

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 124/TT/2018**

**Coram:**

**Shri P. K. Pujari, Chairperson  
Dr. M. K. Iyer, Member  
Shri I.S. Jha, Member**

**Date of Order : 25.4.2019**

**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 DOCO to 31.3.2019 for Asset-I: 220kV Kishanganga-Amargarh D/C line on M/C tower under "Transmission system associated with Kishenganga HEP" in Northern Region.

**And in the matter of:**

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

**.....Petitioner**

**Vs**

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited  
Vidyut Bhawan, Vidyut Marg,  
Jaipur - 302 005
2. Ajmer Vidyut Vitran Nigam Ltd  
Caligiri Road, Malviya Nagar,  
Jaipur-302017
3. Jaipur Vidyut Vitran Nigam Ltd  
Caligiri Road, Malviya Nagar,  
Jaipur-302017
4. Jodhpur Vidyut Vitran Nigam Ltd.  
Caligiri Road, Malviya Nagar,



Jaipur-302017

5. Himachal Pradesh State Electricity Board  
Vidyut Bhawan  
Kumar House Complex Building li  
Shimla-171 004
6. Punjab State Electricity Board  
Thermal Shed Tia  
Near 22 Phatak,  
Patiala-147001
7. Haryana Power Purchase Centre  
Shakti Bhawan, Sector-6  
Panchkula  
Haryana-134 109
8. Power Development Deptt.  
Govt. Of Jammu & Kashmir  
Mini Secretariat,  
Jammu
9. Uttar Pradesh Power Corporation Ltd.  
(Formerly Uttar Pradesh State Electricity Board)  
Shakti Bhawan,  
Lucknow - 226 001
10. Delhi Transco Ltd  
Shakti Sadan, Kotla Road,  
New Delhi-110 002
11. BSES Yamuna Power Ltd,  
BSES Bhawan, Nehru Place,  
New Delhi.
12. BSES Rajdhani Power Ltd,  
BSES Bhawan, Nehru Place,  
New Delhi
13. North Delhi Power Ltd,  
Pitampura,  
New Delhi – 110034
14. Chandigarh Administration  
Sector -9,  
Chandigarh.



15. Uttarakhand Power Corporation Ltd.  
Urja Bhawan  
Kanwali Road  
Dehradun.
16. North Central Railway  
Allahabad.
17. New Delhi Municipal Council  
Palika Kendra, Sansad Marg,  
New Delhi-110002
18. Madhya Pradesh Power Management Company Ltd.  
Shakti Bhawan, Rampur  
Jabalpur - 482 008
19. NHPC  
N.H.P.C Office Complex  
Sector-33  
Faridabad-121003(Haryana)

.....Respondents

**For Petitioner** : Shri S.K. Niranjan, PGCIL  
Shri S.K. Venkatesan, PGCIL  
Shri S.S. Raju, PGCIL  
Shri Amit Yadav, PGCIL  
Shri Nitish Kumar, PGCIL

**For Respondents** : Shri A.K. Pandey, NHPC Ltd.  
Shri Piyush Kumar, NHPC Ltd.  
Shri R.B. Sharma, Advocate, BRPL  
Shri Mohit Mudgal, Advocate, BRPL

### **ORDER**

The present Petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as “the petitioner”) for determination of transmission tariff from COD to 31.3.2019 for Asset-I: 220kV Kishanganga-Amargarh D/C line on M/C tower under “Transmission system associated with Kishenganga HEP” in

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Northern Region for the period 2014-19 block in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter "the 2014 Tariff Regulations").

2. The petitioner has made the following prayers:
- i. Approve the Transmission Tariff for the tariff block 2014-19 block for the assets covered under this petition.
  - ii. Allow the cost variation and admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.
  - iii. Allow tariff upto 90% of the Annual Fixed Charges in accordance with clause 7 (i) of Regulation 7 CERC (Terms and Conditions of tariff) Regulations,2014 for purpose of inclusion in the PoC charges.
  - iv. 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.
  - v. 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 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure ( if any) in relation to the filing of petition.
  - vi. Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.
  - vii. 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.
  - viii. Allow the approach the Hon'ble Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike from 01.01.2017 onwards
  - 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. Condone the delay in completion of subject assets on merit of the same being out of



the control of Petitioner in line with CERC Regulations'2014 12(2)(i) "uncontrollable factors"

- xi. Allow the initial spare as procured in the current petition in full as given in para-6.1 under Regulation 54 of the CERC (Terms and Condition of Tariff) Regulation, 2014, "Power to Relax".
- xii. Pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice

3. The scope of the scheme was discussed and agreed in 33<sup>rd</sup> standing committee meeting of Northern Region held on 23.12.2013 and in 30<sup>th</sup> NRPC meeting held on 28.02.2014. The Investment Approval and expenditure sanction to the transmission project was accorded by Board of Directors of POWERGRID, vide Memorandum dated 2<sup>nd</sup> Feb, 2015 at an estimated cost of ₹268.80 crores including IDC of ₹16.58 crores based on October, 2014 price level.

#### **Scope of work**

4. The scope of work covered under "Transmission system associated with Kishenganga HEP" is as follows:-

##### **Transmission Line:**

- i. Kishenganga – Amargarh 220 kV D/C
- ii. Kishenganga – Wagoora 220 kV D/C

*Note: Due to right of way constraint near Kishenganga HEP, portion from Kishenganga to Amargarh T-point is being proposed to be constructed as multi-circuit line. After Amargarh T-point, the lines will be constructed on D/C towers*

##### **Substation**

- i. Amargarh (PDD, J&K) 220kV Substation  
220 kV Line Bays – 2 Nos.
- ii. Wagoora(POWERGRID) 400/220kV Substation  
220 kV Line Bays – 2 Nos.



### **Revised Cost Estimate (RCE)**

5. The revised cost estimate of the said project was issued vide Memorandum dated 31.3.2017 at an estimated cost of ₹340.88 crores including IDC of ₹18.86 crores based on October, 2016 price level.

### **Revised scope of work**

6. The revised scope of work as per the Memorandum dated 31.3.2017 is as follows:-

#### **Transmission Line:**

- i. Kishenganga – Amargarh 220 kV D/C
- ii. Kishenganga – Wagoora 220 kV D/C

*Note: Due to right of way constraint near Kishenganga HEP, portion from Kishenganga to Amargarh T-point is being constructed as multi-circuit line. After Amargarh T-point, the lines will be constructed on D/C towers*

#### **Substation**

- i. Wagoora(POWERGRID) 400/220kV Substation  
220 kV Line Bays – 2 Nos.

7. The details of the transmission charges claimed by the petitioner are as under:-

(₹in lakh)		
<b>Particulars</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	51.10	622.99
Interest on Loan	62.88	731.74
Return on Equity	68.00	818.77
Interest on Working Capital	3.97	47.38
O & M Expenses	1.27	14.77
<b>Total</b>	<b>187.22</b>	<b>2235.65</b>



8. The details of the Interest on Working Capital (IoWC) claimed by the petitioner are as under:-

(₹in lakh)		
Particulars	2017-18	2018-19
O&M Expenses	1.19	1.23
Maintenance Spares	2.13	2.22
Receivables	349.47	372.61
Total Working Capital	352.79	376.05
Rate of Interest	12.60%	12.60%
<b>IoWC</b>	<b>44.45</b>	<b>47.38</b>
<b>IoWC (Pro-rata)</b>	<b>3.97</b>	<b>47.38</b>

9. 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. Uttar Pradesh Power Corporation Limited (UPPCL), Respondent No. 9 has filed reply vide affidavit dated 15.6.2018. BSES Rajdhani Power Limited (BRPL), Respondent No. 12 has filed reply vide affidavit dated 4.7.2018. The petitioner has filed its rejoinder to the reply filed by UPPCL and BRPL vide separate affidavits dated 17.10.2018. The issues raised by UPPCL and BRPL and the clarifications given by the petitioner are addressed in the relevant paragraphs of this order.

#### **Date of Commercial Operation (COD)**

10. The instant transmission asset was scheduled to be commissioned within 29 months from the date of approval of Board of Directors of Petitioner Company i.e. 2.2.2015. Therefore, the scheduled date of commissioning of the transmission system was 1.7.2017. The petitioner, in the main Petition dated 7.3.2018, had claimed anticipated COD as 1.3.2018. Further vide affidavit dated 17.10.2018, the petitioner revised the claimed COD as 27.2.2018 under Proviso (ii) of Regulation



4(3) of the 2014 Tariff Regulations.

11. In support of the claimed COD, the petitioner has submitted provisional CEA Certificate dated 22.2.2018 under Regulation 43 of CEA (Measures relating to safety and Electric Supply) Regulations, 2010, Trial Operation Certificate dated 9.10.2018 in accordance with Regulation 6.3(A)(5) of CERC (Indian Electricity Grid Code), Regulations, 2010, CMD Certificate and Letter dated 16.7.2018 from NRLDC regarding first time charging of 220kV Kishenganga (NHPC)- Delina (J&KPDD)-D/C in which NRLDC has remarked that 220kV Kishenganga(NHPC)-Delina(J&KPDD)-1 & 2 lines were idle charged on 25.2.2018.

12. NHPC, Respondent No. 19, in affidavit dated 29.11.2018 has made submissions that the contention of the petitioner claiming the COD under Proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations is not correct, as the transmission asset of PGCIL was first charged on 25.2.2018. Subsequently, the 1<sup>st</sup> Generating Unit of NHPC was synchronized with grid on 28.2.2018 and started generating the infirm power. Accordingly, there is no delay on part of NHPC as claimed by the petitioner. It has further submitted that there is provision for injection of power for a period of six months from the date of first synchronization prior to declaration of COD of units. Therefore, from the date of first synchronization of Unit#1 of Kishenganga HEP on 28.2.2018 till declaration of COD of units (i.e. 18.5.2018 for Unit#1 & 24.5.2018 for Unit#2&3), the project was under testing/ commissioning stage. Further, the trial operation in line with the regulatory provisions has been done on 20:20 hrs of 21.5.2018 till 20:20 hrs of 22.5.2018. Accordingly, the COD of the





petitioner's asset can only be declared w.e.f 23.5.2018 and NHPC is not liable for payment of any transmission charges/ IEDC during the intervening period (i.e. from COD claimed by Petitioner on 27.2.2018 till COD of first unit of generating station on 18.5.2018. From COD of the NHPC power station, it shall be the responsibility of beneficiaries of Kishenganga HEP to bear the transmission charges.

13. In response, the petitioner in affidavit dated 12.12.2018 has submitted that the petitioner has proposed the COD for the subject asset as 27.2.2018 and instant assets has been back charged from 25.2.2018 from Amargarh end as the generation at Kishenganga HEP was not available. It has submitted that as the petitioner has completed all its work and charged the instant asset on 25.2.2018, therefore, COD of the subject assets qualifies under Proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations. Accordingly, the COD for subject assets may be allowed as 27.2.2018.

14. We have considered the submissions made by Petitioner and Respondents regarding admissibility of COD under Proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations. Proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations, read as under:

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(3) Date of commercial operation in relation to a transmission system shall mean the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from sending end to receiving end:

Provided that:

- (i) where the transmission line or substation is dedicated for evacuation of power from a particular generating station, the generating company and transmission licensee shall endeavour to commission the generating station and the transmission system simultaneously as far as practicable and shall ensure the same through appropriate Implementation Agreement in accordance with Regulation 12(2) of these Regulations :



- (ii) in case a transmission system or an element thereof is prevented from regular service for reasons not attributable to the transmission licensee or its supplier or its contractors but is on account of the delay in commissioning of the concerned generating station or in commissioning of the upstream or downstream transmission system, the transmission licensee shall approach the Commission through an appropriate application for approval of the date of commercial operation of such transmission system or an element thereof.

15. In support of COD of Asset-I, the petitioner has submitted provisional CEA Certificate dated 22.2.2018 under Regulation 43 of CEA (Measures relating to safety and Electric Supply) Regulations, 2010, NRLDC letter dated 16.7.2018 with first time charging date as 25.2.2018, indicating intermittent power flow during trial run period. The petitioner has also submitted the CMD Certificate vide affidavit dated 17.10.2018 certifying that the transmission line, and communication system conform to the relevant Grid Standard and Grid Code and are capable of operation to their full capacity with effect from 27.2.2018 as required under Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010. Thus, in our opinion, when all the conditions for commercial operation are being met, the petitioner cannot be denied the leverage of declaration of Commercial Operation of Asset-I. Considering these facts, we approve the Commercial Operation Date of instant assets as 27.2.2018 under Proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations.

16. Further, the Implementation agreement entered between NHPC & PGCIL dated 8.7.2014, para-1 (i) read as under:

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*(i) In the event of respective units of generating station are not commissioned (COD) by scheduled commissioning date of the associated transmission system (ATS), generation company shall bear the IDC or the transmission charges if the transmission system*



*transmission system is declared under commercial operation by the CERC in accordance with the clause 3 of Regulation 4 of Tariff Regulations, 2014, till the generating station is commissioned (COD).*

17. Thus, as the COD of the instant transmission assets has been approved as 27.2.2018 under Proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations and the COD of unit-I of NHPC was declared on 18.5.2018, the transmission charges from 27.2.2018 (COD of the transmission lines) to 17.5.2018 (day before COD of unit-I of NHPC) shall be borne by NHPC.

### **Time over run**

18. As per the Investment Approval, the commissioning schedule of the project was 29 months from the date of Investment Approval. The date of Investment Approval is 2.2.2015, hence the asset was scheduled to be commissioned on 1.7.2017 against which the COD of the subject asset has been approved as 27.2.2018 under Proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations. As such, there is delay of 7 months 26 days in commissioning of the asset covered in the instant Petition.

### **Reasons of time over-run**

19. The petitioner has submitted the following reasons for delay in Commissioning of the Asset.

#### **I. Law & order situation and severe snowfall:-**

- i. Petitioner has submitted that the Kishanganga – Amargarh transmission Line is passing through Shopian, Baramulla and Bandipora. Since 2014, there has been a rise in the militant activities. There have been frequent encounters



between militants and armed forces. Search operations by securities forces are day to day routine in these districts. Several times, Site Engineers with construction gangs are stuck in these search operations and Construction works are strictly prohibited at construction sites. Labor arrangement and shifting of machinery at different sites was affected several times.

- ii. The petitioner has further submitted that the law and order situation in entire Kashmir valley got totally disturbed since 9th July, 2016 after a military operation. The agitation by local population and imposition of curfew & shutdown halted the construction activities. The agitation continued till Jan' 2017 and situation came back to normal in Kashmir valley only in the first week of Feb' 2017. Thereafter due to severe snowfall and also due to various law & order issues construction work was disturbed till the end of Apr' 2017. Petitioner in support of events has submitted detailed chronology of newspaper cutting from July' 2016 to April' 2017 as below:-

S.no	Headline	Date
1	Burhan Wani killed, Kashmir on boil, Massive protest	9.7.2016
2	Fresh killing, Massive protest	10.7.2016
3	Curfew to continue for 6th straight day	14.7.2016
4	Hit by "full cartridge" of pellets	22.7.2016
5	Stringent curfew	28.7.2016
6	40 Injured in fresh clash	29.7.2016
7	120 injured	30.7.2016
8	Valley remains tense	31.7.2016
9	Curfew, Clashes continue	1.8.2016
10	Civilian Killed, protest etc	3.8.2016
11	Massive rallies, shutdown against valley killings etc	5.8.2016
12	3 more civilian, 400 injured	6.8.2016
13	Day 33: Protest continue 20 injured	11.8.2016
14	Day 50: situation as on Day 1;Toll 70, GeelaniTetained	28.8.2016
15	100 more injured, sudden curfew imposed etc	31.8.2016
16	Day 55: Chased by forces, huge freedom ralies etc..	2.9.2016
17	student killed	18.9.2016



18	Day 72: forces foil pro-freedom rallies, 60 injured	19.9.2016
19	Day 73: Toll 87	20.9.2016
20	Day 74: Clashes, protest continue,50 more injured	21.9.2016
21	Day 75:40 injured in forces' action	22.9.2016
22	40 injured as clashes, protest continue	23.9.2016
23	Day 80: forces continue to foil pro-freedom rallies	27.9.2016
24	Day 81: Amid stone pelting	28.9.2016
25	Day 82: Curfew returns to many parts as forces stop freedom rallies	29.9.2016
26	Shutdown continues on Day 83	30.9.2016
27	Day 87: Protests clashes continue	4.10.2016
28	Kashmir uprising: Protest, clashes continue	7.10.2016
29	Govt. Foils 'UN Chalo' with curfew	8.10.2016
30	12 yr old pelleted to death	9.10.2016
31	93 days on, pellet horror continues across Kashmir	10.10.2016
32	Day 94: Strict curfew imposed in Srinagar	11.10.2016
33	Day 95: Curbs in Srinagar on junaid's chahurum	12.10.2016
34	Day 98: Over 50 injured in fresh clashes	15.10.2016
35	Unrest enters 100th days	16.10.2016
36	Kashmir uprising completes 100days	17.10.2016
37	Day 115: Over 30 injured	1.11.2016
38	Day 116: Uneasy calm prevails in Kashmir	2.11.2016
39	Day 117: 40 civilians injured in soura	3.11.2016
40	Day 118: Protest in soura	4.11.2016
41	Day 119: 20 injured in clashes	5.11.2016
42	Day 121: Uneasy calm prevails in Kashmir	7.11.2016
43	Day 122: Shutdown continues	8.11.2016
44	Days 124: Agitation enters into 5th month	9.11.2016
45	Day 125: Clashes in Pulwama	10.11.2016
46	Day 126: Day after fresh calendar; Mirwaiz, Malik detained again	11.11.2016
47	Day 127: Kashmir remains shut	12.11.2016
48	Day 127: Curfew lifter from Srinagar parts; shutdown continues	13.11.2016
49	Day 128: Kashmir continue to be shut	14.11.2016
50	Day 129: Uneasy calm in Kashmir	16.11.2016
51	After 4-months halt anti-militancy operation intensified	19.11.2016
52	Day 136: Kashmir shuts again	22.11.2016
53	Day 137: Pellets injure 15 in sopore	24.11.2016
54	2 cops killed, 1 injured in kulgam attack	26.11.2016
55	Day 143: Shutters down again after 2-day relaxation	29.11.2016
56	Day 144: Shutdown continues	30.11.2016
57	Day 145: Several injured in Tehab clashes	31.11.2016
58	Govt. foils Lal chowk march	6.12.2016
59	Youth killed, scores injured in protests during gunfight	9.12.2016
60	Clashes leave 20 injured	10.12.2016
61	Resistance camp extends protest program till Jan 15	31.12.2016
62	Fresh snow fall breaks Kashmir's longest dry spell	4.1.2017
63	More snowfall	5.1.2017
64	fresh snow in Srinagar	6.1.2017
65	SASE continues with avalanche warning for J&K higher reaches	9.1.2017
66	Cold wave intensifies	14.1.2017
67	Slight respite from cold after fresh snowfall in Kashmir areas	16.1.2017
68	Brace up more snowfall tomorrow	17.1.2017
69	Fresh snowfall disrupts life	25.1.2017



70	Snowfall claims 8 lives	26.1.2017
71	Gurez avalanche: 4 more bodies recovered , toll 14	28.1.2017
72	Overnight snowfall in higher reaches	1.2.2017
73	Landslide at mehar: Traffic hit, highway closed	3.2.2017
74	Fresh snowfall disrupts life, highway remains closed for 4th day	6.2.2017
75	Kashmir shuts on afzal guru anniversary	10.2.2017
76	Police foils UN chalo detains JKLF chief Yasin Malik	11.2.2017
77	Kashmir shuts to remember Maqbool Bhat	12.2.2017
78	Kashmir shuts in protest against killings	14.2.2017
79	3 soldiers , militant killed in Hajin gun battle	15.2.2017
80	Police foil Kulgam March	16.2.2017
81	Drass receive fresh snowfall	20.2.2017
82	Landslides close srinagar-jammu highway	1.3.2017
83	Expect rains for 4 days	8.3.2017
84	Highway closed; Rains likely to continue	9.3.2017
85	3 bullets pierce many dreams	29.3.2017
86	Kashmir mourns chandoora killings	30.3.2017
87	Kashmir protests chandoora killings	1.4.2017
88	Kashmir shut against PM visit	3.4.2017
89	Rains hit life in Kashmir	4.4.2017
90	Kashmir shuts against Sajad's Killing	16.4.2017
91	2 LeT militants killed in Budgam	23.4.2017
92	Rains lash Kashmir	29.4.2017
93	Kashmir shuts against Kupwara civilian killings	30.4.2017

## II. ROW issue in district Bandipora & Baramulla:-

- i. The petitioner has submitted that there was continuous ROW issue in district Bandipora & Baramulla from May' 2016 to Jan' 2018 i.e 20 months. The villagers were demanding higher compensation and also started illegal construction. Letters were written to various authorities to resolve the RoW issue for early completion of the project. Detailed Chronology of correspondences submitted by the petitioner are as under:-

District Bandipora				
S.no	Date	To	From	Particulars
1	19.12.2016	Addl. Deputy commissioner, Bandipora	Asst. GM, Powergrid	RoW at Loc-24/1 & 24B/1
2	20.12.2016	The tehsildar, Aloosa	Addl. Deputy commissioner, Bandipora	To sort out the issue
3	18.2.2017	Addl. Deputy commissioner, Bandipora	Asst. GM, Powergrid	Regarding 5 No. land acquisition and 16 tower location RoW issue



4	23.2.2017	Addl. Deputy commissioner, Bandipora	Asst. GM, Powergrid	RoW at Loc 19A/0
5	23.2.2017	The divisional Commissioner, Kashmir	Asst. GM, Powergrid	RoW at Loc- 19A/0,19A/1 & 20/0
6	25.2.2017	The tehsildar,Aloosa	Addl. Deputy commissioner, Bandipora	To take appropriate action
7	1.3.2017	The Deputy Commissioner, Bandipora	Addl. GM, Powergrid	Administrative action for RoW issue at 25 Nos. location
8	7.4.2017	Addl. Deputy commissioner, Bandipora	Asst. GM, Powergrid	RoW at Loc-27/2
9	12.4.2017	Addl. Deputy commissioner, Bandipora	Asst. GM, Powergrid	RoW in span-25/0 to 25/1
10	13.4.2017	The Deputy Commissioner, Bandipora	Addl. GM, Powergrid	To expedite land compensation and to solve RoW at 17 Nos. location
11	21.4.2017	The Deputy Commissioner, Bandipora	Addl. GM, Powergrid	To expedite land compensation and to solve RoW at 17 Nos. location
12	4.5.2017	The Deputy Commissioner, Bandipora	Asst. GM, Powergrid	To expedite land compensation and to solve RoW at 17 Nos. location
13	8.5.2017	Addl. Deputy commissioner, Bandipora	Asst. GM, Powergrid	RoW at span 25/0-27/1
14	8.5.2017	Addl. Deputy commissioner, Bandipora	Asst. GM, Powergrid	RoW at span 25/0-27/1
15	9.5.2017	The tehsildar,Aloosa& S.H.O Bandipora	Addl. Deputy commissioner, Bandipora	To provide police protection
16	17.5.2017	Office order Deputy commissioner, Bandipora		Committee to look of RoW issue
17	19.5.2017	The Deputy Commissioner, Bandipora	Addl. GM, Powergrid	To expedite land compensation and to solve RoW at 179Nos location
18	3.6.2017	The S.H.O Bandipora	The Deputy Commissioner, Bandipora	To take immediate action
19	3.6.2017	Addl. Deputy commissioner, Bandipora	Asst. GM, Powergrid	RoW at LOC-24B/2



20	9.6.2017	The Deputy Commissioner, Bandipora	Asst. GM, Powergrid	RoW at Loc-19/0
21	12.6.2017	The tehsildar, Aloosa & S.H.O Bandipora	Addl. Deputy commissioner, Bandipora	To take immediate action
22	4.7.2017	The S.H.O Bandipora	Asst. GM, Powergrid	RoW at LOC-24B/2
23	11.7.2017	The Deputy Commissioner, Bandipora	Asst. GM, Powergrid	RoW at Loc-31/0
24	12.7.2017	The S.H.O Bandipora	The district magistrate, Bandipora	To take strict action
25	18.8.2017	Addl. Deputy commissioner, Bandipora	Asst. GM, Powergrid	RoW at Loc- 38/0
26	18.8.2017	The tehsildar, Bandipora	Addl. Deputy commissioner, Bandipora	To present in office
27	6.9.2017	The Deputy Commissioner, Bandipora	GM, Powergrid	To resolve RoW issue at 24B/0, 27/2, 30C/0, & 40/0
28	15.9.2017	The Deputy Commissioner, Bandipora	Asst. GM, Powergrid	RoW issue at Loc-30A/0
29	19.9.2017	The tehsildar, Bandipora	Addl. Deputy commissioner, Bandipora	To take necessary action
30	28.9.2017	The Deputy Commissioner, Bandipora	Asst. GM, Powergrid	RoW at location 24B/2
31	28.9.2017	The Deputy Commissioner, Bandipora	Asst. GM, Powergrid	RoW at span:-29A/1-29A/3, 30/1 & 30C/0
32	11.10.2017	The Deputy Commissioner, Bandipora	Asst. GM, Powergrid	RoW at Loc-29A/3
33	11.10.2017	The tehsildar, Bandipora	Addl. Deputy commissioner, Bandipora	To present in office
34	13.10.2017	The Deputy Commissioner, Bandipora	Asst. GM, Powergrid	RoW at Span:-29/2-29A/0
35	20.11.2017	Addl. Deputy commissioner, Bandipora	Asst. GM, Powergrid	RoW at Loc-30A/0
36	20.11.2017	Addl. Deputy commissioner, Bandipora	Asst. GM, Powergrid	RoW in span:- 23C/0-23D/0
37	9.1.2018	Office order Deputy commissioner, Bandipora		Committee to look of RoW issue





38	9.1.2018	The Deputy Commissioner, Bandipora	Asst. GM, Powergrid	RoW at span-25/0 to 25/1
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<b>District Baramulla</b>				
<b>S.no</b>	<b>Date</b>	<b>To</b>	<b>From</b>	<b>Particulars</b>
1	12.5.2016	Addl. Deputy commissioner, Baramulla	Chief Manager, Powergrid	RoW issue at Loc-16M/0, 16N/0,16O/0,17/0 & 18/0
2	17.5.2016	Meeting notice from Addl. Deputy commissioner, Baramulla		Meeting notice to resolve RoW
3	25.5.2016	Addl. Deputy commissioner, Baramulla	Chief Manager, Powergrid	RoW issue at Loc-16M/0, 16N/0,16O/0,17/0,13A/0,12/2,9/0,9A/0,7B/0,8/0,5/0,6/0,6/1,6/2,7/0 & 7A/0
4	1.6.2016	The Deputy Commissioner, Baramulla	Addl. GM, Powergrid	RoW issue at Loc-16M/0, 16N/0,16O/0,17/0,13A/0,12/2,9/0,9A/0,7B/0,8/0,5/0,6/0,6/1,6/2,7/0 & 7A/0
5	15.6.2016	The tehsildar, Dangerpora	Chief Manager, Powergrid	RoW at 4 Nos. location
6	3.2.2017	Addl. Deputy commissioner, Baramulla	Asst. GM, Powergrid	To expedite Land compensation and RoW issue at various locations
7	11.3.2017	The SDM, Sapore	Addl. Deputy commissioner, Baramulla	To stop illegal construction in Span:-9A/0-9/0
8	13.4.2017	The Deputy Commissioner, Baramulla	Addl. GM, Powergrid	To expedite Land compensation and RoW issue at various 17 No. locations
9	21.4.2017	The Deputy Commissioner, Baramulla	Addl. GM, Powergrid	To expedite Land compensation and RoW issue at various 15 No. locations
10	21.4.2017	Addl. Deputy commissioner, Baramulla	Asst. GM, Powergrid	RoW issue in span: 1/0 to T-point
11	4.5.2017	The Deputy Commissioner, Baramulla	Asst. GM, Powergrid	To expedite Land compensation and RoW issue at various 9 No. locations
12	19.5.2017	The Deputy Commissioner, Baramulla	Addl. GM, Powergrid	To expedite Land compensation and RoW issue at various 10 No. locations
13	23.5.2017	Addl. Deputy commissioner, Baramulla	Asst. GM, P Powergrid	RoW issue at Loc-14E/0



14	30.6.2017	Addl. Deputy commissioner, Baramulla	Asst. GM, Powergrid	To expedite Land compensation
15	26.7.2017	The Deputy Commissioner, Baramulla	Asst. GM, Powergrid	Regarding distribution of Land compensation
16	29.7.2017	Addl. Deputy commissioner, Baramulla	Asst. GM, Powergrid	For Administrative help at Loc-6/1, 6/2, 9/0,14E/0, 16C/0, 16N/0,18/0
17	3.8.2017	The Deputy Commissioner, Baramulla	GM, Powergrid	For Administrative help at Loc-6/1, 6/2, 9/0,14E/0, 16C/0, 16N/0,18/0
18	9.8.2017	Asst. Commissioner Baramulla	Asst. GM, Powergrid	For Administrative help at Loc-6/1, 6/2, 9/0,14E/0, 16C/0, 16N/0,18/0
19	6.9.2017	The Deputy Commissioner, Baramulla	GM, Powergrid	RoW issue at 1/0,t-point,2/0,6/1,7A/0,9/0, 14A/0, 14C/4 &14E/0
20	14.9.2017	Asst. Commissioner Baramulla	Asst. GM, Powergrid	Critical RoW at Loc-9A/4
21	18.9.2017	Asst. Commissioner Baramulla	Asst. GM, Powergrid	Critical RoW at Loc-14C/4
22	20.9.2017	Asst. Commissioner Baramulla	Asst. GM, Powergrid	Critical RoW at Loc-1/0 DC, T-point, 1/0 MC, 2/0 MC
23	21.9.2017	The tehsildar, Baramulla	Asst. Commissioner Baramulla	To take necessary action
24	3.10.2017	Asst. Commissioner Baramulla	Asst. GM, Powergrid	Critical RoW at Loc-9A/4,14A/0,14C/4 & 14E/0
25	6.10.2017	The tehsildar, Watergram	Asst. GM, Powergrid	RoW at Loc-9A/4
26	2.11.2017	Addl. Deputy commissioner, Baramulla	Asst. GM, Powergrid	Critical RoW at Loc-14C/4
27	2.11.2017	The Deputy Commissioner, Baramulla	Asst. GM, POWERGRID	RoW at Loc-1/0 DC, T-point, 1/0 MC, 2/0 MC,6/1, 14C/4, 14E/0
28	3.11.2017	Addl. Deputy commissioner, Baramulla	Asst. GM, Powergrid	RoW in span-3/0 to 4A/0
29	3.11.2017	The tehsildar, Bomia	Addl. Deputy commissioner, Baramulla	To take necessary action
30	4.11.2017	Addl. Deputy commissioner, Baramulla	Asst. GM, Powergrid	For land compensation



31	8.11.2017	The Deputy Commissioner, Baramulla	Asst. GM, Powergrid	Threatening by Locals
32	9.11.2017	The tehsildar Baramulla	Asst. Commissioner Baramulla	To provide police protection
33	13.11.2017	Addl. Deputy commissioner, Baramulla	Asst. GM, Powergrid	Critical RoW issue at Loc-12/2
34	13.11.2017	The tehsildar, Watergram	Asst. Commissioner Baramulla	To take necessary action
35	13.11.2017	Addl. Deputy commissioner, Baramulla	Asst. GM, Powergrid	RoW issue in village Hardshiva
36	21.11.2017	Addl. Deputy commissioner, Baramulla	Asst. GM, Powergrid	Critical RoW issue at Loc-7A/0
37	28.11.2017	The Deputy Commissioner, Baramulla	Asst. GM, Powergrid	RoW issue at Loc-13A/0 and in Span:13/0 to 13B/0
38	5.12.2017	The Chief Engineer, Srinagar	Asst. GM, Powergrid	RoW issue in village Hardshiva
39	15.12.2017	The Deputy Commissioner, Baramulla	Asst. GM, Powergrid	For land compensation
40	20.12.2017	The Deputy Commissioner, Baramulla	Asst. GM, Powergrid	RoW issue at Loc-13A/0
41	1.1.2018	Office order Deputy Commissioner, Baramulla		Committee to look of RoW issue
42	23.1.2018	The Deputy Commissioner, Baramulla	Asst. GM, Powergrid	RoW issue at Loc-6/1
43	29.1.2018	The Deputy Commissioner, Baramulla	Asst. GM, Powergrid	RoW at Loc-2/0 and 4/0

20. Based on the above reasons, the petitioner has requested to condone the delay in completion of subject asset on merit as the same is being out of the control of the petitioner in line with Regulation 12(2)(i) of the 2014 Tariff Regulations.

21. BRPL in affidavit dated 3.7.2018 has submitted that BRPL is not concerned with time overrun issues and it may be settled between the petitioner and the NHPC



limited.

22. We have considered the submissions made by the petitioner and the Respondents. The petitioner has prayed to condone the delay in accordance with Regulation 12(2) of the 2014 Tariff Regulations which is as under:-

12xxxx

(1) (1) the “controllable factors” shall include but shall not be limited to the following:  
(a) Variations in capital expenditure on account of time and/or cost over-runs on account of land acquisition issues;  
(b) Efficiency in the implementation of the project not involving approved change in scope of such project, change in statutory levies or force majeure events; and  
(c) Delay in execution of the project on account of contractor, supplier or agency of the generating company or transmission licensee.

12.xxx

(2) The “uncontrollable factors” shall include but shall not be limited to the following:  
(i) Force Majeure events; and  
(ii) Change in law.

Provided that no additional impact of time overrun or cost over-run shall be allowed on account of non-commissioning of the generating station or associated transmission system by SCOD, as the same should be recovered through Implementation Agreement between the generating company and the transmission licensee:

Provided further that if the generating station is not commissioned on the SCOD of the associated transmission system, the generating company shall bear the IDC [and IEDC] 6 or transmission charges if the transmission system is declared under commercial operation by the Commission in accordance with second proviso of Clause 3 of Regulation 4 of these Regulations till the generating station is commissioned:

Provided also that if the transmission system is not commissioned on SCOD of the generating station, the transmission licensee shall arrange the evacuation from the generating station at its own arrangement and cost till the associated transmission system is commissioned

Further, as per Regulation, 3(9) & 3(25) of the 2014 Tariff Regulations, provisions related to “Change in Law” and “Force majeure” respectively are under:



3xxx

(9) "Change in Law" means occurrence of any of the following events:

- (a) Enactment, bringing into effect or promulgation of any new Indian law; or
- (b) Adoption, amendment, modification, repeal or re-enactment of any existing Indian law; or
- (c) change in interpretation or application of any Indian law by a competent court, Tribunal or Indian Governmental Instrumentality which is the final authority under law for such interpretation or application; or
- (d) Change by any competent statutory authority in any condition or covenant of any consent or clearances or approval or licence available or obtained for the project; or
- e) Coming into force or change in any bilateral or multilateral agreement/treaty between the Government of India and any other Sovereign Government having implication for the generating station or the transmission system regulated under these Regulations.

3xxx

(25) 'Force Majeure' for the purpose of these Regulations means the event or circumstance or combination of events or circumstances including those stated below which partly or fully prevents the generating company or transmission licensee to complete the project within the time specified in the Investment Approval, and only if such events or circumstances are not within the control the generating company or transmission licensee and could not have been avoided, had the generating company or transmission licensee taken reasonable care or complied with prudent utility practices:

- a) Act of God including lightning, drought, fire and explosion, earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, geological surprises, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred years; or
- b) Any act of war, invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action; or
- c) Industry wide strikes and labour disturbances having a nationwide impact in India;

23. As per the Investment Approval, the commissioning schedule of the project is 29 months from the date of Investment Approval. The date of Investment Approval is 2.2.2015, hence the assets are scheduled to be commissioned on 1.7.2017 against which COD of the subject asset has been considered as 27.2.2018 under Proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations. Hence there is delay of 7 months 26 days in commissioning of the asset covered in the instant Petition. The petitioner



has stated that the delay in instant asset is mainly due to RoW issues, severe rainfall and law and order problems. We note that the LOA (Letter of Award) was also issued in Mar' 2015 immediately after investment approval. Based on the submissions & justifications as above from para -19 to 22, delay in subject assets can be summarized as under:

S. no	Month		Reason(s) for delay	Delay	Remarks
	From	To			
1	9.7.2016	30.4.2017	Law & order Problem due to militant activity and severe snowfall	9 months 22 days	
2	19.12.2016	9.1.2018	RoW issue in district Bandipora	8 months 9 days	The delay portion from 19.12.2016 to 30.4.2017(4 months 22 days due to RoW issues in district Bandipora has been subsumed above in s.no-1 and further, the delay period from 1.5.2017 to 9.1.2018( 8 months 9 days) has been considered as delay period separately here, for Row issues in Bandipora.
3	12.5.2016	29.1.2018	RoW issue in district Baramulla	Time period considered here is from 12.5.2016 to 8.7.2016 (1 months 28 days) + Time period from 10.1.2018 29.1.2018(20 days)= 1 months 48 days	Time period from 9.7.2016 to 9.1.2018( 17 months 31 days) subsumed above in s.no-1& 2
4	Total delay due to Law & order Problem due to militant activity and severe snowfall, RoW issue in district Bandipora and RoW issue in district Baramulla(S.no-1+2+3)			18 months 79 days	
5	Delay in instant Petition			7 months 26 days	

24. From table as indicated in above para 23, we find that the total delay incurred due to Law & Order problem due to militant activity and severe snowfall, RoW issue



in the district Bandipora and Baramulla is of 18 months 79 days, whereas the delay claimed by the petitioner in the instant assets is of 7 months 26 days which is within the overall delay of 18 months 79 days. Accordingly, the delay of 7 months 26 days incurred by Petitioner on account of Law & Order problem arising due to militant activity and severe snowfall, RoW issue in district Bandipora and Baramulla are considered to be beyond the control of the petitioner. Hence the delay of 7 months 26 days in the commissioning of the asset as claimed by the petitioner has been condoned.

### **Capital Cost**

25. Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations provides 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;39



(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.

26. The petitioner vide affidavit dated 28.2.2018, submitted the details of approved apportioned cost and revised approved apportioned cost. Further vide affidavit dated 15.3.2019, the petitioner has furnished the details of capital cost as on the date of commercial operation (COD) and estimated additional capital expenditure incurred or projected to be incurred for the instant asset vide Auditor's Certificate dated 14.3.2019. The details as submitted by the petitioner are as follows:-

Apportioned approved cost(FR)	Apportioned approved cost as per RCE	Actual Exp. Upto COD	Actaul Exp. during FY	Estimated Exp. For FY		Estimated Completion cost*
				2017-18	2018-19	
14524.38	17833.68	13170.55	131.86	1491.04* (1002.98+488.06)	1952.24	16745.69

\*As per the Auditor's Certificate, out of the total expenditure for FY 2018-19 amounting to ₹1491.04 lakh, ₹1002.98 lakh from 1.4.2018 to 31.12.2018 is based on the books of the accounts and the remaining amount of ₹488.06 is based on the management estimate.

### **Cost over-run**

27. The total estimated completion cost of instant transmission assets is ₹16745.69 lakh against the apportioned approved cost as per the RCE of ₹17833.68 lakh. As such, there is no cost overrun. However, as compared with apportioned approved cost (FR) of ₹14524.38 lakh, the estimated completion cost exceeds by an amount of ₹3218.84 lakh. Hence, as per FR cost of ₹14524.38 lakh, there is cost overrun of ₹3218.84 lakh.





28. The petitioner vide affidavit dated 7.3.2018 has submitted the reasons of cost over-run and cost variation along with Form-5 with detailed item-wise cost variation.

The brief reasons of cost over-run in the instant assets as stated by the petitioner are as below:-

- i. Increase of ₹36.85 Cr in Preliminary Investigation, Right of way, forest clearance, PTCC, general civil works etc. and is based on actual payment to statutory authorities.
- ii. Increase of ₹12.10 Cr in transmission line material due to quantity variation due to diversion of route near Wular Lake which lead to increase in overall line length from 39 km to 42.7 km and also due to price variation based on price quoted by the bidder in competitive bidding.
- iii. Increase of ₹1.55Cr in taxes and duties of transmission line material and Decrease of Rs. 0.50Cr in taxes and duties of Substation equipments on actual basis.

29. UPPCL vide affidavit dated 14.6.2018 and BRPL vide affidavit dated 3.7.2018, have submitted that no cost overrun may be allowed in the instant assets without proper and justified reasons.

30. In response to submissions by UPPCL and BRPL, PGCIL filed its rejoinder dated 17.10.2018 and submitted reasons with regard to cost variation and stated that expenditure incurred for preliminary investigation, ROW, forest clearance, PTCC, General Civil works was on actual basis. Details submitted by the petitioner are as under:-

S.no.	Particulars	As per original estimate (FR)	Total as per Actual Certificate	Remarks
1	Land Compensation	273.28	2184.00	Increase in land compensation for transmission line is due to increase in line length from 39 kms to 42.7 kms(% increase of 9.5 %).Land considered in FR was 109.31 Kanal .However in actual 140.01 Kanal Land has been used for Kishanganga – Amargarh Line due to increase in line length/change in route of line. At the time of preparation of FR, Land



				acquisition cost for towers in Kishanganga – Amargarh Line was considered as 273.28 lakh (2.5 lakh / Kanal). Despite being various negotiations by Public Negotiation Committee the higher rates were approved which were agreed by land owners. Land compensation estimates in actual agreed for Rs. 2184.00 lakh (15.64 lakh / Kanal) has been worked out on the basis of various Public negotiation committees.
2	Crop Compensation	188.07	864.47	Increase in payment towards crop compensation from Rs.168.57 lakh to Rs. 864.47 lakh due to increase in rate of crop compensation and Tree Compensation (Calculations are made on rates provided by Local Administration) Earlier the line was passing through water logged areas, wherein, the route was changed to avoid huge cost of concreting pile foundation. The changed route passes through crop/vegetable fields and highly cultivated area, which could not be avoided further and resulted in increase in crop likely to damage.
3.	Trees/Afforestation	244.76	1356.42	Increase in payment towards afforestation from Rs. 244.76 lakh (As per FR) to 1356.42 lakh with increase in 1111.66 lakh. Earlier the line was passing through water logged areas, wherein, the route was changed to avoid huge cost of concreting pile foundation. The changed route passes through apple, Apricot Almond orchards and highly cultivated area, which could not be avoided further and resulted in increase in trees likely to damage. Trees compensation has been worked out based on actual trees likely to infringe safe electrical clearances and rates provided by state Horticulture department.
4.	Route Alignment and Soil Investigation	39.90	26.32	As Per Actual

31. Further in affidavit dated 17.10.2018, the petitioner has submitted the following:

- a) FR estimates were prepared based on the preliminary survey and detailed survey was conducted after placing the award and mobilization of gang for actual work on the site. LOA was awarded on date 26.03.2015 to M/S L&T. M/S L&T mobilized on site and started the construction works. During Construction on M/C Portion of 220 kV Kishanganga – Amargarh route new constraints / impediments have encountered,



which were not known to site during route alignment like Low bearing Capacity of Soil etc. Soil investigation tests were conducted at various locations. As per test report results, it was seen that due to close proximity of Wular Lake, The bearing capacity of soil was very low and pile foundation can be the only solution. Therefore, diversion of line away from Wular Lake was decided, to avoid the pile foundations. This major change in route caused increased in line length from 39 km to 42.7 km. Many efforts were exercised by site to fix and finalize the route in a most techno-economical manner and with due consideration of Catchment Area of Wular Lake. Therefore, to avoid the extra cost burden on the beneficiaries due to requirement of pile foundation route alignment was changed.

- b) Increase in cost for transmission line material is partly due to increase in line length (From 39 kms to 42.7 kms) and due to higher bid price received in actual award. This is evident from 5 of the Petition as FR cost is ₹2034.78 lakh, however, RCE cost is ₹49.44 lakh.
- c) Increase/decrease in award cost received in competitive bidding w.r.t. initial estimates (FR cost) is mainly due to open competitive bidding route which is followed by providing equal opportunity to all eligible firms, lowest possible market prices for required product/services is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may happen to be lower or higher than the cost estimate depending upon prevailing market conditions. Basis of arriving at the cost estimates along with background computation and efforts made by the petitioner to achieve the cost efficiencies while estimating the capital cost of the Transmission Assets covered under instant Petition:
- d) The petitioner has also submitted that, it follows a robust and time tested system of preparing cost estimates before obtaining Investment Approval. After Investment Approval, the award letters are placed on the executing Agencies on the basis of tendering process as per best industry practices and due diligence including justification of bid prices vis-à-vis estimated cost before placing the awards. Further, the cost control measures are taken during execution of the project and only under unavoidable situations caused by the actual soil/terrain conditions, crossing requirements (river, Power line, Railway line, forest stretches and any other compelling technical reason), the cost may undergoes changes.

32. We have considered the submissions of the petitioner and the Respondents.

On the basis of the submission of the petitioner, it is observed that cost over-run is mainly due to increase in length of the transmission line from 39 km to 42.7 km which resulted in increase in cost of preliminary investigation, right of way, forest clearance, PTCC, general civil works, tower steel, conductor, insulator, hardware fittings etc. and higher bid price received in actual award which were beyond the control of the petitioner. Further, as per Revised Cost Estimate (RCE) of ₹17833.68



lakh, the estimated completion cost including additional capital expenditure is ₹16745.69 lakh. As such there is no cost overrun. However, there is a downward cost-variation which is allowed and considered for tariff purpose. Further, capital expenditure would be reviewed at the time of true-up on the submission of Auditor's Certificate verifying capital cost up to 31.3.2019.

### **Treatment of IDC and IEDC**

#### **a. IDC**

33. The petitioner has submitted a statements of IDC calculation vide affidavit dated 15.3.2019. The IDC discharged up to COD and the "IDC to be discharged" after COD i.e. in FY 2017-18 and FY 2018-19 have also been furnished.

34. The IDC has been worked out based on the available information such as dates of draws, loan amounts, rates of interest, interest payment dates till COD/ post COD etc. as per the statement of IDC calculation submitted. It is noticed that the petitioner has availed loan from SBI vide draws on various dates. However, the applicable rate of interest, being the floating rate as mentioned in the statement of IDC calculation, has not been furnished by the petitioner regarding these draws. Hence, rate of interest applicable for SBI loan for the period subsequent to the COD (7.85%) as reflected in Form 9(C) of the Petition has been considered. However, the petitioner is directed to furnish the information with respect to the rate of interest applicable to the SBI loan at the time of true-up.

35. As the time over-run in commissioning of the Asset has been condoned, no deduction has been made in IDC on account of delay and the same has been calculated till the COD. The IDC upto the date of interest payment till COD (IDC



discharged) has been worked out for inclusion in capital cost on cash basis as on COD. The balance IDC, i.e. the interest accrued but not discharged as on COD has been claimed by the petitioner to be discharged in the subsequent years. The same has been considered on projected basis, subject to the total IDC as worked out.

36. Accordingly, following IDC has been worked out and allowed as against the IDC claimed by the petitioner.

(₹in lakh)

Asset	Accrued till COD	Discharged upto COD	Projected to be Discharged in 2017-18	Projected to be Discharged in 2018-19
IDC Claimed	801.21	480.78	59.79	260.63
IDC allowed	792.14	474.92	59.79	257.43

#### b. IEDC

37. The petitioner vide affidavit dated 15.3.2019, has claimed IEDC amounting to ₹428.50 lakh. It is observed that the IEDC claimed by the petitioner is within the limit of 10.75% of the hard cost as specified in the original investment approval. Accordingly, no deduction in claimed IEDC has been made and entire IEDC of ₹428.50 lakh has been allowed.

#### Treatment of initial spares

38. Regulation 13 of the 2014 Tariff Regulations specifies ceiling norms for capitalization of initial spares in respect of transmission system as under:-

"13. Initial Spares: Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:

..



- (d) Transmission system
  - (i) Transmission line - 1.00%
  - (ii) Transmission Sub-station (Green Field) -4.00%
  - (iii) Transmission Sub-station (Brown Field) -6.00%
  - (iv) Series Compensation devices and HVDC Station - 4.00%
  - (v) Gas Insulated Sub-station (GIS) -5.00%
  - (vi) Communication system -3.5%

Provided that:

....

....

iv. for the purpose of computing the cost of initial spares, plant and machinery cost shall be considered as project cost as on cut-off date excluding IDC, IEDC, Land Cost and cost of civil works. The transmission licensee shall submit the break up of head wise IDC & IEDC in its tariff application."

39. The initial spares claimed by the petitioner vide Auditor's Certificate dated 14.3.2019 is as below:-

Particulars	(₹in lakh)	
	Transmission line	Substation & PLCC
Total P&M Cost*	13221.82	110.16
Initial spares included	198.01	5.93

\*Excluding IDC, IEDC, Land cost & cost of civil works for the purpose of initial spares.

40. UPPCL vide affidavit dated 14.6.2018 & BRPL dated 3.7.2018 has submitted that the initial spares claimed by Petitioner is higher than the ceiling allowed in Regulation and same shall be restricted to the limit as mentioned in Regulation, after computation of admissible completion cost by applying prudence check. In response, the petitioner filed its rejoinder dated 17.10.2018 and submitted that instant asset is crossing through extremely rugged mountains, typical hilly terrain and tougher climatic conditions. Further there is no special provision for initial spares especially for hilly areas in the 2014 Tariff Regulations. The spares procured for hilly areas are comparatively higher in quantity and value than those of the plain area so that there



is no shortage of spare in the locations for smooth running of the system. In case of any failure, if sufficient amount of spares in not available at the location, the same is to be transported from other location which is time taking process considering such a rough terrain and will lead to outage of the system for a longer period which will hamper smooth running of the grid. Also the spares procured are essential spares for smooth running of the grid and may be allowed in full under Regulation 54 of 2014 of Tariff Regulation invoking the provision related to “Power to Relax”.

41. We have considered the submissions made by the petitioner and Respondents. Regulation 13 of the 2014 Tariff Regulations specifies ceiling norms for capitalization of initial spares in respect of transmission system and the same has been dealt with accordingly. Further, we see no reason to invoke “Power to Relax” under Regulation 54 of the 2014 Tariff Regulation in the instant case. Based on the ceiling limit as specified in Regulation 13, the initial spares claimed and allowed is as below:

							(₹in lakh)
Particulars	Total Cost(P&M)*	Initial spares claimed	Ceiling limit (%) as per Regulation 13 of the 2014 Tariff Regulation	Initial Spares calculated	Excess initial Spares	<b>Initial Spares Allowed</b>	
Transmission line	13221.82	198.01	1.00%	131.46	66.41	<b>131.46</b>	
Sub-station	110.16	5.93	6.00%	6.65	-	<b>6.65</b>	

42. It is further noticed that the petitioner, vide affidavit dated 17.10.2018, had submitted details of year-wise discharge of initial spares which is as follows:-

				(₹in lakh)
S.no	Particulars	Transmission Line	S/S & PLCC	
1	Est. Expenditure up to 28.2.2018	2.06	0.00	
2	Est. Exp. from 1.3.2018 to 31.3.2018	0.00	0.00	



3	Est. Exp. for 18-19	92.15	3.49
4	Est. Exp. for 19-20	92.14	3.00
	<b>Total</b>	<b>186.35</b>	<b>6.49</b>

43. These details furnished by the petitioner with respect to the discharge of initial spares are pertaining to the expenditure on estimated basis claimed vide Management Certificate. The discharge details, with respect to actual expenditure as per the revised submission dated 15.3.2019, have not been furnished by the petitioner. In absence of the details such as the cash expenditure towards initial spares as on COD and during 2017-18 and 2018-19, the same has been considered as per the details submitted vide affidavit dated 17.10.2018 and restricted to the initial spares allowed at para 41 or the discharge claimed, whichever is lower. As such, the year-wise discharge is considered as below:-

(₹in lakh)				
S.no	Particulars	Transmission Line	S/S & PLCC	Total
1	Discharged upto COD	2.06	0.00	2.06
2	Est. Exp. from COD to 31.3.2018	0.00	0.00	0.00
3	Est. Exp. for 18-19	92.15	3.49	95.64
4	Est. Exp. for 19-20	37.25	3.00	40.25
	<b>Total</b>	<b>131.46</b>	<b>6.49</b>	<b>137.95</b>

44. The initial spares allowed as above shall be reviewed at the time of true-up, based on the details with respect to the year-wise discharge of initial spares and Auditor's Certificate verifying capital cost up to 31.3.2019 to be furnished by the petitioner along with the true-up Petition.

#### **Capital cost as on COD**

45. Detail of the capital cost considered as on COD after making the necessary adjustment in respect of IDC and IEDC is as follows:-





₹ in Lakhs							
Expenditure upto COD (claimed)	Less: IDC claimed	Less: IEDC claimed	Hard Cost	IDC allowed on Cash Basis as on COD	IEDC allowed as on COD	Excess and undischarged Initial spare disallowed on COD	Admissible Capital Cost as on COD
<b>13170.55</b>	801.21	428.50	11940.84	474.92	428.50	201.88	<b>12642.38</b>

### Projected additional capital expenditure

46. Clause (1) of Regulation 14 of the 2014 Tariff Regulations provides as under:-

"(1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

- (i) Undischarged liabilities recognized to be payable at a future date;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and
- (v) Change in law or compliance of any existing law:

Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff."

47. Clause (13) of Regulation 3 of the 2014 Tariff Regulations defines "cut-off"

date as under:-

"cut-off date" means 31<sup>st</sup> March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31<sup>st</sup> March of the year closing after three years of the year of commercial operation".

Provided that the cut-off date may be extended by the Commission if it is proved on the basis of documentary evidence that the capitalisation could not be made within the cut-off date for reasons beyond the control of the project developer;"

48. The details of additional capital expenditure claimed by the petitioner in the instant Petition vide affidavit dated 15.3.2019 under Regulation 14(1) of 2014 Tariff Regulations are as under:-



Estimated Exp. For FY			(₹in lakhs)
2017-18*	2018-19*	2019-20*	Total additional capital expenditure claimed*
131.86	1491.04	1952.24	3575.14

49. Clause (13) of Regulation 3 of the 2014 Tariff Regulations defines “cut-off” date as under:

*“cut-off date” means 31st March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after three years of the year of commercial operation”.*

50. The date of commercial operation of the instant asset has been considered as 27.2.2018. Accordingly, the cut-off date as per Clause (13) of Regulation 3 of the 2014 Tariff Regulations in the case of instant transmission asset is 31.3.2021. The petitioner has submitted that the additional capitalization incurred/ projected to be incurred is on account of balance and retention payments covered under Regulation 14(1)(i) of the 2014 Tariff Regulations. The additional capitalization claimed by the petitioner of ₹131.86 lakh for FY 2017-18 and ₹1491.04 lakh for FY 2018-19 is allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations. However, the additional capitalization for period 2019-20 of ₹1952.24 lakh is not being considered as the tariff period is ending on 31.3.2019. The same shall be considered in tariff period 2019-24 in terms of Regulation prevailing at that time. Further, additional capital expenditure (ACE) would be reviewed at the time of true-up on the basis of the submission of Auditor’s Certificate with respect to the additional capitalisation during the tariff period and capital cost up as on 31.3.2019. IDC and initial spares undischarged as on the COD and projected to be discharged after COD, as



discussed in the foregoing paragraphs, have also been added to the additional capital expenditure of the respective years. Thus, allowed additional capital expenditure is as follows:

Particulars	(₹in lakhs)	
	2017-18 (27.2.18 to 31.3.18)	2018-19
add-cap	131.86	1491.04
IDC to be discharged	59.79	257.43
Initial spares to be discharged	0.00	95.64
<b>Total</b>	<b>191.65</b>	<b>1844.11</b>

### **Capital Cost as on 31.3.2019**

51. Based on the capital cost as on COD and the additional capital expenditure including discharge of IDC and initial spares worked out in the preceding paragraphs, the capital cost from COD to 31.3.2019 is worked out as below:-

Capital cost as on COD	Add-cap		Capital cost as on 31.3.2019
	2017-18 (27.2.18 to 31.3.18)	2018-19	
12642.38	<b>191.65</b>	<b>1844.11</b>	<b>14678.14</b>

### **Debt- Equity ratio**

52. Clause 1 and 5 of Regulation 19 of the 2014 Tariff Regulations specifies as follows:-

“(1) For a project declared under commercial operation on or after 1.4.2014, the debt- equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:



ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

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.

Explanation.-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system."

"(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation"

53. Details of debt-equity in respect of the asset as on the date of commercial operation and as on 31.3.2019 are as follows:-

(₹ in lakh)			
Particulars	%	As on COD	As on 31.3.2019
Debt	70.00	8849.67	10274.70
Equity	30.00	3792.71	4403.44
<b>Total</b>	<b>100.00</b>	<b>12642.38</b>	<b>14678.14</b>

54. Additional capital expenditure has been considered in the debt-equity ratio of 70:30.

### **Return on Equity**

55. This has been dealt with in line with Clause (1) and (2) of Regulation 24 and Clause (2) of Regulation 25 of the 2014 Tariff Regulations.

56. The petitioner has submitted that RoE has been calculated at the rate of 19.610% after grossing up the RoE with MAT rate of 20.961% as per the above



Regulations. The petitioner has further submitted that as per Regulation 25(2)(i) of the 2014 Tariff Regulations, the grossed up RoE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. Any under-recovery or over-recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable/adjustable after completion of income tax assessment of the financial year.

57. We have considered the submissions of 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 the 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. Accordingly, the RoE allowed is given below:-

(₹in lakh)		
<b>Asset-1</b>		
<b>Particulars</b>	<b>2017-18</b> (27.2.18 to 31.3.18)	<b>2018-19</b>
Opening Equity	3792.71	3850.21



Addition due to Additional Capitalisation	57.50	553.23
Closing Equity	3850.21	4403.44
Average Equity	3821.46	4126.83
Return on Equity (Base Rate )	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.960%	20.960%
Rate of Return on Equity (Pre Tax )	19.610%	19.610%
<b>Return on Equity (Pre Tax)</b>	<b>67.75</b>	<b>809.27</b>

### **Interest on Loan**

58. In keeping with the provisions of Regulation 26 of the 2014 Tariff Regulations, the petitioner's entitlement to interest on loan has been calculated on the following basis:-

- (i) Gross amount of loan, repayment of installments and rate of interest and weighted average rate of interest on actual average loan have been considered as per Form 9C given in the affidavit dated 21.7.2017;
- (ii) The normative repayment for the tariff period 2014-19 shall deemed to be equal to the depreciation allowed for that period;
- (iii) 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.

59. Based on the above, interest on loan has been calculated are given as follows:-

Particular	(₹ in lakh)	
	2017-18 (27.2.18 to 31.3.18)	2018-19
Gross Normative Loan	8849.67	8983.82
Cumulative Repayment up to Previous year	0.00	50.99
Net Loan-Opening	8849.67	8932.83
Addition due to Additional Capitalization	134.16	1290.87
Repayment during the year	50.99	617.08



Net Loan-Closing	8932.83	9606.63
Average Loan	8891.25	9269.73
Weighted Avg Rate of Interest on Loan	7.79%	7.80%
<b>Interest</b>	<b>692.96</b>	<b>723.16</b>

### Depreciation

60. This has been dealt with in line with Regulation 27 of 2014 Tariff Regulations.
61. Depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations.
62. Details of the depreciation allowed are as under:-

(₹in lakh)		
<b>Asset-1</b>		
<b>Particulars</b>	<b>2017-18</b> (27.2.18 to 31.3.18)	<b>2018-19</b>
Opening Gross Block	12642.38	12834.03
Addition Capital Expenditure	191.65	1844.11
Closing Gross Block	12834.03	14678.14
Average Gross Block	12738.21	13756.08
Rate of Depreciation	4.4277%	4.4858%
Depreciable Value	11464.39	12380.48
Remaining Depreciable Value	11464.39	12380.48
<b>Depreciation</b>	<b>50.99</b>	<b>617.08</b>

### Operation & Maintenance Expenses (O&M Expenses)

63. Regulation 29(4) (a) of the 2014 tariff regulations specifies the norms for O&M expenses for the transmission system based on the type of sub-station and the transmission line. Norms specified in respect of the elements covered in the instant asset are as under:

(₹in lakh)		
<b>Element</b>	<b>2017-18</b>	<b>2018-19</b>
Double circuit (Single conductor)-in lakh/km	0.334	0.346



64. The O&M Expenses claimed by the petitioner are as below:-

Particulars	(₹in lakh)	
	2017-18	2018-19
O&M Expenses	1.27	14.77

65. BRPL in affidavit dated 3.7.2018 has submitted that the increase in the employee cost, if any, due to wage revision must be taken care by improvement in their productivity levels by the petitioner company so that the beneficiaries are not unduly burdened over and above the provisions made in the 2014 Tariff Regulations. In response, the petitioner filed rejoinder dated 17.10.2018 and submitted that for the tariff period 2014-19 had been arrived at 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.

66. We have considered the submissions made by the petitioner and the respondent. We are of the view that the O&M Expenses needs to be worked out as per the norms of O&M Expenses 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 2014 Tariff Regulations.

67. The allowable O&M Expenses are worked out as below:-





Element	(₹in lakh)	
	2017-18 (27.2.18 to 31.3.18)	2018-19
220kV D/C (single conductor)Kishenganga to T point of line length-41.60Km (A)	33/365x0.334x41.60 =1.25	0.346x41.60 =14.39
220kV D/C (single conductor) T point to Amargarh of line length-1.10km (B)	33/365x0.334x1.10 =0.03	0.346X1.10 =0.38
<b>O&amp;M Expenses allowed (C)=(A)+(B)</b>	<b>1.27</b>	<b>14.77</b>

### **Interest on Working Capital**

68. The petitioner is entitled to claim interest on working capital as per the 2014 Tariff Regulations. The components of the working capital and the petitioner's entitlement to interest thereon are discussed hereunder:-

#### **(i) Receivables**

Receivables as a component of working capital will be equivalent to two months fixed cost. The petitioner has claimed the receivables on the basis of 2 months' annual transmission charges. In the tariff being allowed, receivables have been worked out on the basis of 2 months' transmission charges.

#### **(ii) Maintenance spares**

Regulation 28 of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M expenses. The value of maintenance spares has accordingly been worked out.

#### **(iii) O & M expenses**

Operation and maintenance expenses have been considered for one month as a component of working capital. The petitioner has claimed O&M expenses for 1 month of the respective year as claimed in the Petition. This has been considered in the working capital.

#### **(iv) Rate of interest on working capital**

As per proviso 3 of Regulation 28 of the 2014 Tariff Regulation, SBI Base Rate Plus 350 bps as on 1.04.2017 (i.e.12.60%) has been considered for the instant asset, as the rate of interest on working capital.

69. The interest on working capital as determined is shown in the table given below:-



(₹ in lakh)		
Particulars	2017-18 (27.2.18 to 31.3.18)	2018-19
Maintenance Spares	2.11	2.22
O & M expenses	1.17	1.23
Receivables	138.47	368.52
Total	141.75	371.97
<b>Interest</b>	<b>17.86</b>	<b>46.87</b>

### **Transmission Charges**

70. The transmission charges being allowed for the assets are as follows:-

(₹ in lakh)		
Asset-1		
Particulars	2017-18 (27.2.18 to 31.3.18)	2018-19
Depreciation	50.99	617.08
Interest on Loan	692.96	723.16
Return on Equity	67.75	809.27
Interest on Working Capital	17.86	46.87
O & M Expenses	1.27	14.77
<b>Total</b>	<b>830.83</b>	<b>2211.14</b>

### **Filing fee and the publication expenses**

71. 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.

### **Goods and Services Tax**

72. 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.

**License fee and RLDC Fees and Charges**

73. The petitioner has requested 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 licence fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a), respectively, of Regulation 52 of the 2014 Tariff Regulations.

**Sharing of Transmission Charges**

74. The transmission charges from 27.2.2018 to 17.5.2018 shall be borne by NHPC. With effect from 18.5.2018, the transmission charges allowed in this order shall be recovered on monthly basis in accordance with Regulation 43 of the 2014 Tariff Regulations. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time.

75. This order disposes of Petition No.124/TT/2018.

**Sd/-**

**(I.S. Jha)  
Member**

**Sd/-**

**(Dr. M. K. Iyer)  
Member**

**Sd/-**

**(P. K. Pujari)  
Chairperson**

