

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 69/TT/2017

Coram:

**Shri Gireesh B. Pradhan, Chairperson
Shri A.K. Singhal, Member
Shri A.S. Bakshi, Member
Dr. M.K. Iyer, Member**

Date of Order : 06.12.2017

In the matter of:

Determination of transmission tariff for 400 kV D/C Sikar-Jaipur line with associated bays under "System Strengthening in Northern Region for Sasan and Mundra UMPP" from COD to 31.3.2019 under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

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 Limited,
400 KV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur
3. Jaipur Vidyut Vitran Nigam Limited,
400 KV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur
4. Jodhpur Vidyut Vitran Nigam Limited,
400 KV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur



5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan,
Kumar House Complex Building II,
Shimla-171 004
6. Punjab State Electricity Board,
The Mall, Patiala-147 001
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula (Haryana)-134 109
8. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226 001
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110 002
11. BSES Yamuna Power Limited,
BSES Bhawan, Nehru Place,
New Delhi
12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi
13. North Delhi Power Limited,
Power Trading and Load Dispatch Group,
CENNET Building,
Adjacent To 66/11 KV Pitampura-3,
Grid Building, Near PP Jewellers,
Pitampura, New Delhi-110034
14. Chandigarh Administration,
Sector-9, Chandigarh



15. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road
Dehradun

16. North Central Railway,
Allahabad.

17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002

.....Respondents

For petitioner : Shri V.P. Rastogi, PGCIL
Shri S.K. Venkatesan, PGCIL
Shri Rakesh Prasad, PGCIL
Shri B. Dash, PGCIL

For respondents : None

ORDER

The present petition has been filed by Power Grid Corporation of India Limited (PGCIL) seeking approval of transmission tariff for 400 kV D/C Sikar-Jaipur line with associated bays (hereinafter referred to as “transmission assets”) under “System Strengthening in Northern Region for Sasan and Mundra UMPP” (hereinafter referred to as “transmission scheme”) 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 scope of the scheme was discussed and agreed in 23rd SCM held on 16.2.2008 and Special Joint meeting of Northern and Western Regional Power Committees held on 22.7.2008.



3. The Investment Approval and expenditure sanction for the transmission system (System Strengthening in NR for Sasan and Mundra UMPP) was accorded by the Board of Directors of the petitioner vide Memorandum No. C/CP/SS in Northern Region for Sasan and Mundra dated 10.12.2009 at an estimated cost of ₹121683 lakh including IDC of ₹5770 lakh (based on 2nd Quarter, 2009 price level) in its 229th meeting dated 3.12.2009. Further, the Revised Cost Estimate (RCE) for the transmission system was accorded by the Board of Directors of the petitioner vide Memorandum No. C/CP/RCE-SS in Northern Region for Sasan and Mundra UMPP dated 1.6.2016 at an estimated cost of ₹142887 lakh including IDC of ₹7969 lakh (based on December, 2015 price level) in its 329th meeting dated 26.5.2016.

4. The scope of work covered under the instant transmission system is broadly as follows:-

Transmission Lines

- i. Agra-Sikar 400 kV D/C (Quad) line-320 km
- ii. Sikar-Jaipur 400 kV D/C Line -157 km
- iii. Sikar-Ratanagrh(RVPN) 400 kV D/C line -90 km
- iv. LILO of both circuits of Nathapa Jhakri-Abdullapur 400 kV D/C (Triple Snowbird) line at Panchkula-2*25 km
- v. LILO of both circuits of Sikar (RVPN)- Ratangarh (RVPN) 220 kV D/C line at Sikar (POWERGRID) - 5.4 km

Sub-stations

- i) 2 x 315 MVA, 400/220 kV Sikar Sub-station (New)
- ii) 2 X 315 MVA, 400/220 kV Panchkula Sub-station (New)



- iii) 765/400 kV Agra Sub-station (Extension)
- iv) 400/220 kV Ratangarh (RVPN) Sub-station(Extension)
- v) 400/220 kV Jaipur Sub-station (Extension)

Reactive Compensation

Transmission Lines	Line reactors (MVAR)	
	From end	To end
(i) Agra-Sikar 400 kV D/C (Quad) line	50	50 (Switchable)
(ii) LILO of both circuits of Nathpa Jhakri-Abdullapur 400 kV D/C at Panchkula		
➤ Naptha Jhakri-Panchkula 400 kV D/C line	-	50 (Switchable)
➤ Panchkula-Abdullapur 400 kV D/C line	-	50 (existing reactor to be retained)

Switchable Bus Reactors (MVAR)

(i) Sikar	80
(ii) Ratangarh	125
(iii) Panchkula	125

5. The scope of work under the transmission system has been covered in six different petitions. The details are given as under:-

Srl. No	Asset	Actual COD	Petition No.
1	315 MVA ICT I at Sikar	1.2.2012	97/TT/2012
2	LILO of Ckt I of Sikar Ratnagarh (RVPN) 220 kV D/C line at Sikar (PG)	1.2.2012	
3	LILO of Ckt II of Sikar Ratnagarh (RVPN) 220 kV D/C line at Sikar (PG)	1.5.2012	
4	315 MVA ICT II at Sikar	1.4.2012	
5	LILO of Ckt I of Jhakri Abdullapur 220 kV D/C line at Panchkula (PG)	1.3.2012	
6	LILO of Ckt II of Jhakri Abdullapur 220 kV D/C line at Panchkula (PG)	1.3.2012	



7	315 MVA ICT I at Panchkula	1.3.2012	
8	315 MVA ICT II at Panchkula	1.3.2012	
9	125 MVAR Bus Reactor at Panchkula	1.3.2012	
10	400 kV 80 MVAR Bus Reactor in Sikar alongwith associated bays.	1.9.2012	61/TT/2013
11	400 kV D/C Quad Agra-Sikar TL	1.1.2014	
12	2 Nos.400 kV line bays for 400 kV D/C Agra-Sikar line including 2 Nos. 50 MVAR Line Reactors under Bus Reactor operation mode at 400/220 kV Sikar Sub-station.	1.8.2013	300/TT/2013
13	One Ckt of 400 KV D/C Sikar-Ratangarh line with associated bays	3.2.2015	
14	Second Ckt of 400 KV D/C Sikar-Ratangarh line with associated bays	11.2.2015	199/TT/2015
15	125 MVAR bus reactor at Ratangarh SS (RRV PNL) with associated bays	3.2.2015	

6. Annual Fixed Cost was granted for the instant transmission asset vide order dated 12.6.2017 under the first proviso to Regulation 7(7) of the 2014 Tariff Regulations, for inclusion in the PoC charges.

7. The details of the transmission charges claimed by the petitioner vide affidavit dated 21.7.2017 are as under:-

(₹ in lakh)			
Particulars	2016-17	2017-18	2018-19
Depreciation	160.44	1352.87	1390.86
Interest on Loan	60.88	493.11	469.93
Return on Equity	179.77	1515.57	1557.82
Interest on working capital	11.20	94.09	96.02
O & M Expenses	46.99	397.86	411.05
Total	459.28	3853.50	3925.68



8. The details of the "Interest on Working Capital" claimed by the petitioner vide affidavit dated 21.7.2017 are as under:-

Particulars	(₹ in lakh)		
	2016-17	2017-18	2018-19
Maintenance Spares	57.76	59.68	61.66
O & M expenses	32.09	33.16	34.25
Receivables	634.57	641.28	640.48
Total	724.42	734.11	736.40
Interest	92.73	93.97	94.26
Interest Rate	12.80	12.80	12.80

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, 2003. U.P. Power Corporation Limited (UPPCL), Respondent No. 9 has filed reply vide affidavit dated 5.9.2017. UPPCL has raised the issues of time over-run, cost over-run, rate of interest on loan and O & M Expenses. No rejoinder to the reply of UPPCL has been furnished by the petitioner. The objections raised by the UPPCL are addressed in the relevant paragraphs of this order.

10. Having heard the petitioner and perused the material on record, we proceed to dispose of the petition.

Date of commercial operation (COD)

11. Initially, the petitioner had claimed the anticipated COD of the instant asset as 31.1.2017. Pursuant to the directions of the Commission vide order dated 12.6.2017, the petitioner vide affidavit dated 21.7.2017 has submitted that the actual COD of the instant asset was 16.2.2017. The petitioner has also submitted the certificate of RLDC as per the 2014 Tariff Regulations, certificate of CEA under Regulation 43 of



CEA (Measures Related to Safety and Electric Supply) Regulations, 2010 as well as certificate of CMD as required under the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010.

12. We have considered the submissions of the petitioner and have also gone through the certificate of CMD and the certificates issued by RLDC and CEA. Keeping in mind, the submissions of the petitioner supported by documentary evidence, we approve the COD of the instant asset as 16.2.2017 for the purpose of tariff calculation.

Capital Cost

13. 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.

14. The details of the apportioned approved capital cost, capital cost as on the date of commercial operation and estimated additional capital expenditure incurred or projected to be incurred for the instant transmission asset as submitted by the petitioner vide affidavit dated 21.7.2017 are as under:-

Approved apportioned cost	Approved apportioned cost as on RCE	Expenditure as on actual COD	Estimated Expenditure		Total estimated completion Cost
			2016-17	2017-18	
16048.68	26886.64	25093.50	2.79	1383.78	26480.08

(₹ in lakh)

Cost over-run

15. The petitioner had initially submitted that the approved apportioned cost of the instant asset as per the FR was ₹16048.68 lakh with expected expenditure upto scheduled COD was ₹25649.05 lakh and the total estimated completion cost of the instant asset was ₹26368.56 lakh. The petitioner vide affidavit dated 21.7.2017 has submitted the revised approved apportioned cost of the instant asset as ₹26886.64 lakh with the expenditure upto actual COD (16.2.2017) as ₹25093.50 lakh and the total estimated completion cost of the instant asset to be ₹26480.08 lakh. This shows cost over-run of ₹10431.40 lakh (65%) in completion cost as compared to FR cost.

16. UPPCL in its reply has submitted that against the total apportioned approved



cost of ₹16048.68 lakh, the anticipated completed cost is ₹26368.56 lakh and the same is higher by ₹10319.88 lakh. The respondent has submitted that the petitioner be directed to furnish the details of ₹442.42 lakh incurred towards erection, stringing, civil works including foundation of transmission line due to increase of the line length from 157 km to 169 km and price variation

17. The petitioner has submitted the following reasons for cost over-run of ₹10319.89 lakh in Form 5, vide affidavit dated 9.11.2017:-

(₹ in lakh)			
Sl. No.	Head/Items	Amount increased	Reason for cost variation
1	Preliminary investigation right of way, forest clearance, PTCC, general civil works etc.	133.78	As per actual amount paid to authorities.
2	Transmission line material	3175.73	Due to line length increased from 157 km to 169 km and high bid prices.
3	Erection, Stringing & Civil works including foundation of transmission line	442.42	Due to line length increased and high bid prices.
4	Sub-station equipment	451.58	Due to price variation.
5	Sub-station preliminary work, land & civil works	199.45	As per actual amount paid to authorities and high bid prices.
6	Taxes and Duties (Transmission line)	-431.71	
7	Taxes and Duties (Sub-station)	68.01	
8	IDC	23.92	As per actual
9	IEDC	734.19	As per actual.
10	FERV	5616.83	As per actual (not envisaged in FR)
11	Minor variation	17.20	
Total		10431.40	

18. The petitioner has submitted that open competitive bidding route is followed for



procurement and after providing equal opportunity to all eligible firms, lowest possible market prices for the product/services are obtained and contracts are awarded on the basis of lowest bidder considering total bid price (not item-wise). Depending upon prevailing market conditions, the best competitive bid prices against tenders may happen to be lower or higher than the cost estimate.

19. We have considered the submissions of the petitioner. There is a cost over-run of ₹3618.15 lakh due to increase in line length from 157 km to 169 km. The petitioner vide affidavit dated 6.11.2017 has submitted that at the time of preparation of FR, the length of the line was estimated as 157 km based on preliminary survey/walk over. However, on exhaustive survey, the line length was found to be 169 km as per actual route alignment and actual site conditions/urbanization. Keeping in mind the fact that such variation in the length may be possible due to actual site conditions and actual route alignment, the cost increase due to increase in line length is therefore allowed for the purpose of tariff. Further, the cost over-run of ₹5600 lakh due to FERV is also allowed. The petitioner has submitted RCE vide affidavit dated 1.6.2016 for ₹26886.64 lakh.

20. Accordingly, the estimated completion cost of the instant asset for the purpose of tariff has been considered as ₹26480.08 lakh as claimed by the petitioner.

Time Over-run

21. The instant transmission assets were scheduled to be commissioned within 32 months from the date of Investment Approval dated 10.12.2009. Accordingly, the scheduled commercial operation date of the instant assets was on 10.8.2012. The



date of commercial operation of the instant assets was on 16.2.2017. There is time over-run of approximately 54 months and 7 days in commissioning of the instant asset.

22. The detailed chronology of events submitted by the petitioner regarding time over-run due to ROW issues is given in **Annexure-I**.

23. The petitioner has submitted that time over-run in the case of instant asset was mainly attributable to ROW problems created by villagers of Bhadadar Jigar Choti, Achrol, Bhanpur Kala, Kanouta, Bhajpura and Bassi at multiple locations which commenced on 3.6.2011 and continued throughout the construction work of the line. The matter was taken up with Chief Secretary, Additional Chief Secretary (Home), Secretary (Energy) Government of Rajasthan and Collector for their intervention and to resolve the RoW problems efficaciously. With the assistance of police, the work was completed.

24. The petitioner has submitted the details of events in chronological order in respect of RoW issues at various locations in its petition. RoW problems continued till February, 2017 when the work of the line was completed. The petitioner has submitted that right from 3.6.2011 to February, 2017 the petitioner was compelled to deal with the issues of Right of Way and compensation of land owners which were dehors the provisions of relevant Acts.

25. The petitioner vide its affidavit dated 21.7.2017 has submitted the following information with regard to time over-run:-



Activity	Period of Activity				Reason(s) for delay
	Planned		Achieved		
	From	To	From	To	
Trans- mission line construction	December, 2009	August, 2012	December, 2009	February, 2017	There were continuous RoW issues from 3.6.2011 to 15.1.2017. Chronology of events upto 6.1.2017 is enclosed with the petition Last RoW letter dated 15.1.2017 is enclosed with affidavit dated 21.7.2017

26. The petitioner has submitted that the time over-run of 54 months and 7 days is mainly attributable to RoW issues faced by the petitioner during construction of the transmission line at various locations including at Bhadadar Jigar Choti, Achrol, Bhanpur kala, Kanouta, Bhajpura and Bassi. We have gone through the chronology of events supported by documentary evidence and correspondences exchanged with the various Authorities. On 18.10.2011 Tehsildar J.Ramgad informed the SDM, J. Ramgarh and others about the obstruction caused by anti-social elements at location nos. 259 to 264, at village Bhanpur. The Secretary, Government of Rajasthan wrote a letter to the District Collector and District Magistrate on 19.9.2013 to resolve the ROW problems caused by villagers of Bhadadar and Mailashi. On 19.6.2014, SDM, J. Ramgarh wrote to SHO J. Ramgarh to assist the completion of pending work at Bhanpur Kalan village at location no. 359. On 2.12.2014 the District Magistrate, Jaipur directed SDM, Jaipur to prepare a report of ROW issues of Sikar-Jaipur line in response to the petitioner's letter dated 30.11.2016 regarding ROW issues at location nos. 359 and 360 at Bhanpur Kalan which were pending since 18.10.2011. Besides this, there were ROW problems at location nos. 85, 182, 423 and 424 at Mahrauli which could be completed on 15.1.2017 with the assistance of police on the direction



of SDM, Shrimadhopur. Similar RoW issues were faced by the petitioner at other locations as well and the same are supported by documentary evidence.

27. We have considered the submissions of the petitioner regarding time over-run of 54 months and 7 days in achieving COD of the instant asset. The petitioner has submitted extensive details of correspondences exchanged with various Authorities alongwith supporting documents. However, from the submission, it is not clear when a specific RoW issue was resolved at a particular location. Further, the period of RoW issue at certain location is also not understood. However, based on the documentary evidence placed on record by the petitioner, the time over-run of 54 months and 7 days is provisionally allowed.

28. The petitioner is directed to furnish the details of time over-run for each activity/event supported by PERT/CPM charts at the time of filing truing up petition. The petitioner is also directed to furnish a detailed note on execution of the project giving details of erection of each tower planned and its actual execution, number of gangs deployed for construction of towers, construction of towers taken in parallel, start and completion date of construction of each tower, start date of ROW problem associated with each tower, date of resolving the ROW problem and efforts made, gangs deployed in stringing of towers, date of restoring the work after every ROW problem faced and efforts made, date of charging of the line etc at the time of truing up.

Interest During Construction (IDC)

29. The petitioner has claimed (IDC) of ₹1676.56 lakh for the instant asset. It is



observed that the loan amount mentioned for bond LIII 2016-17 in the IDC statement and Form-9C and Form-12B do not match. However, the loan drawn up to actual COD (Form-9C and Form-12B) is considered for IDC. The IDC on cash basis has been worked out on the basis of loans deployed for the instant asset as per Form-9C submitted in the petition. Therefore, ₹1674.12 lakh is worked out as IDC and considered for tariff computation.

Incidental Expenditure During Construction (IEDC)

30. The petitioner has claimed ₹732.82 lakh of IEDC for the instant asset. The IEDC amount claimed is within the percentage on Hard Cost submitted in the Abstract Cost Estimate. Therefore, amount of ₹732.82 lakh claimed towards IEDC for the instant asset is considered for tariff computation.

31. The allowable IDC and IEDC have been worked out as under:-

(₹ in lakh)			
	Claimed	Disallowed*	Admissible
IDC	1676.56	2.44	1674.12
IEDC	732.82	0.00	732.82

*IDC and IEDC have been disallowed on pro-rata basis

Treatment of Initial Spares

32. Regulation 13(d) 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:

(i) where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost by the Commission, such norms shall apply to the exclusion of the norms specified above:

(ii) -----

(iii) Once the transmission project is commissioned, the cost of initial spares shall be restricted on the basis of plant and machinery cost corresponding to the transmission project at the time of truing up:

(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 breakup of head wise IDC & IEDC in its tariff application.”

33. The petitioner has claimed initial spares of ₹161.21 lakh corresponding to transmission line and of ₹66.81 corresponding to sub-station. UPPCL in its reply has submitted that initial spares against the sub-station are 2.53% as against allowable 4% in case of Green Field Sub-station and the initial spares in respect of transmission line is 0.76% as against 1% allowable as per the 2014 Tariff Regulations.

34. Initial spares, claimed by the petitioner in respect of the instant asset are within the ceiling specified in the 2014 Tariff Regulations. Hence, no adjustment of initial spares is required. The details of the initial spares claimed and allowed are as follows:-



Asset	(₹ in lakh)		
	Initial spares Claimed	Initial spares Allowed	Initial spares Disallowed
Transmission Line	161.21	161.21	0.00
Sub-Station	66.81	66.81	0.00

Additional Capital Expenditure

35. 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 recognised 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; 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 work deferred for execution shall be submitted along with the application for determination of tariff.”

36. 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”.

37. The “cut-off date” in the case of instant asset is 31.3.2020.

38. The petitioner vide affidavit dated 21.7.2017 has claimed the following Additional Capital Expenditure for the period from COD to 31.3.2019, as per Regulation 14(1) of the 2014 Tariff Regulations:-



(₹ in lakh)		
16.2.2017 (Actual COD) to 31.3.2017	2017-18	2018-19
2.79	1383.78	0.00

39. The petitioner has claimed the additional capitalization incurred/projected to be incurred on account of balance/retention payments under Regulation 14(1)(i) of the 2014 Tariff Regulations.

40. UPPCL has submitted that the petitioner has prayed to allow additional capitalization on account of balance/retention payments incurred before the cut-off date. UPPCL has submitted that the petitioner be directed to submit liability flow statement in respect of each item covered under additional capitalization.

41. We have considered the submissions of the petitioner. The additional capitalization incurred/projected to be incurred is on account of balance/retention payments and are within the “cut-off” date and is covered under Regulation 14(1) (i) of the 2014 Tariff Regulations. Accordingly, the following additional capitalization claimed by the petitioner is allowed:-

(₹ in lakh)			
Particulars	2016-17	2017-18	2018-19
ACE (excluding discharges)	2.79	1383.78	0.00

42. The capital cost and additional capital expenditure considered for the purpose of tariff are as follows:-



(₹ in lakh)

Capital cost as on COD	ACE during 2016-17	ACE during 2017-18	ACE during 2018-19	Capital Cost as on 31.03.19
25038.46	2.79	1436.39*	0.00	26477.64

*Including discharge of ₹52.61 lakh during 2017-18.

Debt- Equity ratio

43. 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.”

44. The petitioner has claimed debt:equity ratio of 70:30 as on the date of commercial operation. The debt:equity ratio of 70:30 is considered as provided in Regulation 19 of the 2014 Tariff Regulations. The details of debt : equity ratio in respect of the instant asset as on the date of commercial operation and as on



31.3.2019 are as under:-

Particulars	% age	(₹ in lakh)	
		As on COD Amount	As on 31.3.2019 Amount
Debt	70.00	17526.93	18534.35
Equity	30.00	7511.54	7943.29
Total	100.00	25038.46	26477.64

Return on Equity (RoE)

45. Clause (1) and (2) of Regulation 24 and Clause (2) of Regulation 25 of the 2014

Tariff Regulations specify as under:-

“24. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Provided that:

(i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in **Appendix-I:**

(ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:

(iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:

(iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:



(v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:

(vi) additional RoE shall not be admissible for transmission line having length of less than 50 kilometers.

“25. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income Stream (i.e., income of non-generation or non-transmission business, as the case may be) shall not be considered for the calculation of “effective tax rate”.

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

Where “t” is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.”

46. 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.

47. The petitioner has 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.

48. 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 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:-

Particulars	(₹ in lakh)		
	2016-17	2017-18	2018-19
Opening Equity	7511.54	7512.38	7943.29
Addition due to Additional Capitalisation	0.84	430.92	0.00
Closing Equity	7512.38	7943.29	7943.29
Average Equity	7511.96	7727.83	7943.29
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%	19.610%
Return on Equity (Pre-tax)	177.58	1515.43	1557.68



Interest on loan (IoL)

49. Regulation 26 of the 2014 Tariff Regulations are provides as under:-

“(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan

(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting 65 the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalisation of such asset.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the 66 generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.”

50. The petitioner’s entitlement to 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 the petition;

(b) The yearly repayment for the tariff period 2014-19 has been considered to be



equal to the depreciation allowed for that year;

(c) Notwithstanding moratorium period availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed;

(d) Weighted average rate of interest on actual average loan worked out as per (a) above is applied on the notional average loan during the year to arrive at the interest on loan; and

(e) As per Regulation 26(5) only actual loans have been considered for computation of weighted average rate of interest.

51. The petitioner has submitted that the IOL has been considered on the basis of rate prevailing as on COD and the change in interest due to floating rate of interest applicable, if any, for the project needs to be claimed/ adjusted over the tariff period 2014-19. The interest on loan has been calculated on the basis of 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.

52. UPPCL in its reply has submitted that the petitioner has negotiated loan portfolios having fixed yearly rate of interest, therefore, there is no occasion for the application of floating rate of interest.

53. We have considered the submissions of the petitioner and respondent. The IOL is worked out for the instant asset 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 and for the calculation of IDC, which would be reviewed at the



time of truing-up. Detailed calculation of the weighted average rate of interest has been given in **Annexure-II** to this order.

54. Based on above, the details of Interest on Loan calculated are as follows:-

Particulars	(₹ in lakh)		
	2016-17	2017-18	2018-19
Gross Normative Loan	17526.93	17528.88	18534.35
Cumulative Repayment upto Previous Year	0.00	158.48	1511.22
Net Loan-Opening	17526.93	17370.40	17023.13
Addition due to Additional Capitalisation	1.95	1005.47	0.00
Repayment during the year	158.48	1352.74	1390.73
Net Loan-Closing	17370.40	17023.13	15632.40
Average Loan	17448.66	17196.76	16327.77
Weighted Average Rate of Interest on Loan	2.86%	2.87%	2.88%
Interest	60.14	493.12	469.94

Depreciation

55. Regulation 27 of the 2014 Tariff Regulations with regard to depreciation specifies as follows:-

"27. Depreciation:

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating



station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that in case of hydro generating station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and the extended life.

4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-II** to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets.”

56. The instant asset was put under commercial operation on 16.2.2017. Accordingly, they will complete 12 years after 2018-19. As such, depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations.

57. Details of the depreciation allowed are as under:-



(₹ in lakh)			
Particulars	2016-17	2017-18	2018-19
Opening Gross Block	25038.46	25041.25	26477.64
Additional Capital expenditure	2.79	1436.39	0.00
Closing Gross Block	25041.25	26477.64	26477.64
Average Gross Block	25039.86	25759.45	26477.64
Rate of Depreciation	5.25%	5.25%	5.25%
Depreciable Value	22520.62	23168.25	23814.63
Remaining Depreciable Value	22520.62	22362.14	21009.40
Depreciation	158.48	1352.74	1390.73

Operation & Maintenance Expenses (O&M Expenses)

58. 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 bays and the transmission line. Norms specified in respect of the asset covered in the instant petition are as under:-

Asset	2016-17	2017-18	2018-19
D/C twin conductor T/L (₹ lakh/ km)	0.755	0.780	0.806
400 kV bays (₹ lakh/bay)	64.370	66.510	68.710

59. The petitioner vide affidavit dated 21.7.2017 has claimed the following O&M Expenses:-

(₹ in lakh)		
16.2.2017-31.3.17	2017-18	2018-19
46.99	397.86	411.05

60. The petitioner has claimed O & M Expenses as specified in the 2014 Tariff Regulations.

61. The O&M Expenses allowed for the instant assets as per Regulation 29(4) of the 2014 Tariff Regulations are as under:-



(₹ in lakh)			
Asset	16.2.2017-31.3.17	2017-18	2018-19
D/C twin conductor T/L	15.38	131.82	136.21
4 Nos 400 kV bays*	31.04	266.04	274.84
Total	46.42	397.86	411.05

*Breakup as per Form 2 of affidavit dated 21.7.2017

62. The petitioner has submitted that O&M Expenses 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.

63. The O&M Expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. As regards 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.

Interest on Working Capital (IWC)

64. Clause 1 (c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specify as follows:-

“28. Interest on Working Capital

(1) The working capital shall cover:

(c) Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:



(i) Receivables equivalent to two months of fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and

(iii) Operation and maintenance expenses for one month”

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the 72 transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later.

“(5) „Bank Rate” means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;”

65. 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. 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

O&M 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 Regulation 28(3) of the 2014 Tariff Regulations, SBI Base rate of 9.30% as on 1.4.2016 plus 350 Bps i.e. 12.80% has been considered for working out the rate of interest on working capital for the instant assets.

66. Accordingly, the Interest on Working Capital has determined is as under:-

(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
Maintenance Spares	6.96	59.68	61.66
O & M expenses	3.87	33.16	34.25
Receivables	75.61	642.21	654.24
Total	86.45	735.04	750.15
Interest	11.07	94.09	96.02
Interest Rate	12.80%	12.80%	12.80%

Transmission charges

67. The transmission charges allowed for the instant assets are summarized as under:-

(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
Depreciation	158.48	1352.74	1390.73
Interest on Loan	60.14	493.12	469.94
Return on Equity	177.58	1515.43	1557.68
Interest on Working Capital	11.07	94.09	96.02
O & M Expenses	46.42	397.86	411.05
Total	453.68	3853.23	3925.42

68. The petitioner has submitted that the claim for transmission charges and other



charges is exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess, or any other kind of impositions etc. The same, if imposed shall be borne and additionally paid by the respondents. We have considered the submissions of the petitioner. The petitioner is entitled for late payment surcharge and FERV as per Regulations 45 and 50 respectively of the 2014 Tariff Regulations.

Filing Fee and the Publication Expenses

69. 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.

Licence Fee and RLDC fees and Charges

70. The petitioner has requested to allow it to bill and recover license fee and RLDC fees and charges, separately from the respondents. 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

71. The transmission charges shall be recovered on monthly basis in accordance with Regulation 43 of Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2014 and shall be shared by the beneficiaries and



long term transmission customers in CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 as amended from time to time.

72. This order disposes of Petition No. 69/TT/2017.

**sd/-
(M.K. Iyer)
Member**

**sd/-
(A.S. Bakshi)
Member**

**sd/-
(A.K. Singhal)
Member**

**sd/-
(Gireesh B. Pradhan)
Chairperson**



Annexure-I

Sl. No.	Letter dated	FROM	TO	Affected Location	Remarks
1	11.7.2011	Petitioner	District Collector, Sikar	Location Nos. 1 to 12 falling in villages adjacent to sub-station.	Request for resolving the ROW problem in lines caused by villagers of Bhadadar, Bhookarokabas, Mailashi etc.
2	14.10.2011	Petitioner	Telsidar-Dhond, Sikar	Obstruction in foundation work.	Request for resolving the ROW problem in lines caused by villagers of Bhanpur.
3	18.10.2011	Telsildar, J. Ramgarh, Jaipur	1. Patbari-Bhanpur Kala 2. DM, J.Ramgarh. 3. Sr.Engineer, Sikar	Location 359 to 364 Village: Bhanpur Kala.	To resolve resistance created by anti-social element and assist to accomplish the work without any delay.
4.	21.11.2011	Petitioner	SDM, J Ramgarh	Location 359 to 364 Village: Bhanpur Kala.	To resolve resistance caused by anti-social element and assist to accomplish the work without any delay.
5.	17.12.11	Petitioner	SDM, Dhond	Location Nos. 1-12.	Obstruction in foundation by villagers of Mailashi and Bhadadar.
6	16.1.12	Petitioner	Tehsildar, Bassi	Location Nos. 464-468.	Obstruction in foundation by villagers of Bhajupura and Bhanpuri.
7	13.2.2012	Petitioner	Tehsildar Shreemadhapur	Location 182	Obstruction in foundation by villagers of Maharoli.
8	10.4.2012	Petitioner	Telsildar, Dhond, Sikar	Location Nos. 1 to 12 falling in villages adjacent to sub-station	Request for resolving the ROW problem in lines created by villagers of Bhadadar & Bhookarokabas.
9	9.6.2012	Petitioner	District Collector, Sikar	Location Nos 1 to 12 falling in villages adjacent to sub-station.	Request for resolving the ROW problem in lines created by Villagers of Bhadadar & Bhookarokabas.
10	7.7.2012	Petitioner	SDM, Bassi	Location Nos. 464-468.	Obstruction in foundation by villagers of Bhajupura and



					Bhankari
11	12.8.2012	Petitioner	Tehsildar Shreemadhapur	Location 182	Obstruction in foundation by villagers of Maharoli
12	12.9.2012	Petitioner	SDM, Dhond, Sikar	Location Nos. 1 to 12 falling in villages adjacent to sub-station.	Request for resolving the ROW problem in lines created by villagers of Bhadadar & Bhookarokabas.
13	5.10.2012	Petitioner	Telsildar, Dhond, Sikar	Location No. 1 to 12 falling in villages adjacent to sub-station.	Request for resolving the ROW problem in lines created by villagers of Bhadadar & Bhookarokabas.
14	3.11.2012	Petitioner	SP,Sikar Collector, Sikar	Construction activities pertaining to sub-station and associated transmission lines.	Request to take necessary action against villagers of Bhadadar, Mailashi etc. manhandled with POWERGRID officials and working personals working in Sub-station and associated transmission lines.
15	3.11.2012	Petitioner	SHO. Police Thana, Sadar, Sikar	Construction activities pertaining to sub-station and associated transmission lines.	Request to take necessary action against villagers of Bhadadar, Mailashi etc. manhandled with POWERGRID officials and working personals working in sub-station and associated transmission lines. Village: Bhadadar, Mailasi, Bhookaro ka Bas, Choti Jigar at Sikar.
16	24.6.2013	Petitioner	Collector, Sikar	Obstruction by villagers	To resolve ROW problems caused by nearby villagers in construction activities. Sub-station & associated transmission lines.



17	11.7.2013	GM, Jaipur	1. Collector, Sikar 2. Secretary , Energy (Government of Rajasthan) 3. Divisional Commissioner, Jaipur	Obstruction by villagers	To resolve ROW problems created by nearby villagers in construction activities of Sub-station & associated transmission lines of Villages: Bhadadar, Mailasi, Choti Jigar, Bhookaro Ka Bas in Sikar.
18	21.8.2013	GM, Jaipur	1. Collector, Sikar 2. Secretary, Energy (Government of Rajasthan) 3. Divisional Commissioner, Jaipur	All the construction activities of transmission projects (line) associated with 400 kV Sub- station, Bhadadar, Sikar.	Unlawful obstruction near Sikar Sub-station area. Village: Bhadadar, Mailasi, Choti Jigar, Bhookaro Ka Bas in Sikar.
19	27.8.2013	Petitioner	Tehsildar, Dhond, Sikar	Line Location Nos. 1 to 12 falling in villages adjacent to sub-station.	Request for resolving the ROW problem in line nearby sub- station area Village: Bhadadar, Mailasi, Bhookaro ka Bas, Choti Jigar at Sikar.
20	10.9.2013	Petitioner	SDM, Dhond, Sikar	Location Nos. 1 to 12 falling in villages adjacent to sub-station.	Request for resolving the ROW problem in line nearby sub- station area.
21	19.9.2013	Sec. Energy (Govt of Rajasthan) & C.M.D – R.V.P.N.L	1. Collector & District Magistrate, Sikar	All the construction activities of transmission projects associated with 400 kV sub- station, Bhadadar, Sikar.	To resolve ROW problem created By Villagers of Bhadadar, Mailashi & nearby areas affecting construction of Transmission projects associated with POWERGRID Sub- station.
22	2.1.2014	Petitioner	Tehsildar Dhond, Sikar	Location Nos. 1 to 12 falling in Village: Bhadadar, Mailasi, Bhookaro ka Bas, Choti	Request for resolving the ROW problem nearby Sub-station Area. Village: Bhadadar, Mailasi, Bhookaro ka Bas, Choti Jigar at Sikar.



				Jigar at Sikar.	
23	5.2.2014	Petitioner	Tehsildar, Dhond, Sikar	Sikar-Jaipur Line 1 to 12 falling in villages adjacent to sub-station.	Request for resolving the ROW problem nearby sub-station Area.
24	6.3.2014	Petitioner	1.DM,Sikar 2. Secretary Energy (Government of Rajasthan) of 3. S.P, Sikar.	Obstruction by villagers	Request for providing protection of employees and working personnel at Sikar.
25	6.3.2014	Petitioner	DM, Sikar	Location Nos. 1 to 12 falling in villages adjacent to sub-station.	Request for providing protection to the employees and working personnel at Sikar.
26	6.3.2014	Petitioner	SP, Sikar	Location Nos. 1 to 12 falling in villages Bhadadar, Choti Jigar & Mailasi.	Request for providing protection to the employees and working personnel at Sikar by villagers of Bhadadar, Choti Jigar & Mailasi.
27	7.3.2014	Petitioner	SDM, Dhod, Sikar	Obstruction by villagers.	Request for providing protection to the employees and working personnel at Sikar.
28	7.3.2014	Petitioner	DM, Sikar	Obstruction by villagers.	Request for providing protection to the employees and working personnel at Sikar.
29	8.3.2014	Petitioner	Tehsildar, Dhod, Sikar	Obstruction by villagers.	Request for providing protection to the employees and working personnel at Sikar.
30	8.3.2014	Petitioner	Add. S.P Sikar	Obstruction by villagers.	Request for providing protection to the employees and working personnel at Sikar.
31	9.3.2014	Petitioner	SDM, Sikar	Obstruction by villagers.	Request for providing protection to the employees and working personnel at



					Sikar.
32	9.3.2014	Petitioner	DSP, Sikar	Obstruction by villagers.	Request for providing protection to the employees and working personnel at Sikar.
33	11.3.2014	Petitioner	District Magistrate, Sikar Secretary (Energy), Government Of Rajasthan, Jaipur S.P, Sikar	Location No. 1 to 12 falling in villages adjacent to substation	Request for providing protection to the employees and working personnel at Sikar from the villagers of Bhadadar, Choti Jigar & Mailasi.
34	15.4.2014	Petitioner	SDM, Dhod/Sikar	Location Nos. 1 to 12 falling in villages: Bhadadar, Choti Jigar & Mailasi	Request to resolve the resistance created by villagers of Bhadadar, Choti Jigar & Mailasi.
35	15.5.2014	Petitioner	SDM, Dhod/Sikar	Location Nos. 1 to 12 falling in villages adjacent to sub-station	Request to resolve the resistance created by villagers of Bhadadar, Choti Jigar & Mailasi
36	8.6.2014	Petitioner	Tehsildar, Dhod/Sikar	Sikar-Jaipur Line Location No. 1 to 12 falling in villages adjacent to substation	Request to resolve the resistance created by villagers of Bhadadar, Choti Jigar & Mailasi.
37	19.6.2014	SDM, J. Ramgarh, Jaipur	1.SHO,Police thana Jramgarh 2.Deputy.Manager,Powergrid,Sikar	Location No.359 Vill : Bhanpur Kala	To assist for completion of work at location no. 359 (pending since Oct.2011) of Sikar-Jaipur line in Bhanpur Kala village.
38	18/19.6.2014	Petitioner	SDM, Jambaramg ARH, Jaipur.	Location No.359 Village: Bhanpur Kala	To resolve ROW problem at location no. 359 (pending since Oct.2011) in Bhanpur Kala village.
39	13.8.2014	Petitioner	DM, SIKAR	Location No. 1 to 12 Village: Bhadadar and Mailashi.	Request for providing protection against inlawful obstruction in village Bhadadar and Mailashi.



40	10.9.2014	Petitioner	DM, SIKAR, S.P, Sikar	Location Nos. 1 to 12 Village: Bhadadar and Mailashi.	Request for providing protection against unlawful obstruction in village Bhadadar and Mailashi.
41	8.12.2014	Petitioner	SDM, Sikar (Jaipur)	Location Nos. 1, 2 and 5.	To resolve ROW problem at location No. 1, 2 and 5.
42	8.1.2015	Petitioner	SDM, Amer (Jaipur)	Location No. 344	To resolve ROW problems at location No. 344.
43	10.2.2015	Petitioner	SDM, Jambaramgarh, Jaipur.	Location Nos. 359 -364 village: Bhanpur Kala.	To resolve ROW problem at location no. 359 (pending since October, 2011) in Bhanpur Kala village.
44	18.3.2015	Petitioner	SDM, Dhod/Sikar	Location GA2 & 11	Obstruction in foundation by land owners.
45	20.4.2015	Petitioner	Tehsildar, Amer (Jaipur)	Location No. 350	To resolve ROW problem at Location No. 350
46	3.5.2015	Petitioner	Tehsildar-Bassi, Jaipur	Location No. 438 & Location Nos. 464-468 in village Bhajpura Bassi.	Request to resolve ROW problems at location nos. 438 & 464-468.
47	18.6.2015	Petitioner	Tehsildar, Bassi (Jaipur)	Location No. 464A	To resolve ROW problems at location No. 464 A.
48	20.7.2015	Petitioner	Tehsildar Shreemadhapur	Location 182	Obstruction in foundation by villagers of Maharoli.
49	25.8.2015	Petitioner	SDM, Dhod/Sikar	Location GA2 & 11	Obstruction in foundation by land owners.
50	18/21.9.2015	Petitioner	SDM, Bassi (Jaipur)	Location No. 464A.	To resolve ROW problems at location No. 464A.
51	20.10.2015	Petitioner	SDM, Dhod/Sikar	Location GA2 & 11	Obstruction in foundation by land owners.
52	16.11.2015	Petitioner	Tehsildar Shreemadhapur	Location 186A	Obstruction in foundation by villagers of Maharoli.
53	11.12.2015	Petitioner	Tehsildar, Bassi	Stringing Location Nos.	To resolve ROW problems at stringing



				427-429.	location nos. 427-429.
54	15.2.2016	Petitioner	The Deputy Tehsildar, Palsana	Location Nos. 83 & 84	For proper action.
55	25.2.2016	Petitioner	Sub-Tehsildar, Palsana (Sikar)	Location No. 85	To resolve ROW problems at location no. 85.
56	8.3.2016	Petitioner	SDM, Amer (Jaipur)	Location No. 350.	To resolve ROW problem at location no. 350
57	6.4.2016	Petitioner	SDM, Amer (Jaipur)	Location No. 353.	To resolve ROW problems at location no. 353.
58	1.6.2016	Petitioner	To Additional. Collector, Ramgarh	Tower No. 83 & 84.	For proper action.
59	8.6.2016	Petitioner	The Tahisldar, Aamer	RoW problems by villager.	To instruct SHO for police protection.
60	26.8.2016	Petitioner	SDM, Jamua Ramgarh (Jaipur)	Location No. 362.	To resolve ROW problem at Loc. No. 362
61	29.8.2016	Petitioner	The SHO, chandwaji, Jaipur	ROW by villager.	For Police Protection
62	6.9.2016	Petitioner	Nayab Tehsildar, Palsana (Sikar),SHO, Ranoli	Location No. 85.	To resolve ROW problem at location no. 85.
63	9.9.2016	Petitioner	SDM, Tehsildar Shrimadhapur (Sikar)	Location No. 186 A.	To resolve ROW problems at location no.186 A.
64	12.9.2016	Petitioner	Superintendent of Police (Rural) Jaipur	Location No. 350.	To resolve ROW problems at location no. 360 by deputing police force.
65	22.9.2016	Petitioner	The Sub-Magistrate	Location No. 85.	For proper action.
66	28.9.2016	Petitioner	Collector, Jaipur	Location No. 350.	To resolve ROW problems by deputing SDM/Tehsildar as Magistrate with police force.
67	29.9.2016	Petitioner	SDM, Data Ramgarh (Sikar)	Location No. 85.	To resolve ROW problem at location no. 85.
68	8.11.2016	Petitioner	The sub-section Magistrate	Tower No.186.	For proper action.
69	25.11.2016	Petitioner	The Station- House Officer,	Location Nos. 359 & 360.	To resolve ROW problems at location



			Ramgarh		nos. 359 & 360.
70	28.11.2016	Petitioner	The S.P, Sikar	Tower No. 85.	For providing police force.
71	28.11.2016	Petitioner	The SDM, Ramgarh	Location Nos. 359 & 360.	To resolve ROW problem at location nos. 359 & 360.
72	30.11.2016	Petitioner	The DC, Jaipur	Location Nos. 359 & 360.	To resolve ROW problems at location nos. 359 & 360.
73	2.12.2016	DM, Jaipur	The Sub-Section Magistrate	Obstruction by villagers.	To prepare report of RoW issues.
74	8.12.2016	Petitioner	SHO, Ramgarh	Village-Jamwa	To taking proper action against villager.
75	8.12.2016	Petitioner	The S.P, Jaipur	Village-Jamwa	To issue instruction to resolve the issue.
76	9.12.2016	Petitioner	The sub-section Magistrate	Tower No-182	To take proper action.
77	9.12.2016	Petitioner	The Principal Secretary (Energy), Jaipur	Remaining 4 locations.	To resolve ROW problems in remaining locations.
78	10.12.2016	Petitioner	The DC, Sikar	Tower Nos. 85 & 182.	Intervention to resolve the issue.
79	12.12.2016	Petitioner	SDM, Bassi (Jaipur)	Tower Nos. 423-424.	To resolve ROW problems by instructing the responsible officers.
80	13.12.2016	Petitioner	The Sub-Section Magistrate	Village-Mehrauli	To provide constables.
81	26.12.2016	Petitioner	The Deputy SHO Reengus, Sikar	Village-Mehrauli.	Regarding requirement of female constables.
82	4.1.2017	Petitioner	The DC, Sikar	Location No. 182.	Intervention to resolve the issue.
83	6.1.2017	Petitioner	The SHO, Reengus, Sikar	Obstruction by villagers of Mehroli.	For taking proper action.



CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

Srl. no.	Name of loan	Particulars	2016-17	2017-18	2018-19
1	BOND XLVI	Net opening loan	206.97	206.97	206.97
		Add: Addition du. the period	-		
		Less: Repayment du. the period	-	-	-
		Net Closing Loan	206.97	206.97	206.97
		Average Loan	206.97	206.97	206.97
		Rate of Interest	9.3000%	9.3000%	9.3000%
		Interest	19.25	19.25	19.25
	Rep Schedule				
2	Loan under IBRD-V Loan No. 7787-IN	Net opening loan	15725.67	15725.67	15080.03
		Add: Addition du. the period	-		
		Less: Repayment du. the period	-	645.64	649.11
		Net Closing Loan	15725.67	15080.03	14430.92
		Average Loan	15725.67	15402.85	14755.48
		Rate of Interest	2.7700%	2.7700%	2.7700%
		Interest	435.60	426.66	408.73
	Rep Schedule				
3	BOND LIII	Net opening loan	12.17	12.17	49.00
		Add: Addition du. the period		36.83	
		Less: Repayment du. the period	-		-
		Net Closing Loan	12.17	49.00	49.00
		Average Loan	12.17	30.59	49.00
		Rate of Interest	8.1300%	8.1300%	8.1300%
		Interest	0.99	2.49	3.98
	Rep Schedule				
4	BOND LVII	Net opening loan	-	1.95	1.95
		Add: Addition du. the period	1.95		
		Less: Repayment du. the period	-	-	-



		Net Closing Loan	1.95	1.95	1.95
		Average Loan	0.98	1.95	1.95
		Rate of Interest	7.8900%	7.8900%	7.8900%
		Interest	0.08	0.15	0.15
	Rep Schedule				
	Gross Total	Net opening loan	15944.81	15946.76	15337.95
		Add: Addition du. the period	1.95	36.83	0.00
		Less: Repayment du. the period	0.00	645.64	649.11
		Net Closing Loan	15946.76	15337.95	14688.84
		Average Loan	15945.79	15642.36	15013.40
		Rate of Interest	2.86%	2.87%	2.88%
		Interest	455.92	448.55	432.11

