amplus. Furthermore, Amplus *vide* its Additional Affidavit dated 15.05.2025 has made a vague statement that the said amount pertains solely to its project. This is specifically when admittedly there was a common e-mail circulated seeking approval to pay statutory charges for the Petitioner and other related SPVs. The same cannot be allowed.

11.35 That Amplus has further claimed certain amounts towards payment of court fees in relation to unrelated Court cases. In this regard reference may be made to Pages 607 to 611 of the Affidavit dated 07.02.2025 filed by Amplus.

11.36 That Amplus has claimed an amount of Rs. 0.38 crores towards legal charges incurred for legal advice pertaining to EPC contracts with various parties ought to be disallowed by this Hon'ble Commission as the same cannot be a part of capital cost. In this regard reference may be made to Pages 453 – 462, 539 – 548, 552 – 562, 607-611 of the Affidavit dated 07.02.2025 filed by Amplus.

Re. <u>DISCREPANCIES IN THE AUDITOR'S CERTIFICATE</u>:

11.37 That the petitioner has placed on record various Auditor's certificates as well as Affidavits claiming different Capital Costs and their break ups. A perusal of the same would make it clear that there exist various discrepancies in the Auditor's Certificates ad well as the Affidavits/Replies filed by Amplus before this Hon'ble Commission and the same may not be admissible. The submissions in this regard are as under:

(a) In the reply dated 17.12.0220 [Pages 514-536, Submissions of Amplus dt. 2024], Amplus had initially sought for a capital cost of Rs. 286 Crores wherein Amplus while attaching the Auditor's Certificate as an Annexure has stated that *"The Petitioner has incurred a total cost of INR 286 Crores towards construction of 50 (AC)/75 (DC) MWp Solar Power Plant in Mirzapur, Uttar Pradesh.".* [Page 517, Submissions of Amplus dt. 2024]. The Interest during construction sought initially was 4.3 Crores. Further, The Auditor's certificate by Sonika Bansal was issued on 16.12.2020 (Page 535, Submissions of Amplus dt. 2024].;

(b) Thereafter, Amplus, 5 days later, by way of another the Additional Affidavit dated 22.12.2020 revised its Capital Cost claim to Rs. 275.40 Crores. Out of the above, Rs. 225.40 Crores were now alleged to have been incurred however; the remaining 49.43 Crores were yet to be incurred [*ref.* Page 561, Amplus Submissions dt. 2024]. In fact, as on 22.12.2020 the bills for an amount of Rs. 27.85 Crores out of the total amount of Rs. 65.26 Crores (alleged to have been incurred for Inverters, other plant and Machinery excluding the modules) were not even raised [*ref.* Para 4(c), Page 5 Amplus Submissions dt. 2024]. Further an additional Rs. 15.03 Crores were yet to be raised by Sterling and Wilson [*ref.* Para 4(d), Page 5 Amplus Submissions dt. 2024]. However, if above was the case the amount of Rs. 27.94 Crores (cost yet to be incurred) as provided under Item No. 2(c) for Plant and Machinery-Others do not match. In this regard it is reiterated that Amplus has failed to provide any bill that have been raised pursuant to the 22.12.2020, hence Amplus' submission in regard to the above figures cannot be relied upon, specifically when the above amounts are yet to be incurred three weeks prior the be Commercial Operation Date i.e., 12.01.2021. It is relevant to note that the Interest during construction was now 9.59 Crores (which included 2.93 Crores yet to be incurred).

(c) Pursuant to the Remand by the Hon'ble Tribunal, Amplus *vide* Additional Affidavit dated 07.02.2025 reduced its claim of Capital cost to Rs. 241 Crores [*ref.* Page 4, Additional Affidavit dt. 07.02.2025].

(d) Further, Amplus in the Affidavit dated 15.05.2025, has provided a CA Certificate giving statement of costs till 12.01.2021 [*ref.* Page 363, Add. Affidavit dt. 15.05.2025] which is contrary to the earlier CA Certificate attached in the Original Proceedings before this Hon'ble Commission by Amplus itself in its Reply dated 17.12.2020 as well as the Affidavit dated 20.12.2020. The capital cost now sought by Amplus is Rs. 244 Crores (Rs. 261 Crores -17 Crores i.e., minus Financing Cost and IDC). Further, the interest during construction as provided in the present

Affidavit has been inflated to Rs. 16.8 Crores as against the claim of Amplus of Rs. 9.59 Crores in the Affidavit dated 22.12.2020 as reiterated in the Additional Affidavit dated 07.02.2025.

EXCESSIVE CAPITAL COST CLAIMED BY AMPLUS IS ALSO NOT CONSISTENT WITH THE MARKET TRENDS

11.38 That the capital cost claimed by Amplus is exorbitant and not rationale as compared to the market trend of the prices of the Solar Power Plant. Amplus has not provided the relevant documents in support of its claim and the same was also observed by this Hon'ble Commission in the Order dated 18.01.2021 as under:

Further, the Petitioner could not substantiate that the capital cost of Rs. 2754 Millions claimed by it in its Petition, with respect to 50 MW AC capacity, is the ideal/minimum cost which was essentially required to be incurred backed by quotes from more than three vendors etc. In absence of the same and given the huge capital cost of Rs. 55.08 millions/MW claimed by the Petitioner as against the benchmark capital cost of Rs. 35.62 Millions/MW determined by Hon'ble UKERC and Rs. 34 Million/MW determined by this Commission in its Order dated 20.12.2019 for small projects, the Commission is not convinced regarding its prudence i.e. incurrence of capital cost after taking all economic safeguards and negotiations.

It needs to be noted that while claiming/ determining project specific tariff, the Petitioner as well as this Commission ought not to escape the rigor of prudence check including the market trend in India. The ridiculously low cost offered by the Chinese firm in the global market also needs to be discounted given the inherent disadvantages in India, across the solar value chain.

11.39 That in view of the above and in the absence of details from Amplus, HPPC is placing before this Hon'ble Commission the comparable solar prices prevalent at the relevant time approved by the Hon'ble Commissions including this Hon'ble Commission:

(a) Order dated 20.12.2019, passed by this Hon'ble Commission in PRO-57 of 2019 for PM – KUSUM scheme which was in fact for capacity of less than 2 MW. In the said scheme, the capital cost as considered and approved by this Hon'ble Commission was Rs. 3.40 crores per MW. The above cost is inclusive of land cost;

(b) Order dated 07.06.2019, passed by the Uttarakhand Electricity Regulatory Commission in Petition No. 18 of 2019 considering the cost of Rs. 3.56 crores per MW (out of which Rs. 50 lacs has been considered as the land cost). In the present case, the land cost is not included in the capital cost. Therefore, the corresponding consideration would be around Rs. 3 crores per MW. This is for projects up to 1 MW plants;

(c) Order dated 01.08.2019, passed by Karnataka Electricity Regulatory Commission had adopted capital cost of Rs. 3.17 crores per MW. This was for projects of capacity less than 5 MW. This capital cost is exclusive of land cost;

(d) Ministry of New and Renewable Energy (MNRE) vide Office Memorandum dated 21.07.2020, has also notified benchmarking cost for Grid connected Rooftop Solar Photo voltaic systems ranging from100 kW to 500 kW for the FY 2020-21 as Rs. 36 per Watt. The cost of solar plant considering this standard is Rs. 3.6 crores per MW and this is for rooftop projects. Considering the increase in capacity (in MW), it shall further decrease the cost of Project substantially. This is exclusive of the land cost/lease rentals. Further, these costs are applicable to less than 1 MW and up to projects of 500 kW capacity;

(e) Order dated 11.02.2020 passed by Rajasthan Electricity Regulatory Commission for KUSUM Scheme had considered the cost of setting up 1 MW solar plant including the cost of 3km connected 11 kv line as Rs. 3.65 Crores per MW and the cost of project without the cost of 11 kV line/breaker works out to be Rs. 3.40 crores per MW. This is including the land cost.

Further, the costs considered in most of the above Orders passed by the respective State Commissions are usually for projects of less than 2MW and are inclusive of land costs which has to be excluded, as, in the present case, the land lease expenses has been provided separately to Amplus. Therefore, there is no element of land cost in the capital cost. Considering the economies of scale and reduced cost of solar inverter and panels, the capital cost per MW should be much lower for Amplus. Compared to the same, the cost as sought by Amplus is exorbitant and exaggerated.

11.40 That Amplus has wrongly interpreted the various Orders passed by the Hon'ble State Commissions and the Ministry of New and Renewable Energy ('**MNRE**') with respect to the per/MW capital cost considered at the relevant time is as under:

(a) It is submitted that the Order dated 20.12.2019 passed by this Hon'ble Commission for PM Kusum Projects takes into account the prevailing market trends in terms of Regulation 47 of HERC RE Regulations. Amplus has failed to consider that the per MW benchmark cost for small scale solar PV based project as per HERC order dated 20.12.2019 corresponding to 20 % CUF includes the cost of land and evacuation facility whereas Amplus has considered both the aspects separately while computing the capital cost. Thus, the Capital Cost claimed by the Amplus is in no manner aligned to market trend and not worthy of consideration.

(b) The Order dated 07.06.2019 passed by Uttarakhand Commission is correct in law. It is submitted that it is the prerogative of the Solar Power Developer whether to install additional DC modules to increase the CUF. Installation of additional

DC capacity is an enabling provision which allows the Amplus to upgrade, install new machines/panels etc. to reach the optimum consistent level of performance. However, the cost of the same has to be borne by the Solar Power Developer at its own risk and cost [Ref. Article 4.7 of the PPA]. In view of the above, this Hon'ble Commission has rightly held the ratio of AC:DC capacity as 1:1.

(c) With regard to MNRE Notification dated 21.07.2020, the submissions made hereinabove are reiterated. It is submitted that the cost of land has to be in line with the prevailing market trends. The cost of land of the Amplus is extremely high and is not in consonance with the prevailing market trends and hence is liable to be rejected.

(d) It is submitted that the reference made by the HPPC to the capital cost of power projects for comparison to the Amplus are mostly of lower capacity. Therefore, it is reiterated that the capital cost allowed qua 50 MW AC capacity is higher and not in consonance with the prevailing market trend. This Hon'ble Commission has erroneously allowed the exorbitant capital cost of 3.8 crores per MW. The cost allowed ought to be much lower than what this Hon'ble Commission has allowed. There is no element of land cost in the capital cost.

Further, considering the economies of scale and reduced cost of solar inverter and panels, the capital cost per MW should be much lower for power plant of the Amplus and as per the economies of scale.

11.41 That considering that the capital cost of the Plant of Amplus is exclusive of cost of land, downward trend of the prices and applying economies of scale for the capacity of the Plant of Amplus, the capital cost ought to have been reduced by 15-20%. It is relevant to note that the tariff of Amplus is also exclusive of income tax.

11.42 That there has been a significant downward trend in the reduction in the cost of solar modules which is evident even when comparing the 2019 costs, however the Order dated 18.01.2021 does not account for the same, and needs reconsideration. Most of the Order for comparison were passed by the Regulatory Commissions in FY 2019-20 and there has been a downward trend during FY 2020-21 since June, 2019 and therefore, the costs of Amplus ought to be even lower.

11.43 That the above has also been noted by the Uttarakhand Electricity Regulatory Commission in its *suo-moto* Order dated 23.06.2020 wherein it had categorically observed that the cost of solar module has decreased to 0.185 USD/Wp as on 17.06.2020 against the average module cost of 0.241 USD/Wp prevailing on 07.06.2019:

"2.5 Some of the Solar PV plant developers requested the Commission for the tariff enhancement of 10% for their Solar Power projects considering that there is an increase in dollar exchange rate vis-à-vis INR and the availability of labour,

transportation and allied services has become scarce and thereby increasing the costing of the projects.

In the matter, the Commission observed that while approving the module cost for FY 2019-20, the Commission had considered the average exchange rate of Rs. 70.735/USD which has increased to Rs. 76.216/USD as on June 19, 2020 and cost of labour as well as transportation has also increased, however, it also cannot be denied that the cost of module cost has decreased to $ 0.185/module as on June 17, 2020 (Source http://pvinsights.com/) against average module cost of 0.241 USD/Wp as considered by the Commission in Suo-moto Order dated June 07, 2019 while determining the benchmark capital cost and levelized generic tariff for solar PV plants for FY 2019-20. Further, the Commission had considered the average SBI MCLR of 8.53% for the purpose of Interest on Loan and Interest on Working Capital in Suo-moto Order dated 07.06.2017 which has decreased substantially to 7.00% as on June 10, 2020 (Source:https://www.sbi.co.in/web/interest-rates/interest-rates/mclr-historical-data). Accordingly, there will be a saving to the Solar PV plant developers on account of decrease in module cost as well as interest rates which may compensate the increase in other costs. Moreover, the tariffs were determined through bidding process and any arbitrary enhancement of tariff would not be appropriate. Accordingly, request for 10% tariff hike on pro-rata basis for respective projects by the Solar PV developers is rejected."

11.44 That this Hon'ble Commission, in its various Orders, has allowed Capital Cost to similarly placed solar projects as under:

(a) Rs. 3.245 Crores/MW to M/s Avaada Green HN Project (50 MW) **[Order dated 11.11.2020 in Petition No. HERC/PRO – 16 of 2021]**; and

(b) Rs. 3.574 Crores/MW to M/s LR Energy (20 MW); **[Order dated 17.09.2021 in Petition No. HERC/PRO – 70 of 2020]**

(c) Rs. 3.4 Crores/MW to M/s Greenyana Solar Private Limited (10.72 MW) **[Order dated 29.01.2024 in Petition No. HERC/PRO 33 of 2023]**

Re: <u>ANNUAL DEGRADATION IN CUF AT 0.5%</u>:

11.45 That the Order dated 18.01.2021, had considered a degradation of 0.5% in the CUF despite the fact that the capital cost includes the monetised value attributed to degradation of solar panels. In this regard, the reference may be made to the Orders passed by this Hon'ble Commission and Uttarakhand Commission which had included the cost of degradation in the capital cost and had not provided for a separate degradation in the CUF:

(a) Order dated 20.12.2019 passed by this Hon'ble Commission for KUSUM scheme tariff.

(b) Order dated 07.06.2019 passed by Uttarakhand Electricity Regulatory Commission in the matter of review of benchmark cost for solar power plants for FY 2019-20 and onwards.

11.46 That the capital cost approved under KUSUM Scheme in Order dated 20.12.2019 and the benchmark cost approved by other State Regulatory Commissions included in addition to the cost of land, evacuation system, "*monetised value attributed to degradation of solar panels*". Without such degradation, the capital cost would have been much lower. The Net present value cost associated with degradation of solar panel has been specifically worked out as Rs. 8.84 lakhs/MW by the Uttarakhand Electricity Regulatory Commission in its Order dated 07.06.2019. If the cost of degradation is not included in the Capital Cost of Amplus, the benchmark Capital Costs to be considered should be lower. Thus, Capital Cost for the Project would have to be reduced to exclude the degradation cost.

11.47 That, in any event, the HERC RE Regulations, 2017 do not contemplate for or provide for any degradation in the CUF. Without prejudice to the same, no justification/documentary evidence such as the guarantees has been provided by the PV Module Suppliers in the application of 0.5%. Further, Amplus has not provided any documentary evidence such as bills, date of import, etc. with regard to the cost of modules.

11.48 That the PPA provides that the no additional cost shall be provided to the Solar Power Developer on this account. In this regard, Article 4.7 of the PPA reads as under:

*"The Solar Power Developer shall be free to undertake expansion / repowering of the Project including to take care of **module degradation** or any other losses in the Solar Power Project, provided that the rights and obligations of the Parties under this Agreement shall remain unaffected. **However, it is clarified that no additional cost shall be allowed to SPD on this account.**"*

[Emphasis Supplied]

Re. <u>MATCHING PRINCIPLE</u>:

11.49 That Amplus has sought to contend that in terms of the Judgment dated 19.11.2007 J. K. Industries Ltd. & Anr vs. Union of India & Ors., (2007) 13 SCC 673 (J. K. Industries judgment) and the principle of matching therein, the cost incurred to set up the project should be co-related (matched) to the power being supplied. They further contend that since procurers benefit from higher CUF, the cost incurred by the Generator should be compensated. The above case primarily concerns the validity of Accounting Standard 22 (AS 22), namely, "Accounting for Taxes on Income," specifically as it relates to deferred taxation. The question of law involved therein was whether AS 22 is inconsistent with and ultra vires the Companies Act, 1956, the Income-tax Act, 1961, and the Constitution of India. Within this judgment, the "matching principle" is discussed as a fundamental concept in accounting, particularly in the context of accrual accounting.

11.50 That the reliance placed by Amplus on the aforesaid judgment is misplaced and distinguishable on the following aspects:

(e) **Context of Application:** The J. K. Industries judgment discusses the matching principle primarily within the context of financial accounting and reporting for the purpose of determining periodic profit and presenting a "true and fair view" of a company's financial statements under the Companies Act and Accounting Standards like AS 22. Amplus herein is attempting to apply a "matching principle" to justify a commercial arrangement for cost recovery or compensation from a third party (procurer herein) based on the *benefit* received by that party (higher CUF). There is a fundamental difference in the domain of application – financial reporting v. commercial/contractual/tariff-based compensation.

(f) **Nature of components being Matched:** In the judgment, the matching principle is used to match expenses (like the tax effect of timing differences and depreciation effects) against revenues over the relevant accounting period(s) to determine periodic income. However, Amplus here is attempting to match a capital cost (project setup) against the output (power supplied) and the benefit derived by the customer (CUF) to justify a compensation mechanism. While both involve correlating items, the nature of the items (capital cost vs. periodic expense/tax effect) and the nature of the correlation (cost recovery/pricing vs. financial reporting of periodic profit) are distinct.

(g) **Statutory/Regulatory Framework:** The J. K. Industries judgment's discussion of the matching principle is rooted in the requirements of the Companies Act, 1956, and Accounting Standards notified thereunder, specifically regarding how companies must prepare and present their financial accounts. Whereas, Amplus' argument for compensation based on CUF is governed by the specific terms of the power purchase agreement, relevant electricity regulations, or tariff principles determined by regulatory authorities, not by the principles of financial accounting for corporate reporting as discussed in the J. K. Industries case.

Thus, Amplus' attempt to form a correlation to justify commercial compensation for capital costs based on customer benefit (CUF), falls outside the scope and context of the financial accounting principles discussed in the above judgment. The judgment does not establish a principle requiring compensation from third parties based on their utilization or benefit derived from a company's capital assets; it discusses the accounting treatment of costs and revenues within the company's own books for financial reporting.

Commission's Analysis and Order

12. The Commission heard the arguments of the parties at length as well as perused the written submissions placed on record by the parties. The Commission observes that the impugned order dated 18.01.2021 (Petition No. 59 of 2020) was remand back by Hon'ble Appellate Tribunal for Electricity (APTEL) for redetermination of tariff after prudence check of capital cost including related issues raised and considering the feasible CUF corresponding to the capital cost of AC: DC module allowed. The issues with regard to Interest on term loan and working capital, Interest During Construction and O& M expenses are not to be opened for reconsideration.

13. Thus, the remand back is limited to the issue of allowing the reasonable DC capacity corresponding to the AC PLF approved and capital cost corresponding to the allowed DC capacity. In order to examine the same, the Commission has framed the following issues for consideration and decision in the matter:-

Issue No. 1: What DC capacity should be feasible corresponding to the approved CUF?

Issue No. 2: Whether Annual Degradation in CUF is allowed?

Issue No. 3: What should be the revised capital cost after considering the approved DC capacity?

After hearing the learned counsels for the parties and going through the record of the appeal, the findings of the Commission on the issues framed above, are as under:-

13.1 **Issue No. 1: What DC capacity should be feasible corresponding to the approved CUF?**

The Petitioner in the original petition had claimed CUF at 25.91% AC based on PVSYST simulations report for the Project. The Commission, in its impugned order had approved CUF @ 25.91%, as proposed, on the ground that the extant HERC RE Regulations, 2017, specifies the minimum acceptable capacity utilization factor for solar PV power projects and that there is no bar on the claim of the Petitioner of higher CUF @ 25.91% AC, due to its efficient design. The petitioner had claimed that it has installed 75 MW DC module capacity for 50 MW AC capacity with AC:DC ratio as 1.5:1 and claimed capital cost for 75 MW DC modules.

Per-contra, HPPC has vehemently argued that CUF of 25.91% allowed in the impugned order is less as compared to CUF of 27.17% arrived at based on the generation data in Petitioner's PPA with a captive user M/s. Sandhar Technologies Ltd. Further, similarly placed generator in Bhiwani, Haryana - M/s. L.R. Energy is giving

CUF of 18.80% at AC:DC ratio of 1:1. Accordingly, at AC:DC ratio of 1.5:1, the CUF is arrived at 28.20%.

The solar power project of M/s. Amplus was commissioned on 12.01.2021. As on the date of commissioning, the HERC RE Regulations, 2017 were in force. The Regulation clause 48 of the ibid regulations, provides as under:-

"48. The Capacity utilisation factor for Solar PV project shall be 19%. Provided that the Commission may deviate from above norm in case of project specific tariff determination."

The ibid regulations were framed by this Commission, as guided by the relevant regulations framed by Hon'ble Central Commission, on the premise that the AC:DC ratio shall be 1:1.

Therefore, the minimum benchmark CUF should be considered as 19% with AC:DC ratio as 1:1 as per the HERC RE Regulations, 2017 in vogue and not 17.3% AC CUF as contended by M/s. Amplus.

However, the Commission has taken note of the decision of Hon'ble APTEL dated 23.04.2025 in Appeal No. 302 of 2024 in the matter of M/s. Greenyana Solar Pvt. Ltd. vs. Haryana Electricity Regulatory Commission & ors., wherein it has been observed as under:-

"14. We are, however, unable to appreciate and find merit in the submissions made by Respondent HPPC for the following reasons: firstly, in the present lis, we are concerned with the HERC Regulations 2021, however no reference has been made to its SOR, and reference is made to the SOR of the CERC RE Regulations 2020, which is not the reference regulation for the present lis; and secondly, or more significantly, we do not find any ambiguity in the provisions of the applicable HERC Regulations 2021, as it does not specify the AC:DC ratio while specifying that the minimum capacity utilization factor ("CUF") for Solar PV project should be 21% and in such a situation, in our view, prudence check is required to be undertaken by the State Commission for the required AC:DC ratio to achieve the specified CUF while undertaking project specific tariff determination. The State commission in the Impugned Order, citing RE Regulations, has determined project-specific tariff reckoning with AC capacity only and stated that installation of DC capacity is left to the discretion of project developer, and restricted the cost of DC module considering ratio of AC:DC as 1:1."

"16. It is trite that the ratio of AC:DC module, the associated capital cost and the resultant CUF are interlinked, as held in "Amplus Sun Solutions Pvt. Ltd. v. HERC &

Ors" in Appeal No.326 & 149 of 2021". In our view, in the absence of any stipulation with regard to an AC:DC ratio for achieving specified CUF in the HERC Regulations 2021, it is important for the State Commission to make prudence check of required AC:DC ratio for achieving the specific CUF while undertaking project specific Tariff determination in Appellant's Solar PV Project…………."

Accordingly, the Commission has not considered the benchmark CUF of 19%, as specified in the HERC RE Regulations, 2017 in vogue, with AC:DC ratio as 1:1, in absence of the specific provision regarding the same in the ibid regulations.

The Commission is of the considered view that AC:DC ratio of solar modules should be allowed proportionate to the resultant CUF.

Thus, in absence of the guiding regulation with regard to AC:DC ratio, and in order to make prudence check on the required AC:DC ratio for achieving the specific CUF, in line with the observations of Hon'ble APTEL, the Commission has considered it appropriate to examine the CUF as well as AC:DC proposed by the petitioners in all the three remand back matters under consideration before it viz. the present case (remand back order dated 25.10.2024), L.R's case (remand back order dated 21.02.2025) and Greenyana's case (remand back order dated 23.04.2025). The comparative table of AC:DC ratio and CUF claimed in all these three cases is given as under:-

Particulars	Amplus Sun Solutions	L.R. Energy	Greenaya Solar
DC (MW)	75	24	13.24
AC (MW)	50	20	10.72
CUF claimed and approved (%)	25.91	22.14	21
CUF with AC:DC as 1:1 (%)	17.27	18.45	17.00

The above table shows that M/s. L.R. Energy situated in District Bhiwani has claimed best CUF of 18.45% with AC:DC ratio as 1:1. Accordingly, the Commission has considered it appropriate to consider the same as the base, for the purpose of deciding the DC capacity required to achieve the claimed CUF of 25.91%. Thus, the AC:DC ratio corresponding to the claimed CUF of 25.91% with base CUF of 18.45% (AC:DC as 1:1) is coming at 1.40.

In view of the above discussion, the Commission decides that the DC capacity corresponding to the approved CUF of 25.91%, for 50 MW AC power plant of the petitioner, in the ratio of 1.40:1 is approved at 70 MW, as against the claimed DC capacity of 75 MW.

13.2 **Issue No. 2: Whether Annual Degradation in CUF is allowed?**

The Commission in its impugned order dated 18.01.2021 had allowed annual degradation of 0.50% in the CUF, which has been contested by HPPC arguing that the

Capital Cost is inclusive of the monetized value attributed to the degradation of solar panels and there is not provision in the PPA for the same.

Per-contra, the petitioner has submitted that Capital Cost has been claimed without any provision towards monetized value of degradation of CUF of the Project.

In order to examine the arguments raised by HPPC, the Commission has considered it appropriate to examine the extant Article 4.7 of the PPA, reproduced hereunder:-

"The Solar Power Developer shall be free to undertake expansion / repowering of the Project including to take care of module degradation or any other losses in the Solar Power Project, provided that the rights and obligations of the Parties under this Agreement shall remain unaffected. However, it is clarified that no additional cost shall be allowed to SPD on this account."

The examination of the ibid article of the PPA, it is apparent that the PPA does not provide for the eligibility of the project developer towards incremental cost on account of module degradation. In line with the same, the project developer has not claimed incremental module cost. However, over the project life cycle the degradation in module efficiency has become an established norm, which effects the annual CUF. The same can either be compensated in form of module upgradation or in the annually degraded CUF. Since, the degradation is not monetized in the capital cost of the petitioner and therefore does not result in any double-counting or excess burden. The intent and purpose of providing the same is to adjust energy yield projections over the life of the project.

In view of the above discussion, the Commission answers the issue so framed in affirmative i.e. the annual degradation in CUF @ 0.50% is allowed, by adjusting the CUF over the useful life of the project.

13.3 **Issue No. 3: What should be the revised capital cost after considering the approved DC capacity?**

The Commission in its impugned order dated 18.01.2021 had allowed fixed cost at Rs. 1912.50 millions, as against the claim of the petitioner for Rs. 2754 millions, mainly on account of 25 MW solar modules amounting to Rs. 440 millions, cost of civil works proportionate to 25 MW DC capacity amounting to Rs. 68.10 millions, project management expenses amounting to Rs. 237.50 millions and interest during construction amounting to Rs. 95.90 millions.

On remand back from Hon'ble APTEL, the Petitioner has restricted its claim over the capital cost to Rs. 244 Crores (which excludes capital cost of Rs. 17 Crores towards IDC), as tabulated hereunder:-

S. No.	**CAPEX Items**	**Amounts (Rs. Cr.)**		
		Estimated	Actual	Claimed
1.	Capital works including Plant and Machinery	198	185	185
2.	Civil works, erection and commissioning	23	19	19
3.	Evacuation Infrastructure up to interconnection point including GSS bay in the HVPNL substation	15	14	14
4.	Project Management Expenses	24	23	23
5.	Financing Cost	3	1	1
6.	Interest During Construction	10	17	Nil
7.	Land lease rentals capitalized during the construction phase as per lease agreement	2	2	2
	Total	**275**	**261**	**244**

The respondent Nigam (HPPC) has vehemently argued against the higher capital cost claimed by the petitioner on the ground of unexplained project management expenses of Rs. 23.00 crore given to its related party, discrepancies in the Auditor's certificate, unexplained capex of Rs. 38.91 crore between 22.10.2020 (the date of original petition, wherein it was submitted that the amount is yet to be spent) and 12.01.2021 (date of CoD).

Additionally, the petitioner is not entitled to the cost of transmission / evacuation infrastructure, as the express disallowance for the same is provided in Clauses 6.1.3 and 6.1.4 of the PPA executed between the parties. The relevant clauses are reproduced hereunder:-

"6.1.3 The entire cost of transmission including cost of construction of line, bay, metering and protection system etc. up to the Delivery Point shall be borne by the Solar Power Developer.

6.1.4 Construction and operation/maintenance of evacuation system including transmission line up to the point of connectivity at Nigam's/ Discom's substation shall be the responsibility of Solar Power Developer"

The similar disallowance was also made while determining the tariff in the case of M/s. Greenyana Solar Pvt. Ltd. (Order dated 29.01.2024 in petition no. 33 of 2023). The relevant part of the order dated 29.01.2024 is reproduced hereunder:-

"………

Notes2: The cost of transmission has not been considered in view of the concluded contract between the parties cited by the intervener i.e. the same has to be borne by the generator (Ref. 6.1.3 and 6.1.4 of the concluded PPA approved by the Commission vide order dated 1.02.2023.

………..”

(Page 51 of the order dated 29.01.2024)

The disallowance of cost of transmission / evacuation infrastructure, has not been challenged before any court of competent jurisdiction; therefore has attained finality. The respondent has further averred that the capital cost claimed is not consistent with the market trends.

The Commission is of the considered view that the project specific tariff determination under Section 62 of the Electricity Act, 2003, ought not to escape the rigor of prudence check. In doing so, this Commission as a regulatory body, is also mindful of its duties towards promoting of generation of electricity from renewable energy sources and protection of investment by electricity generators in the State. The tariff under Section 62 of the Electricity Act, 2003 is a cost-plus tariff i.e., the tariff is to necessarily compensate the generating company for the cost incurred towards generation. Although market trends could be of persuasive value in certain situations, but, in the present case, when the tariff determination is being done in terms of a duly notified tariff regulations with details of actual expenditure incurred available before this Commission for its perusal and prudence check, market trends all over the country may serve not more than a guiding factor to arrive at the correct tariff.

The Commission tends to agree with the arguments advanced by the petitioner that in project specific tariff determination under Section 62, the Commission can exercise its prudence check on the aspects of truthfulness and wrong claim made by the petitioner, if any. The petitioner cannot be penalized for economical purchase made by some other project developer. There might be endless probabilities of some other big market player buying items of capital cost at even cheaper rate. The Commission has considered the submissions of the petitioner that in case such an approach is adopted in tariff determination under Section 62, the petitioner will never be able to recover the actual cost incurred and ultimately will go in bankruptcy. In tariff determination under Section 62, a certainty is assured to the project developer regarding recovery of its actual cost. In case of selection of bidder under Section 63, the petitioner would have quoted its tariff based on its tentative capital cost and it would have been open for the procurer to accept the same. Whereas, under Section 62, denying actual cost incurred on the pretext of cost of procurement of some other project developer is unjustified; however, the actual cost incurred by the project developer should pass the test of reasonability and rigorous of financial prudence.

The determination of tariff under a Section 62 exercise cannot be linked to the tariff discovered and adopted under Section 63 which is lowest tariff offered by the bidders. While a Section 62 determination is done under the umbrella of notified regulations wherein Appropriate Commissions determine tariff, basis the parameters outlined in the relevant tariff regulations.

The Commission has further observed that states like Uttar Pradesh, Kerala, Bihar and Maharashtra have discovered price of solar power in the rate of Rs. 3/unit. The details of such tariffs are as under:-

Tender Particulars	Capacity Breakup	e-Reverse Auction Date	Tariff Discovered (Lowest Bidders)
Bihar 250 MW Solar Projects Tender	250 MW	23rd – August – 2021	Rs. 3.11/kWh – Rs. 3.20/kWh
Kerala 200 MW Solar Projects Tender	200 MW	12th – Nov – 2020	200 MW – Rs. 2.97/kWh
MSEDCL 500 MW STU Connected Solar Projects Tender [Tranche-V]	500 MW	18th – Mar – 2020	Rs. 2.90/kWh
Uttar Pradesh 500 MW Solar Projects Tender [Tranche-II]	500 MW	10th – Oct – 2018	Rs. 3.17/kWh – Rs. 3.23/kWh
Uttar Pradesh 550 MW Solar Projects Tender [Tranche-III]	550 MW	12th – Dec – 2018	Rs. 3.02/kWh – Rs. 3.08 /kWh

Further, HPPC itself in its bidding held in January, 2025, has discovered a tariff of Rs. 2.99/kWh, in respect of 5 MW solar power project, whereas the price of solar modules have shown a declining trend since 2020.

In view of the above, the Commission is not forming its opinion considering the market trends, but on the actual cost incurred by the petitioner in setting up of the solar power plant subject to the prudence check on the reasonability and fairness of the same.

Under the abovementioned broad principles of tariff determination along with adopting a cautious approach so that the generator is not allowed to unjustly enrich itself at the cost of the electricity consumers of the State, the Commission has proceeded to approve the capital cost in respect of 70 MW DC (50 MW AC) solar power plant of the petitioner.

The petitioner has claimed revised capital cost to Rs. 244 Crores corresponding to 75 MW DC capacity. However, since the DC capacity of 70 MW has been approved corresponding to 50 MW AC capacity, relevant for CUF of 25.91% with annual degradation of 0.50%, **the cost of module & related cost, PV Plant Supply and Civil Works cost, amounting to Rs. 132 crore, Rs. 49.60 crore and Rs.15.52 crore, respectively, for 75 MW is proportionately reduced for 5 MW i.e. by an amount of Rs. 8.8 Crore, Rs. 3.30 crore and Rs. 1.03 crore, respectively. The reduction in the capital cost, also substantiates to a certain extent, the claim of HPPC regarding unspent and unexplained capex of Rs. 27.94 crore by the petitioner.**

The discrepancies pointed out by HPPC in the Auditor's certificate, largely pertains to IDC, which has not been claimed by the petitioner; therefore, the same has not been dwelled upon.

The Commission has further observed that the capital cost claimed by the petitioner amounting to Rs. 244 crore, also includes cost of evacuation infrastructure i.e. transmission lines etc amounting to Rs. 11.29 crore. The Commission is of the considered view that the duly executed PPA between the parties, containing the express terms & conditions agreed upon by them with open eyes cannot be interpreted in a different context. Doing so will vitiate the legal efficacy and binding force of an act or instrument. Therefore, the article 6.1.3 of the duly executed PPA which provides that the entire cost of transmission including cost of construction of line, bay, metering and protection system etc. up to the Delivery Point shall be borne by the Solar Power Developer, impose a promissory estoppel on the petitioner to raise a claim to this effect.

In view of the above discussions, the cost of transmission lines amounting to Rs. 11.29 crore, shall not form part of the approved capital cost and has be borne by the generator. It is not out of the place to mention that the cost of evacuation infrastructure created by the petitioner i.e. Rs. 11.29 crore is way higher than the similar cost incurred by similarly placed generator – M/s. L.R. Energy in respect of its 20 MW solar power plant which is Rs. 1.46 crore.

The capital cost claimed by the Petitioner also includes Project management expenses of Rs. 23.75 crore, which has been paid to its group companies/ related parties i.e. M/s. Amplus KN one Power Pvt. Ltd. and M/s. Amplus Management Services Pvt. Ltd.. The Commission reiterates its finding on the issue that the petitioner could not submit any convincing reason to incur such huge amount on Project Management, that too by making payment to its group companies, when it admittedly already owns and manages a portfolio of 800+ MWp of operational and under construction solar assets across 24 States of India with projects spread over more than 400 locations. The claim to this effect of the Petitioner is not justified and the Petitioner should have exercised due diligence including leveraging its expertise and vast experience in avoiding such expenses.

During the course of proceedings of the present remand proceedings, the petitioner was given ample opportunity to justify the exorbitant amount claimed to be incurred on Project Management. However, the petitioner has simply submitted that the amount has been incurred for obtaining consultancy in regard to business development, quality, legal, facilities and administrative, Human Resource, Capital and Risk Management and IT Support. The petitioner could not submit the details of such consultancy obtained, if any. HPPC has rightly pointed out that the petitioner has separately claimed expenditure on consultancy services as part of its capital cost viz. legal services, quality tests, business management / support consultancy etc. There is no demonstrable evidence that M/s. Amplus KN One Power Pvt. Ltd. has actually rendered any services covered under the scope of the agreement executed between them. Rather, every function has been handled by M/s. Amplus Sun Solutions Pvt. Ltd., directly. No output, report, or deliverable has been placed on record to establish

the role or involvement of M/s. Amplus KN One Power Pvt. Ltd. in the management of the project. However, incurring certain expenditure like salaries and allowances of the staff associated with the project, fee for obtaining approvals from various authorities, travelling expenses etc, incurred before the date of CoD, cannot be ruled out. Hence, the Commission has considered it appropriate to allow the same @ 2% of the approved capital cost.

Resultantly, the Commission approves total capital cost of 70 MW power plant at Rs. 196.68 Crore (Rs. 244.10 Crore claimed by the Petitioner minus Rs. 8.8 Crore toward cost of modules of 5 MW, minus Rs. 3.30 Crore towards cost of PV Plant Supply of 5 MW, Rs. 1.03 crore towards cost of civil work of 5 MW, minus Rs. 11.29 Crore as cost of transmission lines, minus Rs. 23 crore claimed as Project Management expense). Further, project management expenses @ 2% of the approved capital cost i.e. Rs. 3.93 crore is also allowed. Thus, total approved capital cost of 70 MW DC (50 MW AC) solar power plant of the petitioner works out to Rs. 200.61 crore, for the purpose of tariff determination, which is Rs. 4.01 crore/MW, for 50 MW solar power plant.

Based on the parameters discussed in the foregoing paras, the Commission determines the tariff for 25 years life of the project, appended to the present Order (Annexure – A). The tariff payable is the year to year tariff computed by the Commission for the entire life of the project.

HPPC / Discoms are directed to make payment in respect of differential amount payable as worked out in Annexure 'A', within one month from the date of issue of this order. Further, in line with the principle of restitution, interest @ 9.58% p.a. i.e. the rate of interest on working capital allowed to UHBVNL in the ARR order dated 28.03.2025, shall also be payable from the date the differential amount would have been due in case the original tariff allowed in the order dated 18.01.2021 would have been the tariff determined in the present proceedings up to the date of actual payment. Any delay in payment of differential tariff along with applicable interest thereon, beyond the allowed period of 30 days, will attract late payment surcharge @ 1.25% per month as per Article 5.2.3 of the duly executed PPA between the parties.

In terms of the above Order, the present petition is disposed of.

This order is signed, dated and issued by the Haryana Electricity Regulatory Commission on 12.08.2025.

Date: 12.08.2025	(Mukesh Garg)	(Nand Lal Sharma)
Place: Panchkula	Member	Chairman

Calculation of Levelized Tariff for Amplus Solar 50 MW - Solar PV Projects for 25 years (Remand Back)

Table of Parameters	Per MW	50	MW
Capital cost (Rs. in Million / MW)	40.12	2,006.10	
Cost of Land (Rs. Million)		-	
Remaining capital cost		2,006.10	
Residual value (10%)		200.61	
Total depreciation (Rs in Million / MW)		1,805.49	
Loan component (Rs in Million / MW)		1,404.27	
Equity component (Rs in Million / MW)		601.83	
CUF		25.91%	
Annual degradation in CUF		0.50%	
O&M (Rs Million)	0.303	15.15	
O&M escalation		5.72%	
Depreication (first 13 years)		5.38%	
ROE (1st 10 years)		14%	
ROE (11th year onwards)		14%	
Interest on term loan		9.00%	
Interest on working capital		9.00%	
Auxiliary consumption		0.25%	
Discount rate WACC		10.50%	
Levellised tariff		2.58	

Year		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
O&M with escalation		15.15	16.02	16.93	17.90	18.93	20.01	21.15	22.36	23.64	24.99	26.42	27.93	29.53	31.22	33.01	34.90	36.89	39.00	41.23	43.59	46.08	48.72	51.51	54.45	57.57
Outstanding Loan amount		1404.27	1296.25	1188.23	1080.21	972.19	864.17	756.15	648.12	540.10	432.08	324.06	216.04	108.02												
Loan repayment		108.02	108.02	108.02	108.02	108.02	108.02	108.02	108.02	108.02	108.02	108.02	108.02	108.02												
Interest on loan		121.52	111.80	102.08	92.36	82.64	72.91	63.19	53.47	43.75	34.03	24.30	14.58	4.86												
Working Capital																										
One month O&M & Lease Rental		2.18	2.30	2.42	2.55	2.69	2.84	2.99	3.15	3.32	3.50	3.70	3.90	4.11	4.33	4.57	4.81	5.08	5.35	5.64	5.95	6.27	6.61	6.97	7.35	7.75
2 Months receivables		57.57	56.17	54.78	53.41	52.05	50.71	49.38	48.07	46.78	45.50	44.25	43.02	41.81	28.86	29.35	29.86	30.40	30.97	31.57	32.20	32.87	33.57	34.31	35.10	35.92
Maintenance spares15% of O&M		2.27	2.40	2.54	2.69	2.84	3.00	3.17	3.35	3.55	3.75	3.96	4.19	4.43	4.68	4.95	5.23	5.53	5.85	6.18	6.54	6.91	7.31	7.73	8.17	8.64
Total		62.02	60.87	59.75	58.65	57.58	56.54	55.54	54.58	53.65	52.76	51.91	51.11	50.35	37.87	38.86	39.91	41.01	42.17	43.39	44.69	46.05	47.49	49.01	50.62	52.31
Interest on working capital		5.58	5.48	5.38	5.28	5.18	5.09	5.00	4.91	4.83	4.75	4.67	4.60	4.53	3.41	3.50	3.59	3.69	3.80	3.91	4.02	4.14	4.27	4.41	4.56	4.71
Parameters	**Derivation**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
Capacity (MW)		**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**
CUF		**25.91%**	**25.78%**	**25.65%**	**25.52%**	**25.40%**	**25.27%**	**25.14%**	**25.02%**	**24.89%**	**24.77%**	**24.64%**	**24.52%**	**24.40%**	**24.28%**	**24.15%**	**24.03%**	**23.91%**	**23.79%**	**23.67%**	**23.56%**	**23.44%**	**23.32%**	**23.20%**	**23.09%**	**22.97%**
		9.45715																								
Generation (Million Units)	A	113.4858	112.9184	112.3538	111.7920	111.2331	110.6769	110.1235	109.5729	109.0250	108.4799	107.9375	107.3978	106.8608	106.3265	105.7949	105.2659	104.7396	104.2159	103.6948	103.1763	102.6604	102.1471	101.6364	101.1282	100.6226
Auxiliary Cons (%)		0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
Generation (Ex-bus Mllion Units)	A1	113.2021	112.6361	112.0729	111.5125	110.9550	110.4002	109.8482	109.2990	108.7525	108.2087	107.6677	107.1293	106.5937	106.0607	105.5304	105.0027	104.4777	103.9553	103.4356	102.9184	102.4038	101.8918	101.3823	100.8754	100.3710
Costs																										
O&M Expenses		15.15	16.02	16.93	17.90	18.93	20.01	21.15	22.36	23.64	24.99	26.42	27.93	29.53	31.22	33.01	34.90	36.89	39.00	41.23	43.59	46.08	48.72	51.51	54.45	57.57
Lease Expenses	with 5% escalation	11.00	11.55	12.13	12.73	13.37	14.04	14.74	15.48	16.25	17.06	17.92	18.81	19.75	20.74	21.78	22.87	24.01	25.21	26.47	27.80	29.19	30.65	32.18	33.79	35.48
Depreciation		107.93	107.93	107.93	107.93	107.93	107.93	107.93	107.93	107.93	107.93	107.93	107.93	107.93	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54
Interest on Term Loan		121.52	111.80	102.08	92.36	82.64	72.91	63.19	53.47	43.75	34.03	24.30	14.58	4.86												
Interest on Working Capital		5.58	5.48	5.38	5.28	5.18	5.09	5.00	4.91	4.83	4.75	4.67	4.60	4.53	3.41	3.50	3.59	3.69	3.80	3.91	4.02	4.14	4.27	4.41	4.56	4.71
Return on Equity		84.26	84.26	84.26	84.26	84.26	84.26	84.26	84.26	84.26	84.26	84.26	84.26	84.26	84.26	84.26	84.26	84.26	84.26	84.26	84.26	84.26	84.26	84.26	84.26	84.26
Cost (Rs. Million)		345.44	337.03	328.70	320.46	312.30	304.23	296.27	288.41	280.65	273.02	265.50	258.11	250.86	173.16	176.08	179.15	182.39	185.80	189.40	193.20	197.21	201.43	205.89	210.59	215.54
Tariff (Rs/kWh)		3.05	2.99	2.93	2.87	2.81	2.76	2.70	2.64	2.58	2.52	2.47	2.41	2.35	1.63	1.67	1.71	1.75	1.79	1.83	1.88	1.93	1.98	2.03	2.09	2.15
Per unit tariff components																										
Per unit O&M Expenses		0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.22	0.23	0.25	0.26	0.28	0.29	0.31	0.33	0.35	0.38	0.40	0.42	0.45	0.48	0.51	0.54	0.57
Per Unit Depreciation		0.95	0.96	0.96	0.97	0.97	0.98	0.98	0.99	0.99	1.00	0.31	1.01	1.01	0.32	0.32	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.33
Per Unit Interest on term loan		1.07	0.99	0.91	0.83	0.74	0.66	0.58	0.49	0.40	0.31	0.23	0.14	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Per Unit Interest on working capital		0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05
Per Unit Return on equity		0.74	0.75	0.75	0.76	0.76	0.76	0.77	0.77	0.77	0.78	0.78	0.79	0.79	0.79	0.80	0.80	0.81	0.81	0.81	0.82	0.82	0.83	0.83	0.84	0.84
Levellised tariff																										
Discount factor		1.00	0.905	0.819	0.741	0.671	0.607	0.549	0.497	0.450	0.407	0.368	0.333	0.302	0.273	0.247	0.224	0.202	0.183	0.166	0.150	0.136	0.123	0.111	0.101	0.091
Discounted tariff	2.58	3.05	2.71	2.40	2.13	1.89	1.67	1.48	1.31	1.16	1.03	0.91	0.80	0.71	0.45	0.41	0.38	0.35	0.33	0.30	0.28	0.26	0.24	0.23	0.21	0.20
Levellised Tariff (Rs/kWh)		2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58