CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 34/TT/2019

Coram:

Shri P.K. Pujari, Chairperson Shri I.S. Jha, Member

Date of Order: 14.4.2020

In the matter of:

Approval under regulation-86 of CERC (Conduct of Business) Regulations,1999 and CERC (Terms and Conditions of Tariff) Regulations, 2014 for determination of Transmission Tariff from anticipated COD to 31.03.2019 for **Asset-I**: 400 kV D/C Hiriyur – Mysore transmission line along with associated bays and 2X80 MVAR switchable line reactors along with associated bays at 400/220 kV Mysore S/S, **Asset-II**: 2X500 MVA 400/220 kV ICTs along with associated bays at Tumkur (Pavagada) S/S and **Asset-III**: 1X500 MVA 400/220 kV ICT along with associated bays and equipment at Tumkur (Vasantnarsapur) S/S under Transmission system for Ultra Mega Solar Power Park at Tumkur (Pavagada), Karnataka - Phase II (Part A) in Southern Region.

And in the matter of:

Power Grid Corporation of India Limited "Saudamini", Plot No.2, Sector-29, Gurgaon -122 001

.....Petitioner

Versus

 Tamil Nadu Generation and Distribution Corporation Ltd, (TANGEDCO),(Formerly Tamil Nadu Electricity Board -TNEB), NPKRR Maaligai, 800, Anna Salai, Chennai - 600 002



- Transmission Corporation of Andhra Pradesh Ltd., (APTRANSCO), Vidyut Soudha, Hyderabad- 500082
- Kerala State Electricity Board (KSEB)
 Vaidyuthi Bhavanam Pattom,
 Thiruvananthapuram 695 004
- Tamilnadu Electricity Board (TNEB) NPKRR Maaligai, 800, Anna Salai, Chennai - 600 002
- Electricity Department, Government of Goa Vidyuti Bhawan, Panaji, Goa 403001
- 6. Electricity Department, Govt of Pondicherry, Pondicherry 605001
- Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL), P&T Colony, Seethmmadhara, VISHAKHAPATNAM
- 8. Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL), Srinivasasa Kalyana Mandapam Backside, Tiruchanoor Road, Kesavayana Gunta, TIRUPATI-517501
- Central Power Distribution Company of Andhra Pradesh limited (APCPDCL), Corporate Office, Mint Compound, HYDERABAD - 500 063
- Northern Power Distribution Company of Andhra Pradesh Limited (APNPDCL), Opp. NIT Petrol Pump, Chaitanyapuri, Kazipet, WARANGAL - 506 004
- Bangalore Electricity Supply Company Ltd., (BESCOM), Corporate Office, K.R.Circle, BANGALORE - 560 001, Karanataka
- Gulbarga Electricity Supply Company Ltd., (GESCOM) Station Main Road, GULBURGA, Karnataka



- Hubli Electricity Supply Company Ltd., (HESCOM) Navanagar, PB Road, HUBLI, Karnataka
- Mangalore Electricity Supply Company Ltd.,
 (MESCOM), Corporate Office, Paradigm Plaza,
 AB Shetty Circle MANGALORE 575001, Karnataka
- Chamundeswari Electricity Supply Corporation Ltd., (CESC), # 927, L J Avenue Ground Floor, New Kantharaj Urs Road, Saraswatipuram, MYSORE - 570 009, KARNATAKA
- Transmission Corporation of Telangana Limited,
 Vidhyut Soudha, Khairatabad,
 Hyderabad-500082
- 17. Tamil Nadu Transmission Corporation Limited, (TANTRANSCO), NPKRR Maaligai, 800, Anna Salai, Chennai 600 002
- Karnataka Power Transmission Corporation Ltd., (KPTCL), Kaveri Bhavan,
 Bangalore - 560 009

...Respondents

Parties present:

For Petitioner: Shri S.S. Raju, PGCIL

Shri Amit K Jain, PGCIL Shri Zafrul Hassan, PGCIL Shri Vivel Kumar Singh, PGCIL

For Respondent: Shri S. Vallinayagam, Advocate, TANGEDCO

Dr. R. Kathivaran, TANGEDCO Ms. R. Alamelu, TANGEDCO

<u>ORDER</u>

The present petition has been filed by the Petitioner, Power Grid Corporation of India Ltd. ("PGCIL") for determination of tariff for **Asset-I**: 400 kV D/C Hiriyur –



Mysore transmission line along with associated bays and 2X80 MVAR switchable line reactors along with associated bays at 400/220 kV Mysore S/S, **Asset-II**: 2X500 MVA 400/220 kV ICTs along with associated bays at Tumkur (Pavagada) S/S and **Asset-III**: 1X500 MVA 400/220 kV ICT along with associated bays and equipment at Tumkur (Vasantnarsapur) S/S under "Transmission system for Ultra Mega Solar Power Park at Tumkur (Pavagada), Karnataka - Phase II (Part A)" in Southern Region for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations").

2. The Petitioner has made the following prayers:

- i. Approve the Transmission Tariff for the tariff block 2014-19 for the assets covered under this Petition.
- ii. Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.
- iii. Tariff may be allowed on the estimated completion cost. Revised Cost estimate for the project is under approval.
- iv. Allow the Petitioner to approach Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike, if any, during period 2014-19.
- v. Allow the Petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided under clause 25 of the Tariff Regulations 2014.
- vi. Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 52 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure (if any) in relation to the filing of petition.
- vii. Allow the Petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 52 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff)



- Regulations, 2014.
- viii. Allow the Petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2014-19 period, if any, from the respondents.
- ix. Allow the Petitioner to bill and recover GST on Transmission charges separately from the respondents, if GST on Transmission of electricity is withdrawn from the exempted (negative) list at any time in future. Further any taxes and duties including cess, etc. imposed by any Statutory/Govt./Municipal Authorities shall be allowed to be recovered from the beneficiaries.
- x. Allow the petitioner to recover FERV on the foreign loans deployed as provided under clause 50 of the Tariff Regulations, 2014.
- xi. Allow tariff up to 90% of the Annual Fixed Charges in accordance with clause 7 (i) of Regulation 7 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for purpose of inclusion in the POC charges.
- xii. Allow the petitioner to bill Tariff from actual DOCO and also the Petitioner may be allowed to submit revised certificate and tariff forms for anticipated elements (as per relevant regulation) based on actual DOCO.
 - and pass such other relief as the Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.

Background

- 3. The Investment Approval (hereinafter referred to as "IA") for implementation of assets under "Transmission system for Ultra Mega Solar Power Park at Tumkur (Pavagada), Karnataka Phase II (Part A)" in Southern Region was accorded by the Board of Directors of the Petitioner in 334th meeting held on 22.10.2016 for ₹40,846 lakh including IDC of ₹1,760 lakh based on June, 2016 price level (communicated vide Memorandum No. C/CP/PA1617-10-0Q-IA-015 dated 11.11.2016).
- 4. Ministry of Power, Government of India, vide letter dated 8.1.2015 intimated the Petitioner for taking up of transmission system for evacuation of power from 9 solar generating parks to be set up in 7 States along with pooling stations as ISTS

schemes which includes Tumkur (Pavagada) UMSPP on compressed time schedule basis.

- 5. The Commission has accorded regulatory approval, under Regulation 3 of the Central Electricity Regulatory Commission (Grant of Regulatory Approval for execution of Inter-State Transmission System to Central Transmission Utility) Regulations, 2010, for execution of subject transmission system vides its order dated 19.8.2016 in petition no 36/MP/2016 with IA No. 9/2016 and addition & modification in the scope of work for execution of transmission scheme for Phase-II vide order dated 7.9.2017 in petition No. 131/MP/2017 with IA No. 38/2017.
- 6. The scope of the scheme was discussed and agreed in 39th and 40th meeting of Standing Committee on Power System Planning in SR held on 28/29.12.2015 and 19.11.2016, respectively. The transmission scheme has also been agreed in 29th Meeting of SRPC held on 5.3.2016 and 30th SRPC meeting held on 27.08.2016. The Petitioner has been entrusted with the implementation of the said project.
- 7. The scope of work covered under the project "Transmission system for Ultra Mega Solar Power Park at Tumkur (Pavagada), Karnataka Phase II (Part A)" is as follows: -

Transmission Line

i. Hiriyur – Mysore 400 kV D/c line - 195 km

(Upon completion, this line would be connected with Tumkur (Pavagada) Pooling station - Hiriyur 400 kV D/c line (under phase-I) near Hiriyur to form Tumkur (Pavagada) -Mysore D/c direct line)

Substations

a) 400/220 kV Tumkur (Pavagada) Pooling station (Extension)

400 kV

(i) 500 MVA transformer : 2 nos.

(ii) Transformer bays : 2 nos.

(iii) Bus reactor bay : 1 no

(iv) 125 MVAR Bus reactor : 1 no.

220 kV

(i) Transformer bays : 2 nos.

b) 400/220kV Mysore (POWERGRID) Substation (Extension)

<u>400kV</u>

(i) Line Bays : 2 nos.

(ii) 80 MVAR Switchable line reactor : 2 nos

(iii) 80 MVAR Switchable line reactor bays: 2 nos

c) 400/220kV Tumkur (Vasantnarsapur) Substation Extension

400kV

(i) 500MVA transformer : 1 no.

(ii) Transformer bay : 1 no.

220kV

(i) Transformer bay : 1 no.

Reactive Compensation

a) Bus Reactor

S.N.	Sub station				Bus Reactor	
1	400/220	kV	Tumkur	(Pavagada)	1x125 MVAR (420kV)	
'	Pooling S	tation	1		2 nd Bus reactor	

b) Line Reactor

S.N.	Transmission Line	From end	To end
		(each ckt)	(each ckt)
		MVAR	MVAR

1	Hiriyur – Mysore 400 kV D/c	-	1x80
			(switchable)

8. The Petitioner has submitted that entire scope of the project "Transmission system for Ultra Mega Solar Power Park at Tumkur (Pavagada), Karnataka - Phase II (Part A)" has been covered in the instant petition. Details of the assets covered in the instant petition is summarized below:-

S.N.	Asset
1	Asset-I 400 kV D/C Hiriyur - Mysore transmission line along with associated
	bays and 2X80 MVAR switchable line reactors alongwith associated bays at
	400/220 kV Mysore Substation
2	Asset-II: 2X500 MVA 400/220 kV ICTs along with associated bays at Tumkur
	(Pavagada) Substation
3	Asset-III: 1X500 MVA 400/220 kV ICT along with associated bays and
	equipments at Tumkur (Vasantnarsapur) Substation

9. The Petitioner has filed the instant petition in respect of the 3 assets initially claiming anticipated COD. However, the Petitioner vide affidavit dated 13.11.2019 has split the Asset-II into Asset-II(a), Asset-II(b) and Asset-II(c) and claimed the actual COD of Asset-II(a). The Petitioner further submitted that Asset-I is yet to achieve COD while Asset-II(b), Asset-II(c) and Asset-III have achieved COD after 31.3.2019 and, hence, is covered under 2019-24 Regulations. The same is summarised as under: -

Asset claimed at the time of filing of instant petition	COD claimed at the time of filing of instant petition	Assets revised vide affidavit dated 13.11.2019	Claimed COD
Asset-I 400 kV D/C Hiriyur	28.12.2018	Asset-I: 400 kV D/C Hiriyur –	Yet to be
 Mysore transmission line 	(Anticipated)	Mysore transmission line	commission
along with associated bays		along with associated bays at	-ed.
and 2X80 MVAR switchable		400/220 Mysore S/s and	
line reactors along with		2X80 MVAR switchable line	
associated bays at 400/220		reactors along with	

Asset claimed at the time of filing of instant petition	COD claimed at the time of filing of instant petition	Assets revised vide affidavit dated 13.11.2019	Claimed COD
kV Mysore Substation		associated bays at 400/220 kV Mysore S/S	
Asset-II: 2X500 MVA 400/220 kV ICTs along with associated bays at Tumkur (Pavagada) Substation	28.12.2018 (Anticipated)	Asset-II(a): 1X500 MVA 400/220 kV ICT along with associated bays at Tumkur (Pavagada) Substation	31.3.2019 (Actual)
		Asset-II(b): 1X500 MVA 400/220 kV ICTs along with associated bays at Tumkur (Pavagada) S/S	28.4.2019 (Actual)
		Asset-II(c): 1X125 MVA 400kV Bus Reactor along with associated bays at Tumkur (Pavagada) pooling S/S	3.6.2019 (Actual)
Asset-III: 1X500 MVA 400/220 kV ICT along with associated bays and equipments at Tumkur (Vasantnarsapur) Substation	28.12.2018 (Anticipated)	Asset-III: 1X500 MVA 400/220 kV ICT along with associated bays at Tumkur (Vasantnarsapur) S/S	17.6.2019 (Actual)

- 10. During hearing dated 11.02.2020, the Petitioner reiterated the above submission and submitted that the Petitioner will file a separate petition for Asset-I, Asset-II(b), Asset-II(c) and Asset-III. Accordingly, the Petitioner, in the instant petition, has claimed tariff for Asset-II(a) only.
- 11. The details of the Annual Transmission Charges claimed by the Petitioner are as under:-

(₹ in lakh)

Particulars	Asset-II (a)	
	2018-19 (Pro-rata)	
Depreciation	0.41	
Interest on Loan	0.21	
Return on Equity	0.47	
Interest on Working Capital	0.04	



Particulars	Asset-II (a)	
	2018-19 (Pro-rata)	
O & M Expenses	0.32	
Total	1.45	

12. The details of the interest on working capital claimed by the Petitioner are as under: -

(₹ in lakh)

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Particulars	Asset-II (a)
	2018-19 (Pro-rata)
Maintenance Spares	17.52
O&M expenses	9.73
Receivables	88.12
Total	115.37
Rate of Interest	12.20%
Interest on working capital	0.04

- 13. The Petitioner has served a copy of the petition upon the respondents and notice of this tariff petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the notices published by the Petitioner under Section 64 of the Electricity Act, 2003. Reply to the petition has been filed by Tamil Nadu Generation and Distribution Corporation Ltd. (TANGEDCO), Respondent No. 1, vide affidavit dated 8.3.2019 and the Petitioner vide its affidavit dated 15.11.2019 filed its rejoinder to the reply of TANGEDCO. Subsequently, TANGEDCO vide affidavit dated 20.12.2019 filed counter-reply to the submissions of the Petitioner dated 13.12.2019 in pursuance to the ROP of hearing dated 18.11.2019.
- 14. The Petition was heard on 11.2.2020 and the Commission reserved the order in the Petition.

- 15. This order has been issued after considering the main petition dated 28.12.2018 and Petitioner's affidavits dated 13.11.2019, 14.11.2019, 15.11.2019 and 13.12.2019 and reply of TANGEDCO dated 8.3.2019 and 20.12.2019.
- 16. Having heard the representatives of the Petitioner present at the hearing and having perused the material on record, we proceed to dispose of the petition.

Analysis and Decision

Date of Commercial Operation (COD)

17. The Petitioner has claimed the actual COD in respect of the instant Asset-II(a) as per the following details:-

S.N.	Name of Asset	COD claimed
1	Asset-II(a): 1X500 MVA 400/220 kV ICT along with associated	31.3.2019
	bays at Tumkur (Pavagada) Substation	(Actual)

- 18. In support of the actual COD of the Asset-II(a), the Petitioner has submitted CEA energisation certificate dated 27.3.2019 under Regulation 43 of CEA (Measures Related to Safety & Electricity Supply) Regulations, 2010; RLDC charging certificate dated 11.4.2019; and CMD certificate as required under Grid Code.
- 19. Taking into consideration of the RLDC charging certificate, CEA energisation certificate and CMD certificate, COD of the Asset-II(a) is approved as 31.3.2019.

Capital Cost

- 20. Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations provide as follows:-
 - "(1) The Capital cost as determined by the Commission after prudence check in



accordance with this regulation shall form the basis of determination of tariff for existing and new projects"

- (2) The Capital Cost of a new project shall include the following:
 - (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
 - (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
 - (c) Increase in cost in contract packages as approved by the Commission;
 - (d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;
 - (e) Capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;
 - (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;
 - (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and
 - (h) Adjustment of any revenue earned by the transmission licensee by using the assets before COD."
- 21. The Petitioner vide Auditor's Certificate dated 30.7.2019 has claimed the following capital cost as on COD and additional capitalization projected to be incurred, in respect of the instant asset:-

(₹ in lakh)

Asset	Apportioned Approved	Cost up to COD	Projected Additional Capitalisation in FY		Estimated Completion	
	Cost (FR)		2018-19	2019-20	2020-21	Cost
Asset-II(a)	3576.46	2897.88	0.00	576.82	100.68	3575.38

Cost Over-run

22. We have considered the submission of the Petitioner and noted that against the total apportioned approved cost as per FR in respect of Asset-II(a) as mentioned in the Table above, the estimated completion cost including additional capitalisation is within the apportioned approved cost. Therefore, there is no cost

Time over-run

- 23. As per the Investment Approval (IA) dated 22.10.2016, the transmission scheme was scheduled to be commissioned within 27 months from the date of Investment Approval. Accordingly, the Commissioning Schedule comes to 22.1.2019 against which the Asset-II(a) is put under Commercial Operation on 31.3.2019. Therefore, there is a time over-run of 68 days.
- 24. The Petitioner has submitted that the delay is due to various unavoidable contractual delay and on account of working in energized switchyard during shut down. TANGEDCO vide affidavit dated 20.12.2019 has submitted that the Petitioner has not furnished proper justification and submitted that the delay is attributable to the improper planning of the Petitioner.
- 25. We have considered the submissions of the Petitioner and Respondent TANGEDCO and observe that Petitioner has not submitted proper justification for the delay and has cited the vague reasons. Therefore, the delay of 68 days is not condoned.

Central Finance Assistance (CFA)

- 26. The Petitioner has submitted the following in respect of CFA: -
 - (a) Central Finance Assistance for development of Solar Park and associated external transmission system has been provided by the Ministry of New and Renewable Energy, Government of India (MNRE). MNRE vide its letter dated 12.12.2014 issued administrative guidelines for release of fund for

implementation of Scheme for development of Solar Park and Ultra Mega Solar Power projects. MNRE vide its O.M. dated 29.9.2016 issued further clarifications to the said guidelines. The relevant extracts of the same are as follows:

"The CFA for development of solar park and for development of external transmission system will be apportioned in the ratio of 60:40 i.e. Rs 12 lakh per MW or 30% of the project cost, whichever is lower may be provided to the Solar Power Park Developers (SPPDs) towards development of solar parks and Rs. 8 lakh per MW or 30% of the project cost, whichever is lower will be provided to the CTU or STU towards development of external transmission system......"

- (b) Accordingly, the Petitioner vide its letter dated 16.1.2018 requested MNRE to release the amount of CFA.
- (c) MNRE vide its O.M. no F.No.320/6/2017/NSM dated 29.06.2018 sanctioned the CFA grant. The relevant extracts of the O.M. is reproduced below:
 - "2. It is mention that this ministry vides its sanction order no. 30/52/2014-15/NSM dated 28.02.2017 released central finance assistance (CFA) of Rs 28,28,00,000/- (Rupees twenty Crore and twenty eight lakhs only) to SECI for further disbursement of Rs. 28,00,00,000/- (Rupees twenty eight crore only) to PGCIL towards development of external power evacuation system for evacuation of 1000 MW (phase-I) solar power from Pavagada solar park, Karnataka and Rs. 28,00, 000/- (Rupees Twenty eight lakhs only) to SECI towards fund handling charges. Further, Ministry vide its sanction order no. 320/6/2017-NSM dated 29.12.2017 released CFA of Rs. 12,12,00,000/- (Rupees twelve Crore and twelve lakhs only) to SECI for further disbursement of Rs. 12,00,00,000/- (Rupees Twelve Crore only) to PGCIL for development of ecternal power evacuation system for evacuation of 1000 MW (Phase-I) solar power from Pavagada Solar Park, Karnataka and Rs. 12,00,000/- (Rupees twelve lakhs only) to SECI towards fund handling charges @1%.
 - 3. As per Administrative Guidelines 30/26/2014-15/NSM, dated 12.12.2014 and subsequent clarification vide OM no. 30/26/2014-15/NSM dated 29.09.2016, administrative guidelines 30/26/2014-15/NSM dated 21.03.2017 & OM no. 320/14/2017 –NSM dated 18-01-2018 an amount of Rs 40,40,00,000/- (Rupees Forty Crore Forty Lakh only) is due to SECI, New Delhi towards award of work for external power evacuation system of Pavagada Solar Park pahse-II of external power evacuation system of Povgada Solar Park (1000MW) in Karnataka. The amount of Rs 40,40,00,000/- (Rupees Forty Crore Forty Lakh only) includes Rs 40,00,00,000/- (Rupees Forty Crore only) towards development of external power evacuation system Phase-I of Pavagada Solar Park, Karnataka and Rs 40,00,000/- (Rupees Forty Lakh only) towards fund handling charges to SECI.
 - 4. Accordingly, sanction of the President of India is hereby conveyed for



release of Rs. 40,40,00,000/- (Rupees Forty Crore Forty Lakh only) to Solar Energy Corporation of India (SECI), New Delhi as CFA towards development of external power evacuation system of Pavagada Solar Park (Phase-II,1000 MW) in Karnataka.

- (d) The petitioner applied for grant under Phase II based on Capacity of 1000 MW @ Rs. 800,000 (Total Rs 80 crore). 50% of the grant applied is released by MNRE through SECI i.e. Rs. 40 crore on 29.06.18 towards Transmission System for Ultra mega Solar Power Park at Tumkur (Pavagada), Karnataka-Phase-II. Balance 50% of approved grant for Phase-II is yet to be disbursed. The said grant received as on date has been adjusted in the capital cost of assets covered under instant petition.
- (e) The Petitioner vide affidavit dated 14.11.2019 submitted the following details of grants received in respect of the instant asset but has not furnished the basis of apportionment of grant:

Asset Amount of IDC deduction (after adjusting grant with loan)

Asset-II(a) 153.72 7.56**

27. Proviso to clause (d) of Regulation 9(6) of the 2014 Tariff Regulations provides as under: -

"Provided that any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment shall be excluded from the Capital Cost for the purpose of computation of interest on loan, return on equity and depreciation."

28. Proviso (iii) of Regulation 19(1) of the 2014 Tariff Regulations provides as under: -

"iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio."



^{**} the IDC in the Auditor Certificate has been considered by taking the loan component of the Capital cost for the Asset after reducing the Grant from the DOCO cost i.e. 70% of DOCO Cost (after Grant adjustment). However, Tariff is calculated taking Grant as part of the Loan component of the Total capital cost.

29. We have considered the submission of the Petitioner and noted that in line with the above provisions, funding through grant is not required to be considered for debt:equity ratio. Therefore, funding sans any grant would form remaining capital structure for the purpose of debt: equity ratio as per Regulation 19 of the 2014 Tariff Regulations and the same has been considered in the relevant para of this Order.

Interest During Construction (IDC)

- 30. The Petitioner has claimed Interest During Construction (IDC) for the instant asset and submitted Auditor's Certificate dated 30.7.2019 in support of the same. Vide RoP for hearing dated 11.2.2020, the Petitioner was directed to submit detailed statement for IDC in respect of foreign loan indicating date of drawl, element-wise allocation of loan, rate of interest duly reconciled with the amount of IDC claimed vide Auditor's Certificate dated 30.7.2019.
- 31. In response, the Petitioner has submitted revised IDC statement for foreign loan. The statement showing IDC on foreign loan consists of the name of the loan, drawl date, gross loan amount in foreign currency and allocated loan amount in Indian rupees (INR), Commitment Fees, Guarantee Fee and interest claimed. However, it does not contain rate of interest and also the IDC amount claimed as per Auditor certificate does not match with IDC statement for domestic loan and foreign loan.
- 32. The Petitioner vide affidavit dated 14.11.2019 deducted an amount of ₹ 7.56 lakh (after adjusting grant with loan) from the capital cost and submitted that that the

IDC in the Auditor Certificate has been considered by taking the loan component of the capital cost for the asset after reducing the grant from the DOCO cost i.e. 70% of DOCO Cost (after grant adjustment). However, tariff is calculated taking grant as part of the loan component of the total capital cost.

33. We have considered the submission of the Petitioner and noted that the Petitioner has adjusted the amount of grant received with the loan component only and after adjusting the grant received with loan deducted the amount of IDC ₹ 7.56 lakh from the capital cost. As discussed in paragraph 29 above, the amount of grant received is required to be adjusted with the capital cost in the instant petition. In the absence of complete details in respect of IDC, the computation of IDC after adjustment of grant with capital cost instead of loan component is not possible at this stage. Therefore, for a time being, IDC claimed by the Petitioner is considered as it is, after adjustment of time over-run. The Petitioner is at liberty to file detailed IDC statement by rectifying the aforesaid deviations, at the time of true up for the 2014-19 period. Details of IDC considered for tariff computation is as below:-

(₹ in lakh)

IDC Considered for Tariff Computation of Asset-II(a)				
IDC Claimed by the Petitioner (as per Auditor certificate)	137.80			
Less: IDC (after adjusting grant with loan) as per affidavit dated 14.11.2019	7.56			
Less : Accrual IDC up to DOCO as per affidavit dated 14.11.2019	9.19			
Less: Disallowed due to time over-run not condoned	9.25			
IDC allowed on COD on Cash Basis	111.80			

Incidental Expenditure During Construction (IEDC)

34. The Petitioner has claimed IEDC of ₹349.14 lakh for Asset-II(a) and submitted Auditor's Certificate in support of the same. The IEDC claimed is beyond the percentage of hard cost i.e. 10.75% as indicated in the abstract cost estimate. Therefore, the same has been restricted to 10.75% of the hard cost duly adjusted for time over-run, subject to true up. The details of IEDC claimed and allowed are as under:-

(₹ in lakh)

Asset	IEDC Claimed	IEDC admissible as per % abstract cost	Disallowed due to time over-run	IEDC Allowed
Asset-II(a)	349.14	259.17	19.80	239.37

35. The IEDC allowed for the subject asset will be reconsidered in the light of the directions of Appellate Tribunal for Electricity (APTEL) in judgment dated 2.12.2019 in Appeal No. 95 of 2018 and Appeal No. 140 of 2018 against Commission's orders dated 29.7.2016 and 5.10.2017 in Petition No. 46/TT/2014 and Petition No. 2/RP/2017 respectively, at the time of truing up.

Initial Spares

36. This has been dealt in line with Regulation 13 of the 2014 Tariff Regulations. The Petitioner has claimed initial spares of the Assets covered in the petition and submitted Auditor's certificate in support of the same. The Petitioner vide affidavit dated 13.12.2019 submitted details of initial spares discharged up to COD. The details of initial spares claimed by the Petitioner is as follows:-

(₹ in lakh)

					,	- ,
Asset	Element	Plant and machinery Cost excluding IDC, IEDC, Land Expenditure up to 31.03.2019	Initial spares claimed	Expenditure on Initial Spare up to COD and included in Auditor Certificate	Expenditure on Initial Spare as add-cap	Total
Asset-II(a)	Substation	2310.18	136.54	136.54	0.00	136.54

37. We have considered the submissions made by the Petitioner. The initial spares allowed for the purpose of tariff calculation after considering the Plant and Machinery cost excluding IDC, IEDC and land expenses up to 31.3.2019, subject to ceiling limit as per 2014 Tariff Regulation are as under: -

(₹ in lakh)

	Asset	Туре	Plant and machinery Cost excluding IDC, IEDC, Land Expenditure up to 31.03.2019	Initial Spares claimed	Spares	Initial Spares discharged up to COD
Α	sset-II(a)	Substation	2310.18	136.54	136.54	136.54

Capital cost as on COD

38. Accordingly, the capital cost allowed as on COD under Regulation 9(2) of the 2014 Tariff Regulations is summarized as under: -

(₹ in lakh)

Asset	Capital	Revised	Less:	Less: IDC	Less:	Less: IEDC	Less:	Capital
	Cost as	capital	Grant	Dis-	Undis-	Disallowed	IEDC	Cost as
	on COD	cost as on	Received	allowed	charged	beyond the	disallowed	on COD
	as per	COD as	as per	due to	IDC	% of FR	due to	Considered
	Auditor	per	affidavit	time		abstract	time over-	for tariff
	Cost	affidavit	dated	overrun		cost	run	calculation
	Certificate	dated	14.11.2019	not		estimate		
		14.11.19**		condoned				
Asset-II(a)	2897.88	2890.32	153.72	9.25	9.19	89.96	19.80	2608.40

^{**}After reducing the amount of ₹7.56 lakh of IDC(after adjusting grant with loan).

Additional Capital Expenditure (ACE)

39. As per Clause (13) of Regulation 3 of the 2014 Tariff Regulations, the cut-off date for instant assets is 31.3.2022. Additional capitalization as per Auditor's Certificates for the period 2019-20 and 2020-21 are as under:-

(₹ in lakh)

Asset	Additional Ca	Total		
	2018-19			
Asset-II(a)	0.00	576.82	100.68	677.50

40. The Petitioner has not claimed any ACE during 2018-19. Since FY 2019-20 and 202-21 falls beyond the tariff period 2014-19 and is not covered under the provisions of the 2014 Tariff Regulation, the projected ACE claimed beyond 2018-19 has not been taken into consideration and the same shall be dealt during the next tariff period as per extant Tariff Regulations for 2019-24 period.

Capital cost for the tariff period 2014-19

41. Accordingly, the capital cost considered for the tariff period 2014-19, subject to truing up, is as follows:-

(₹ in lakh)

Asset	Capital Cost as on COD considered for tariff calculation	ACE during 2018-19	Total Estimated Completion Cost up to 31.03.2019
Asset-II(a)	2608.40	0.00	2608.40

Debt-Equity Ratio

42. Debt-Equity Ratio is considered as per Regulation 19 of the 2014 tariff Regulations and in line with para 29 above. The debt-equity as on date of commercial operation and as on 31.3.2019 considered on normative basis are as

under:-

(₹ in lakh)

Asset-II(a)	As on COD		As on 31.	03.2019
Debt	1825.88	70.00%	1825.88	70.00%
Equity	782.52	30.00%	782.52	30.00%
Total	2608.40	100.00%	2608.40	100.00%

Return on Equity (ROE)

- 43. The Petitioner has submitted that ROE has been calculated at the rate of 19.61% after grossing up ROE with MAT rate of 20.961% as per Regulations. The Petitioner has further submitted that the grossed-up ROE is subject to truing up based on the effective tax rate of respective financial year applicable to the Petitioner Company.
- 44. We have considered the submissions made by the Petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25(3) of the 2014 Tariff Regulations.
- 45. Accordingly, the ROE allowed is as follows:-

(₹ in lakh)

	Asset-II(a)
Particulars	2018-19
	(Pro-rata)
Opening Equity	782.52
Addition due to Additional Capitalization	0.00
Closing Equity	782.52
Average Equity	782.52
Return on Equity (Base Rate)	15.50%
MAT rate for the FY 2013-14	20.961%
Rate of Return on Equity (Pre-tax)	19.610%
Return on Equity (Pre-tax)	0.42

Interest on Loan (IOL)

- 46. The IOL has been calculated as per the provisions of Regulation 26 of the 2014 Tariff Regulations as detailed below:
 - a) Gross amount of loan, repayment of installments and rate of interest on actual loans have been considered as per petition including additional information.
 - b) The yearly repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that year.
 - c) Weighted average rate of interest on actual average loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on loan.
- 47. The Petitioner has submitted that the IOL has been claimed on the basis of rate prevailing as on COD and the change in interest due to floating rate of interest applicable, if any, needs to be claimed/ adjusted over the tariff block 2014-19. We have calculated IOL on the basis of the rate prevailing as on the date of commercial operation. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing-up. The IOL is allowed considering all the loans submitted in Form-9C. The Petitioner is directed to reconcile the total Gross Loan for the calculation of weighted average Rate of Interest for the

calculation of IDC, which would be reviewed at the time of truing-up.

48. The details of IOL calculated are as follows:-

(₹ in lakh)

	Asset-II(a)
Particulars	2018-19
	(Pro-rata)
Gross Normative Loan	1825.88
Cumulative Repayment upto previous Year	0.00
Net Loan-Opening	1825.88
Addition due to Additional Capitalization	0.00
Repayment during the year	0.40
Net Loan-Closing	1825.48
Average Loan	1825.68
Weighted Average Rate of Interest on Loan	4.04%
Interest on Loan	0.20

Depreciation

49. Depreciation has been dealt with in line of Regulation 27 of 2014 Tariff Regulations. The instant asset was put under commercial operation during 2018-19. Accordingly, it will complete 12 years beyond the tariff period 2014-19 and depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations. Details of the depreciation allowed are as under:-

(₹ in lakh)

	Asset-II(a)
Particulars	2018-19 (Pro-rata)
Opening Gross Block	2608.40
Additional Capital expenditure	0.00
Closing Gross Block	2608.40
Average Gross Block	2608.40
Rate of Depreciation	5.5438%
Depreciable Value	2283.84
Remaining Depreciable Value	2283.84
Depreciation	0.40

Operation and Maintenance Expenses (O&M Expenses)

50. The Petitioner has claimed the O&M expenses for Asset-II(a) as per following details:-

		(₹ in lakh)
Asset	Particulars	2018-19 (Pro-rata)
Asset-II(a)	O&M Expenses	0.32

- 51. The Petitioner in the instant petition has submitted that, O&M rates for the tariff period 2014-19 had been arrived on the basis of normalized actual O&M Expenses during the period 2008-09 to 2012-13. The Petitioner has further submitted that the wage revision of the employees is due during 2014-19 and actual impact of wage hike effective from a future date has not been factored in fixation of the normative O&M rates specified for the tariff block 2014-19. The Petitioner has submitted that it would approach the Commission for suitable revision in norms for O&M Expenses for claiming the impact of wage hike during 2014-19, if any.
- 52. Norms for O&M expenditure for Transmission System have been specified under Regulation 29(4) of the 2014 Tariff Regulations as follows: -

Element	2018-19
Sub-Station: 400 kV ICT bay (₹ in lakh per bay)	68.71
Sub-Station: 220 kV ICT bay (₹ in lakh per bay)	48.10

53. We have considered the submissions of Petitioner. The O&M Expenses have been worked out as per the norms specified in the 2014 Tariff Regulations. As regards the impact of wage revision, any application filed by the Petitioner in this regard will be dealt with in accordance with the appropriate provisions of the Tariff Regulations. The Petitioner has computed normative O&M Expenses as per sub-

clause (a) of clause (4) of Regulation 29 of the 2014 tariff regulations. Accordingly, the allowed O&M Expenses is given below:-

(₹ in lakh)

Asset-II(a)	2018-19
Details	(Pro-rata)
1 no. of 400 kV ICT bay at Pavagada substation	0.19
1 no. of 220 kV ICT bay at Pavgada Substation	0.13
Total O&M Expenses Allowed	0.32

Interest on Working Capital (IWC)

54. As per the 2014 Tariff Regulations, components of working capital and interest thereon are discussed hereinafter:-

a) Maintenance spares:

Maintenance spares @ 15% of Operation and maintenance expenses specified in Regulation 28.

b) O & M expenses:

Operation and maintenance expenses have been considered for one month of the O&M expenses.

c) Receivables:

The receivables have been worked out on the basis of 2 months of annual fixed cost as worked out above.

d) Rate of interest on working capital:

As per Clause 28 (3) of the 2014 Tariff Regulations, SBI Base Rate as on 1.4.2018 (8.70%) plus 350 Bps i.e. 12.20% has been considered as the rate of interest on working capital.

55. Accordingly, the interest on working capital (IWC) is summarized as under:-

	(₹ in laki		
Particulars	Asset-II(a)		
	2018-19		
	(Pro-rata)		
Maintenance Spares	17.52		
O&M expenses	9.73		
Receivables	83.68		
Total	110.93		
Rate of Interest	12.20%		
Interest on working capital	0.04		

Annual Transmission charges

56. Accordingly, the annual transmission charges being allowed for the instant assets are as under:-

	(₹ in lakh)
Particulars	Asset-II(a)
	2018-19
	(Pro-rata)
Depreciation	0.40
Interest on Loan	0.20
Return on Equity	0.42
Interest on Working Capital	0.04
O & M Expenses	0.32
Total	1.38

Filing fee and the publication expenses

57. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with clause (1) of Regulation 52 of the 2014 Tariff Regulations.

License fee and RLDC Fees and Charges

58. The Petitioner has prayed to allow the Petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. We are of the view that the Petitioner shall be entitled for reimbursement of license fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a) of Regulation 52 in the 2014 Tariff Regulations.

Goods and Services Tax

59. The Petitioner has prayed for reimbursement of tax, if any, on account of implementation of GST. GST is not levied on transmission service at present and we are of the view that Petitioner's prayer is premature.

Sharing of Transmission Charges

- 60. The petitioner has submitted that the transmission charges of the instant assets should be recovered on monthly basis and the billing, collection and disbursement of Transmission Charges should be governed by the provisions of CERC (Sharing of Interstate Transmission Charges and Losses) Regulations, 2010 (hereinafter referred to as the 2010 Sharing Regulations) as provided under Regulation 43 of the 2014 Tariff Regulations.
- 61. The respondent, TANGEDCO has submitted that as per Regulation 7 of the 2010 Sharing Regulations, the RE generators are required to submit a certificate from the concerned Discom(s) stating that the power is purchased from the RE generators to meet the Renewable Purchase Obligations (RPO) for availing waiver

of transmission charges and losses and has submitted that the issue was also discussed in the Standing Committee Meeting of Southern Region on transmission held on 19.6.2019.

- 62. The Commission vide RoP of the hearing dated 18.11.2019 directed the Petitioner to submit all the details based on which billing and RPO obligations for waiver of transmission charges and losses are ascertained and finalized by the Petitioner along with details of RPO certificates and list of the generators which are eligible for waiver of transmission charges.
- 63. The Petitioner vide affidavit dated 15.11.2019 (rejoinder to the reply of TANGEDCO) and vide subsequent affidavit dated 13.12.2019 has made its submissions.
- 64. The Petitioner has submitted that as per amendment, dated 14.12.2017, to the Regulation 7 of the 2010 Sharing Regulations:

"No transmission charges and losses for the use of ISTS network shall be payable for the capacity of the generation projects based on solar resources for a period of 25 years from the date of commercial operation of the such generation projects if they fulfill the following conditions:

- (i) Such generation capacity has been awarded through competitive bidding; and
- (ii) Such generation capacity has been declared under commercial operation between 1.7.2017 and 31.12.2019; and
- (iii) Power Purchase Agreement(s) have been executed for sale of power from such generation capacity to the Distribution Companies for compliance of their renewable purchase obligation".
- 65. The Petitioner has submitted that subsequently, as per Amendment dated 27.03.2019 to Regulation 7 of the 2010 Sharing Regulations, the above waiver to solar projects has been extended from 31.03.2019 to 31.03.2022.
- 66. The Petitioner has submitted that 1650 MW solar capacity from Pavagada



solar park have been commissioned starting from January 2018 and up to August 2019. In this regard, generator-wise details such as block capacity (MW), bid awarding agency (NTPC/ KREDL/ SECI) and date of commissioning have been submitted by the Petitioner as under:

SI. No.	Block name/Name of the SPD	Block no.	Block capacit y in MW	Awarding Agency (NTPC/K REDL/SE	Date of commis sioning
				CI)	
1.	M/s. Fortum FinnSurya Energy Private Limited	B30	50	NTPC	14/01/18
2.	M/s. Fortum FinnSurya Energy Private Limited	B31	50	NTPC	14/01/18
3.	M/s. Parampujya Solar Energy Private Limited	B29	50	NTPC	14/01/18
4.	M/s. Yarrow Infrastructure Limited	B35	50	NTPC	19/01/18
5.	M/s. Tata Power Renewable Energy Ltd	B32	50	NTPC	19/01/18
6.	M/s. Tata Power Renewable Energy Ltd	B34	50	NTPC	19/01/18
7.	M/s. Parampujya Solar Energy Private Limited	B36	50	NTPC	19/01/18
8.	M/s. Renew Solar Power Pvt Ltd	B33	50	NTPC	19/01/18
9.	M/s. Tata Power Renewable Energy Ltd,	B27	50	NTPC	28/01/18
10.	M/s. Parampujya Solar Energy Private Limited	B28	50	NTPC	03/02/18
11.	M/s. ACME Solar Holdings Pvt Ltd	B37	50	NTPC	02/03/18
12.	M/s. ACME Solar Holdings Pvt Ltd	B38	50	NTPC	02/03/18
13.	M/s. Giriraj Renewables Pvt Ltd	B4	50	KREDL	20/12/18
14.	M/s. Tata Power Renewable Energy Ltd	B18	50	KREDL	01/02/19
15.	M/s. Tata Power Renewable Energy Ltd	B17	50	KREDL	04/02/19
16.	M/s. ReNew Solar Power Pvt Ltd	B1	50	KREDL	21/03/19
17.	M/s. Giriraj Renewables Pvt Ltd	B7	50	KREDL	06/02/19
18.	M/s. ReNew Solar Power Pvt Ltd	B13	50	KREDL	15/03/19
19.	M/s. Giriraj Renewables Pvt Ltd	B8	50	KREDL	27/02/19
20.	M/s. ReNew Solar Power Pvt Ltd	B2	50	KREDL	21/03/19
21.	Azure Power India Pvt Ltd	B12	50	KREDL	06/03/19
22.	M/s. Tata Power Renewable Energy Ltd	B19	50	KREDL	06/03/19
23.	Azure Power India Pvt Ltd	B11	50	KREDL	12/03/19
24.	M/s. ReNew Solar Power Pvt Ltd	B3	50	KREDL	28/03/19
25.	M/s. ReNew Solar Power Pvt Ltd	B6	50	KREDL	29/03/19
26.	M/s. Tata Power Renewable Energy Ltd	B15	50	KREDL	22/03/19
27.	M/s. Tata Power Renewable Energy Ltd	B21	50	KREDL	25/03/19
28.	M/s. ReNew Solar Power Pvt Ltd	B10	50	KREDL	28/03/19
29.	M/s. Fortum Solar India Private Ltd	B14	50	KREDL	15/07/19
30.	M/s. Fortum Solar India Private Ltd	B20	50	KREDL	15/07/19
31.	M/s. Fortum Solar India Private Ltd	B9	50	KREDL	18/07/19
32.	M/s. Fortum Solar India Private Ltd	B5	50	KREDL	03/08/19
33.	M/s. Fortum Solar India Private Ltd	B40	50	KREDL	05/08/19
	Total		1650		

- 67. The Petitioner has submitted that the commissioning schedule of balance capacity of 400 MW solar park generation was expected in November/ December 2019 as per letter dated 14.11.2019 of KSPDCL.
- 68. The Petitioner has submitted that sharing of transmission charges for "Ultra Mega Solar Power Park at Tumkur (Pavagada), Karnataka-Phase-I" has already been clarified by Commission vide order dated 9.10.2018 in petition no. 2/TT/2018 and that the Petitioner is raising bills in the instant case on a similar pattern. The relevant extract from Order dated 9.10.2018 is reproduced below:

"Sharing of Transmission Charges

- 64. The transmission charges shall be recovered on monthly basis in accordance with Regulation 43 of the 2014 Tariff Regulations and shall be shared by the beneficiaries and long term transmission customers in Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 as amended from time to time."
- 69. The respondent, TANGEDCO has submitted that the petitioner has filed only the details of the generators and has not furnished proper certificates for RPO compliance. The petitioner has only submitted a NOC of Karnataka Discoms and no such certificate in respect of UP Discoms has been submitted. It has further submitted that Regulation 7 of the 2010 Sharing Regulations requires submission of RPO certificate for waiver of transmission charges and losses and not the NOC. On the issue of sharing of transmission charges, TANGEDCO submitted that the generators are eligible for waiver of transmission charges after fulfillment of all relevant requirements and submission of RPO certificates, and if the generation is not ready, the transmission charges from the date of execution of the transmission assets till the date of commissioning of the generating station should be borne by the concerned generator.

- 70. The petitioner has submitted that as per the letters dated 16.05.2018, 29.08.2018, 11.07.2019, 26.08.2019, 03.09.2019 and 14.11.2019 forwarded by M/s Karnataka Solar Power Development Corporation Limited (KSPDCL) pertaining to the eligibility of the generators for waiver of Transmission charges and Losses, KSPDCL has stated that:
 - (i) All the generators are awarded through Competitive bidding.
 - (ii) Generation capacity of 1650 MW was declared under commercial operation progressively from Janaury'18 to August'19 and balance is expected by December'19.
 - (iii) Power Purchase Agreement(s) have been executed with Karnataka Discoms for 1800 MW and UP Discoms for 200 MW for compliance of their Renewable power obligations (RPO).
- 71. With regard to LTA operationalization, the Petitioner has submitted that it has operationalized 600 MW LTA with effect from 12.07.2018 and 400 MW with effect from 28.09.2018. Balance LTA of 1000 MW (Phase-II) shall be made operational upon commissioning of Hiriyur Mysore 400 kV D/c line which is expected to be commissioned by December 2019. The assets covered in the instant petition are associated with 1050 MW at Pavagada Ultra Mega Solar Power Park (Phase-II). The Petitioner has referred to direction of the Commission in order dated 7.9.2017 in petition No 131/MP/2017 and submitted that it is required to commission its transmission assets matching with generation. Relevant extract from the order is as under:

(D) Transmission system for LTA-Phase-II (1000MW)



[&]quot;11 Based on the above addition/modification in the scope during 40th meeting of Order in Petition No. 131/MP/2017 Page 10 Standing Committee on Power System Planning of Southern Region held on 19.11.2016, the Phase-II transmission scheme comprises the following addition and modification in the scope:

- •Hiriyur-Mysore 400 kV D/C line [after completion of this line, one circuit of this line would be connected with one ckt of Tumkur (Pavagada)- Hiriyur line so as to make Tumkur (Pavagada)-Mysore direct line]
- Fixed series capacitor (40%) on 400 kV Tumkur (Pavagada)-Tumkur (Vasantnarsapura) D/C (QUAD) line at Tumkur (Pavagada) PS end
- Augmentation of 2x500 MVA, 400/220 KV transformer at Tumkur (Pavagada) Pooling station
- 1x125 MVAR bus reactor (2nd) at Tumkur (Pavagada) Pooling Station
- Third 400/220kV, 1x500 MVA transformer at Tumkur (Vasantnarsapura) S/s
- 1x80 MVAR switchable Line reactor at Mysore end of Hiriyur-Mysore D/C (each ckt) Additional ATS for Tumkur (Pavagada)
- 400 kV Tumkur (Pavagada) pooling station-Devanahalli (KPTCL) D/C (Quad) line with some portion on multi circuit towers."
- 12. We are of the view that the transmission system needs to be implemented matching with the time schedule of the generation projects so that the generation from Ultra Mega Solar Power Projects in Tumkur (Pavagada) District in the State of Karnataka do not get stranded."
- 72. During hearing dated 11.2.2020, the representative of the Petitioner submitted that all the requirements for waiver of transmission charges for the generators and RPO certificates have been submitted in Petition No. 49/TT/2019.
- 73. We have considered the submissions of the petitioner and respondent TANGEDCO. With regard to contention of TANGEDCO as regards solar generators meeting the transmission charges in case of delayed schedule, we notice that the generation associated with Pavagada Phase-II is commissioned matching with the associated transmission system. The Asset-II(a), for which COD is being claimed in the instant Petition, is a 1X500 MVA 400/220 kV ICT along with associated bays at Tumkur (Pavagada) Substation. The generators associated with Pavagada Phase-II are connected to this ICT and the Petitioner has submitted that approximately 650 MW is flowing through 400 kV Pavagada Substation. From the table above at paragraph 66, it is observed that 1400 MW of solar generation has been commissioned as on 31st March 2019, i.e. the COD of the instant asset. We find no

reason to agree with the contention of TANGEDCO that the transmission charges should be levied on solar generators that have been delayed.

- 74. As regards contention of TANGEDCO to ascertain the conditions of waiver of transmission charges, the Petitioner has submitted that approximately 1800 MW solar capacity has entered into PPA with respective Discoms of Karnataka and 200 MW with UP Discoms for fulfilment of their RPO. It is also observed that the solar generators were selected through competitive process of bidding through NTPC/KREDL. On the other hand, TANGEDCO has not submitted any documents in support of its contention. In our view, the generators have satisfied the conditions of waiver and are covered under provisions of Regulation 7 of the 2010 Sharing Regulations.
- 75. We also notice that the Petitioner has operationalized 1000 MW LTA corresponding to the transmission commissioned and non-oprationalization of remaining 1000 MW is on account of delay in commissioning of Hiriyur Mysore 400 kV D/c line (Asset-I of the instant petition for which tariff is not being considered presently) which is expected to be commissioned by December 2019. There is no force in argument of TANGEDCO that the solar generation should bear the cost on account of their delay in commissioning of generating station.
- 76. In view of the above, the transmission charges shall be shared as per Regulation 43 of CERC (Terms and Conditions of Tariff) Regulations, 2014. These charges shall be recovered on monthly basis and the billing, collection and disbursement of transmission charges shall be governed by provision of the 2010

Sharing Regulations.

77. This order disposes of Petition No.34/TT/2019.

Sd/-(I. S. Jha) Member Sd/-(P. K. Pujari) Chairperson