

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 143/MP/2015  
With I.A No. 24/2015**

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

**Date of Order: 20<sup>th</sup> of March, 2017**

**In the matter of**

Petition under Section 79 of the Electricity Act, 2003 for providing clarification on sharing of capacity charges among beneficiaries of the generating station as per Regulation 30(4) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 read with Regulation 42 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

**And  
In the matter of**

NTPC Ltd.  
NTPC Bhavan, Scope Complex,  
Core-7, Institutional Area,  
Lodhi Road,  
New Delhi-110003

.....**Petitioner**

**Vs**

1. Western Regional Power Committee  
F-3, MIDC Area, Andheri (East).  
Mumbai-400093,
2. Eastern Regional Power Committee.  
14, Golf Club Road,  
Tollygunje, Kolkata-700033
3. Northern Regional Power Committee,  
18-A, Katwaria Sarai, New Delhi- 110016



4. Southern Regional Power Committee  
19, Race Course Cross Road,  
Bangalore-560009
5. North Eastern Regional Power Committee  
NERPC Complex, Dong Parmaw,  
Lapalang, Shillong-793006 (Meghalaya)
6. Uttar Pradesh Power Corporation Ltd.  
Shakti Bhawan, 14, Ashok Marg,  
Lucknow-226007
7. Jaipur Vidyut Vitran Nigam Ltd.  
Vidyut Bhawan, Janpath,  
Jaipur-302005
8. Ajmer Vidyut Vitran Nigam Ltd.  
Old Power House, Hathi Bhata,  
Jaipur Road, Ajmer, Rajasthan
9. Jodhpur Vidyut Vitran Nigam Ltd.  
400 kV GSS Building Ajmer Road, Heerapaura,  
Jaipur, Rajasthan
10. North Delhi Power Limited  
Power Trading and Load Despatch Group,  
Cennet Building, Adjacent to 66/11 kV  
Pitampura-3, Grid Building,  
Pitampura, New Delhi-110034
11. BSES Rajdhani Power Ltd.  
BSE Bhawan, 2<sup>nd</sup> Floor, B-Block,  
Behind Nehru Place Bus Terminal,  
Nehru Place, New Delhi
12. BSES Yamuna Power Ltd.  
2<sup>nd</sup> Floor, B Block, Shakti Kiran Building,  
Near Karkardooma Court, New Delhi
13. Haryana Power Purchase Centre  
Shakti Bhawan, Energy Exchange, Room No. 446,  
Top Floor, Sector-6  
Panchkula-134109
14. Punjab State Power Corporation Limited  
The Mall, Patiala-147001



15. Himachal Pradesh State Electricity Board (HPSEB)  
Kumar Housing Complex Building-II  
Vidyut Bhawan, Shimla-171004 (HP)

16. Power Development Department (PDD)  
Govt. of J&K, Behind Civil Secretariat  
M.A. Road, Srinagar

17. Electricity Department (Chandigarh)  
Union Territory of Chandigarh  
Addl. Office Building  
Sector-9D, Chandigarh

18. Uttarakhand Power Corp. Ltd.  
Urja Bhawan, Kanwali Road  
Dehradun-248001

19. MPPMCL, Shakti Bhawan,  
Vidyut Nagar, Rampur  
Jabalpur-110003

20. MSEDCL, Pradashgad,  
Bandra (East),  
Mumbai-400051

21. GUVNL,  
Sardar Patel Vidyut Bhawan  
Race Course, Vadodara  
Gujarat-390007

22. CSPDCL  
P.O.-Sundernagar,  
Danganiya, Raipur-492013

23. Electricity Department,  
Government of Goa, Vidyut Bhawan,  
Panaji, Goa-403001

24. Electricity Department,  
Administration of Daman & Diu  
Daman-396210

25. Electricity Department,  
Administration of Dadra and Nagar Haveli  
Silvasa-396230

26. West Bengal State Electricity Distribution Company Ltd.



Vidyut Bhawan, Block-DJ,  
Sector-II, Salt Lake City  
Kolkata-700091\

27. Bihar State Power Holding Company Ltd.  
Vidyut Bhawan, Bailey Road,  
Patna-800001

28. Jharkhand Urja Vikas Nigam Limited  
Engineering Building of Heavy Engineering Corporation  
Dhurwa, Ranchi-834004

29. GRIDCO Ltd.  
Janpath  
Bhubaneswar-751007

30. Damodar Valley Corporation  
DVC Towers  
VIP Road  
Kolkata-7005054

31. Power Department  
GOvt. of Sikkim  
Kazi Road, Gangtok  
Sikkim-737101

32. Assam State Electricity Board  
Bijulee Bhawan, Paltan Bazar,  
Guwahati-781001

33. APEDCL  
P&T Colony, Seethammadhara,  
Vishakapatnam-530013

34. APSPDCL  
Backside Srinivasa Kalayana Mandapam  
Tiruchhanur Road  
Kesavayana Gunta,  
Tirupathi-517503 (AP)

35. TSNPDCL  
H.No. 2-5-31/2  
Vidyut Bhavan, Nakkalagutta, Hanamkonda  
Warangal-506001

36. TSSPDCL  
Mint Compound



Hyderabad-500063

37. BESCOM

Krishna Rajendra Circle

Bangalore-560001

38. MESCOM

Paradigm Plaza, A.B. Shetty Circle, Pandeshwar

Mangalore-575001

39. CESC Mysore

No. 927, L.J. Avenue, New Kantharaj Urs Road

Saraswathipuram

Mysore-570009

40. GESCOM

Main Road, Gulbarga,

Gulbarga-585102

Karnataka

41. HESCOM

Corporate Office

P.B. Road, Navanagar

Hubli-580025

42. Electricity Department

Govt. of Puducherry

137, NSC Bose Salai

Puducherry-605001

43. KSEB Ltd.

Vaidyuthi Bhavanam, Pattom Palace

P.O. Trivandrum 695004

44. TANGEDCO

144, Ana Salai, Chennai, Tamil Nadu

PIN-600002

.....Respondents

**The following were present:**

Ms. Suchitra Maggon, NTPC

Shri Rajesh Jain, NTPC

Shri Rajnish Bhagat, NTPC

Shri Nishant Gupta, NTPC

Shri S. Vallinayagam, Advocate, TANGEDCO

Shri R. B. Sharma, Advocate, GRIDCO and BRPL

Shri Aashish Bernard, Advocate, MPPMCL

Shri Anurag Naik, MPPMCL



Shri Rishabh Singh, MPPMCL  
Shri Anil. J., KSEBL  
Shri Latha S.V., KSEBL

## ORDER

The Petitioner, NTPC Limited, has filed the present petition seeking clarification for sharing of capacity charges among the beneficiaries of the generating station as per Regulation 30(4) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (2014 Tariff Regulations).

2. The Petitioner has submitted that the following facts have led to filing of this petition:

(a) The allocation of the capacity from various generating stations of the Petitioner is made by the Government of India from time to time to the beneficiaries/States depending upon their requirements, demands and sometimes after considering the seasonal variations, etc. Accordingly, percentage share of the beneficiaries from a generating station varies on month to month basis.

(b) Regulation 30 of the 2014 Tariff Regulations deals with the computation and payment of Capacity Charge and Energy Charge for the thermal generating stations. Regulation 42 of the 2014 Tariff Regulations provides for billing and payment of capacity charges.



(c) The Statement of Reasons to the 2014 Tariff Regulations provides for computation and payment of capacity charge and energy charge for thermal generating stations.

(d) Regulation 30 (1) of the 2014 Tariff Regulations provides that the total capacity charge payable for a generating station shall be shared among the beneficiaries as per their respective percentage share / allocation in the capacity of the generating station. PAFN taken in the computation has been defined as Percent Plant availability factor achieved upto the end of the nth month and not as Percent Plant availability factor achieved during the month.

(e) 2014 Tariff Regulations provide for two types of billing elements, namely one is monthly in nature i.e. the energy charges which are based on the price and GCV of fuel related to the month and the other being annual in nature i.e. the capacity charges. The capacity charges are yearly charges in Rs/year which are adjusted based on annual availability of the generating station. The capacity charges payable for a particular month in a year are determined based on plant availability achieved cumulatively up to the said month. Therefore, the charges which are annual in nature are to be determined on a cumulative basis, namely for a particular month taking into account the factual aspects not only of the month but also for what had happened up to the said month. Once the amount has been so determined for the generating station, the same has to be apportioned to various beneficiaries as per their allocations/ shares.

(f) Certain beneficiaries have raised a question on the apportionment based on the proportion to cumulative shares i.e. shares upto the month or shares during the month. NTPC has been apportioning the capacity charges in the ratio of cumulative shares as the capacity charges and the basis of their determination are annual/cumulative/upto the month. Regulation 42 (2) of the Tariff Regulations, 2014 provides that the payment of the capacity charge for a thermal generating station shall be shared by the beneficiaries of the generating station as per their percentage shares for the month (inclusive of any allocation out of the unallocated capacity) in the installed capacity of the generating station. Some of the beneficiaries have sought to construe the words “for the month” to mean shares during the month. However, the words “for the month” in the Regulations refer to the shares for the period of financial year up to the month. In other words, the shares for the purpose of apportionment of annual charges are cumulative in nature.

(g) The methodology of computation of capacity charges payable beneficiary-wise on cumulative basis had been in vogue since the introduction of the two part tariff by the Government of India in 1992 and up to the tariff period 2004-09. It was only during the tariff period 2009-14 that there was a change in the methodology of computation of capacity charges from cumulative to monthly basis wherein the recovery of monthly capacity charges from the beneficiaries was linked to the monthly

entitlement. During this control period, the computation of monthly capacity charges was based on monthly availability. The nature of capacity charges during 2009-14 was monthly like energy charges. Since, the month to month plant availability may vary depending upon annual plant maintenance schedule during a year or due to various other factors, the recovery of capacity charges of current month has been linked with the previous month (period) availability for ensuring recovery of AFC. Accordingly, sharing of capacity charges of current month among beneficiaries is also being linked with entitlement upto the previous month (period) for correct and justified sharing of capacity charges.

(h) Regulation 42 of the 2014 Tariff Regulations should not be allowed to be interpreted in a manner that the capacity charges determined based on the cumulative plant availability would be apportioned based on allocations during the month and not cumulative share up to the month. Such an interpretation would lead to an absurd and anomalous result and would completely make redundant the basic objective of the 2014 Tariff Regulations. In particular, Regulation 30 (1) which provides for the fixed cost to be computed on annual basis and accordingly, the Plant Availability Factor to be considered is not on a monthly basis but on annual basis.

(i) Since the Plant Availability Factor is annualised in respect of the beneficiaries covering the entire 12 months, the cumulative effect as at the end of the 12<sup>th</sup> month of the financial year needs to be taken into account both for, the extent of capacity charges payable to the Petitioner and

apportionment of such capacity charges amongst various beneficiaries. In these facts and circumstances, the interpretation and application of the 2014 Tariff Regulations, in regard to the calculation of the capacity charges payable, is justified, equitable, consistent, proper and in the interest of all the beneficiaries.

(j) In either of the interpretation followed by the generating company, the annual fixed charges recovered during the year remains the same i.e. as per the approved tariff by the Commission. It is only apportionment of these charges amongst the beneficiaries that will undergo a change. Since, NTPC have been allocated power to the beneficiaries from the generating stations situated in various regions, different interpretations of the Regulations by different beneficiaries may create anomaly and disputes in the bills raised by NTPC to the beneficiaries of the respective generating station based on the REAs.

3. In the light of the above, the Petitioner has filed the present petition seeking clarification for sharing of capacity charges amongst the beneficiaries of the generating station as per Regulation 30 (4) read with Regulation 42 of the 2014 Tariff Regulations and has made the following prayers:

“(a) Clarify that the beneficiaries are liable to pay capacity charges in the ratio of allocations up to the month and not restricted to the availability / entitlement during the said month.

(b) Pass such further order or orders as this Hon'ble Commission may deem just and proper in the circumstances of the case.”



4. Kerala State Electricity Board Limited) has filed Interlocutory Application No. 24/2015 in Petition No. 143/MP/2015 seeking direction to the Petitioner to implead KSEBL as party to the petition.

5. The Petitioner, vide Record for Proceedings for the hearing dated 23.7.2015, was directed to implead KSEBL and all RPC's as parties to the petition. Notices were issued to the respondents to file their replies. Replies to the petition have been filed by Western Regional Power Committee (WRPC), Eastern Regional Power Committee (ERPC), Northern Regional Power Committee (NRPC), North Eastern Regional Power Committee (NERPC), Rajasthan Distribution Companies, Uttar Pradesh Power Corporation Ltd. (UPPCL), and Kerala State Electricity Board Limited (KSEBL).

6. WRPC in its reply has submitted that as per the role envisaged in Regulation 42 of the 2014 Tariff Regulations and Grid Code, WRPC Secretariat issues the monthly REA. The monthly REA of WRPC, as regards to capacity charges provides monthly entitlements (in kWh) and cumulative entitlements (in kWh) of each beneficiary from each generating station. WRPC has submitted that Regulation 30(1),(2), (3) and (4) of the 2014 Tariff Regulations provides that the calculation of capacity charges payable to thermal generating station and sharing of total capacity charges by its beneficiary and the same is done by NTPC at its end as per the entitlements (in kWh) provided in the monthly REA or WRPC.

7. ERPC in its reply has submitted that Regulation 30 of the 2014 Tariff Regulations allows fixed cost payable to the generator on the basis of cumulative



availability and thereby, a generator could recover the loss of its receivables arising out of less/non-availability of its machine in one month by better availability in the next month. However, the compensation for loss of availability to beneficiaries is not provided under the present Regulations. Regulation 42 (2) of the 2014 Tariff Regulations provides that the payment of the capacity charge for a thermal generating station shall be shared by the beneficiaries of the generating station as per their percentage shares for the month (inclusive of any allocation out of the unallocated capacity) in the installed capacity of the generating station. Regulation 42(2) provides for allocation of the payable amount towards capacity charges as determined under Regulation 30 to the beneficiaries on the basis of percentage shares for the month. However, in the view of NTPC, the allocation of payable amount to the beneficiaries should be on the basis of cumulative percentage shares up to the month. ERPC has submitted that whatever may be the basis for apportionment of payable of fixed cost amongst the beneficiaries, AFC receivable by NTPC will never vary. Therefore, the essence of filing the present petition is not clear and if any beneficiaries faces problem in view of Regulation 42(2) of the 2014 Tariff Regulations, then they should approach the Commission directly for appropriate relief.

8. NRPC in its reply has submitted that NRPC Secretariat is providing Plant Availability Factor (PAF) and allocation of the beneficiaries from generating units for the month as well as cumulative upto the month in that financial year in the Regional Energy Account. NRPC has submitted that NRPC Secretariat does not give distribution of fixed charges among various beneficiaries in the Regional



Energy Account and the same is done by the Petitioner. Accordingly, bills are raised by them based on their interpretation of the aforesaid regulation. NRPC has submitted that the Petitioner in para 10 of the petition has stated that the beneficiaries were raising questions on the apportionment of fixed charges based on the proportion of cumulative shares i.e. shares upto the billing month. However, neither NTPC nor any of the beneficiaries of NTPC's generating stations in Northern Region have raised this issue in NRPC forum.

9. NERPC has submitted that the Plant Availability Factor for the Month (PAFM), Cumulative Plant Availability Factor upto the current month and Weighted Average Share /Allocation for the month for the generating station are reflected in the monthly REA of NERPC. The generating companies raise their bills based on the above data. NERPC has further submitted that neither capacity charge for the month is reflected in monthly REA nor the sharing of capacity charge among the beneficiaries. As on date, there is no operational plant of NTPC in NER.

10. Rajasthan Discoms vide their joint reply have submitted that the Jaipur Vidyut Vitran Nigam Limited vide its letter dated 16.1.2015, on behalf of Rajasthan Discoms informed the Petitioner that as per Regulation 30(1) of the 2014 Tariff Regulations, the total capacity charges payable for a generating station shall be shared by its beneficiaries as per their respective percentage share/ allocation in the capacity of the generating station. Based on the views of the stakeholders, the Commission amended the above Regulation 30 of the



2014 Tariff Regulations and modified the formula for computing monthly capacity charges to ensure recovery of Annual Fixed charges on monthly pro-rata basis, subject to cumulative availability achieved upto the respective month. Rajasthan Discoms have further submitted that with the above methodology, sharing of capacity charges ensure appropriate and exact monthly share of each and every beneficiary of particular power generating station in accordance with their respective share.

11. UPPCL has submitted that the Petitioner has very clearly admitted that the annual fixed charges recovered by it during the year will remain unaffected and it is only apportionment of these charges that will undergo a change. UPPCL has further submitted that NTPC is not the aggrieved party and the present petition has been filed by NTPC to safeguard the interest of certain beneficiaries. Therefore, the present petition appears to be in the nature of PIL (Public Interest Litigation). UPPCL has submitted that the primary purpose of the Commission is to determine tariff for generation, supply, transmission of electricity, etc., and to regulate the electricity purchase and procurement process of distribution licenses, to facilitate intra-State transmission, to promote co-generation and generation of electricity from renewal sources of energy, to adjudicate upon the dispute between the licensees and generating companies, and to refer any dispute for arbitration, to levy fee for the purposes of Act, specify State Grid Code consistent with the Grid Code specified under clause (h) of sub-section (1) of Section 79. In view of the above, the Commission has no jurisdiction to adjudicate the petition in the nature of PIL. UPPCL has submitted that as per Regulation



30(4) read with Regulation 42 of the 2014 Tariff Regulations, capacity charges are to be apportioned amongst the beneficiaries in ratio of their entitlement up to the month so that implementation of the above provisions of the Regulation is ensured in a consistent manner.

12. TANGEDCO has submitted that the pro-rata basis is referred to the apportionment of allocation amongst the beneficiaries and it changes from month to month basis based on the demand. Accordingly, the annual fixed charges are to be calculated considering the apportionment (percentage of allocation) made during the month and not upto the month. TANGEDCO has submitted that the phrase “subject to cumulative availability achieved” referred by the Commission is such that the Annual fixed charges cannot be extended for Availability factor beyond the normative level determined by the Commission. TANGEDCO has submitted that the annual fixed charges are determined annually and need to be collected from the beneficiaries on monthly basis according to the share of the respective beneficiaries. The annual fixed charges are recoverable from the beneficiaries based on the NAPAF norms determined by the Commission under Regulation 36 of the Tariff Regulations. The 2014 Tariff Regulations provide for incentive for excess generation beyond NAPAF determined by the Commission. Therefore, allowing the methodology adopted by NTPC will only benefit the generator. The 2014 Tariff Regulations stipulate that the capacity charges for a thermal generating station be shared by the beneficiaries as per their percentage share for the month. However, due to change in allocation from month to month, percentage allocation for the month and the cumulative percentage allocation

upto the month would be different which resulted in difference in sharing of capacity charges amongst the beneficiaries. TANGEDCO has submitted that in the methodology adopted by the Petitioner, if a beneficiary surrenders its full share during a month and the same is allocated to others, the surrendered beneficiary is liable to pay the capacity charges even though there is no drawl of power during the respective months. Even though there is no allocation / no drawal of share during certain months in respect of a beneficiary, under cumulative allocation method, such beneficiary is liable to pay capacity charges to the extent of upto 3-4% of the total capacity charges. TANGEDCO has submitted that the beneficiaries who are allotted lower shares during certain months are also liable to pay in excess of the actual allocation under the cumulative allocation methodology adopted by NTPC, which is against the interest of the beneficiaries.

13. GRIDCO and BRPL in their replies have submitted that the total capacity charge payable for a generating station shall be shared by its beneficiaries as per their respective percentage share/ allocation in the capacity of the generating station. Therefore, the computation of capacity charges commences from the AFC determined by the Commission and brought down to the monthly basis as per the methodology prescribed in the 2014 Tariff Regulations for payment by the beneficiaries. It clearly means that the payment of capacity charge is on monthly basis. GRIDCO and BRPL have further submitted that Regulation 42 of the 2014 Tariff Regulations clearly provides that the bills shall be raised for capacity charge on monthly basis by the generating company in accordance with these

Regulations. Therefore, the provisions of Regulation 42 are in line with the provisions of Regulation 30(1) and there is no contradiction on this issue. GRIDCO and BRPL have submitted that Regulation 30(2) of the 2014 Tariff Regulations deals with the calculation of the capacity charge on monthly basis payable by the beneficiaries. The perusal of the formulae for calculation of monthly capacity charge for all the 12 months in the year would show that the only variable factor in the calculation of monthly capacity charge is Percent Plant Availability Factor during the month, actually attained by the generating station. Therefore, there is no stipulation of PAFN taken in the calculation defined as Percent Plant Availability Factor achieved up to the end of n<sup>th</sup> month under normal circumstances. GRIDCO and BRPL have submitted that as per the proviso of Regulation 30 (2) of the 2014 Tariff Regulations, if a generating station is under shutdown due to Renovation and Modernization, the company will be allowed to recover part of the AFC which shall include O&M expenses and interest on loan. It is only under this situation, PAFN defined as Percent Plant Availability Factor achieved up to the end of the n<sup>th</sup> month will be taken into consideration for calculation of Capacity Charge. This is only to give some relief to the generating company only when the generating station is undergoing Renovation and Modernisation. The contention of the Petitioner that PAFN be taken for all purposes in the computation of capacity charge is misconceived and without any basis.

14. KSEBL has submitted that NTPC has been adopting the cumulative weighted average of the monthly allocation for computation of capacity charges.



i.e. for allocating the monthly capacity charges for fifth month (August) amongst the beneficiaries including KSEBL. KSEBL has submitted that NTPC has been first arriving the cumulative weighted average allocation of the five months from April to August. This weighted average allocation is being used for sharing the monthly capacity charges. KSEBL has submitted that as per the methodology specified under Regulation 42(2), the monthly weighted average allocation of power from the generating stations to each beneficiary as certified by the RPC Secretariat shall only be adopted for sharing the capacity charges for each month. The methodology adopted by NTPC has resulted in huge difference in the capacity charges claimed by NTPC from KSEBL and the actual capacity charges admissible from KSEBL as per the norms issued by the Commission. KSEBL has submitted a comparison of the capacity allocation adopted by NTPC and the actual allocation certified by SRPC for the allocation from Ramagundam-III Power plant of NTPC during the year 2014-15 to give an insight in to the gravity of the issue as under:

Month	Weighted average capacity allocation certified by SRPC	Cumulative monthly weighted average allocation adopted by NTPC	Excess capacity charges claimed
	(%)	(%)	(Rs. in crore)
Apr-14	14.94	14.94	0.00
May-14	15.06	15.00	0.00
Jun-14	13.41	14.48	0.01
Jul-14	13.59	14.25	-0.01
Aug-14	13.29	14.06	0.00
Sep-14	12.39	13.78	0.00
Oct-14	14.94	14.12	0.34
Nov-14	15.81	14.44	0.24
Dec-14	17.4	14.77	0.00
Jan-15	15.65	14.86	0.01

Feb-15	15.89	14.95	-0.01
Mar-15	15.81	15.02	-0.01
Total			0.57

### **Analysis and Decision**

15. The present petition has been filed seeking clarification for sharing of capacity charges among the beneficiaries of the generating station as per Regulation 30 (4) read with Regulation 42 of the 2014 Tariff Regulations. We have considered the rival submissions and contentions of the Petitioner and the respondents and perused the documents on record.

16. The Petitioner has submitted that the 2014 Tariff Regulations provide for two types of billing elements, namely energy charges which are based on the price and GCV of fuel related to the month, and the other being annual in nature i.e. capacity charges. The Petitioner has contended that the capacity charges are yearly charges in Rs/year and are adjusted based on annual availability of the generating station. The Petitioner has submitted that since, month to month plant availability may vary depending upon the annual plant maintenance schedule during a year or due to various other factors, the recovery of capacity charges of current month has been linked with the previous month (period) availability of ensuring recovery of AFC. Accordingly, sharing of capacity charges of current month amongst the beneficiaries is also linked with entitlement up to the previous month (period) availability for ensuring recovery of AFC and for correct and justified sharing of capacity charges amongst the beneficiaries.

17. The Respondents have contended that 2014 Tariff Regulations provide that the capacity charges for a thermal generating station shall be shared by the beneficiaries as per their percentage share for the month. However, in the methodology adopted by the Petitioner, if a beneficiary surrenders its full share during a month and the same is allocated to others, the beneficiary surrendering its share is liable to pay the capacity charges even though there is no drawl of power by the said beneficiary during the month. The respondents have submitted that under the cumulative allocation methodology as adopted by NTPC, the beneficiaries who are allocated lower shares during certain months, are also liable to pay in excess of actual allocation which is against the provision of Regulation 42 of the 2014 Tariff Regulations. Rajasthan Discoms have submitted that the formula for computing monthly capacity charges to ensure recovery of annual fixed charges on monthly pro-rata basis, subject to cumulative availability achieved upto the respective month, ensures appropriate and exact monthly share of each and every beneficiary of a particular generating station. KSEBL has contended that NTPC has been adopting the method of cumulative weighted average of the monthly allocation for computation of capacity charge amongst the beneficiaries including KSEBL. However, as per the methodology specified under Regulation 42(2), the monthly weighted average allocation of power from the generating station to each beneficiary is certified by the RPC Secretariat and shall be adopted for sharing of capacity charges of each month.

18. There are differences between the Petitioner and the Respondents with regard to the interpretation of Regulations 30 and 42 of the 2014 Tariff



Regulations. The main issue which begs for clarification is whether the sharing of capacity charges amongst the beneficiaries in a month of a tariff year during the tariff period 2014-19 should be on the basis of percentage allocation for that month or cumulative percentage allocation upto that month of the year. Regulation 30(1) and Regulation 30(2) of the 2014 Tariff Regulations deal with the computation and payment of capacity charge and energy charge for the thermal generating station as under:

“30 (1) the fixed cost of a thermal generating station shall be computed on annual basis based on norms specified under these Regulations, and recovered on monthly basis under capacity charge. The total capacity charge payable for a generating station shall be shared by its beneficiaries as per their respective percentage share / allocation in the capacity of the generating station”

“(2)The capacity charge payable to a thermal generating station for a calendar month shall be calculated in accordance with the following formulae:

$$CC1 = (AFC/12)(PAF1/NAPAF) \text{ subject to ceiling of } (AFC/12)$$

$$CC2 = ((AFC/6)(PAF2/NAPAF) \text{ subject to ceiling of } (AFC/6)) - CC1$$

$$CC3 = ((AFC/4) (PAF3/NAPAF) \text{ subject to ceiling of } (AFC/4)) - (CC1+CC2)$$

$$CC4 = ((AFC/3) (PAF4 / NAPAF) \text{ subject to ceiling of } (AFC/3)) - (CC1+CC2+CC3)$$

$$CC5 = ((AFC \times 5/12) (PAF5 / NAPAF) \text{ subject to ceiling of } (AFC \times 5/12)) - (CC1+CC2 +CC3 +CC4) \\ CC6 = ((AFC/2) (PAF6 / NAPAF) \text{ subject to ceiling of } (AFC/2)) - (CC1+CC2+CC3+CC4 + CC5)$$

$$CC7 = ((AFC \times 7/12) (PAF7 / NAPAF) \text{ subject to ceiling of } (AFC \times 7/12)) - (CC1+CC2 +CC3 +CC4 + CC5 + CC6)$$

$$CC8 = ((AFC \times 2/3) (PAF8 / NAPAF) \text{ subject to ceiling of } (AFC \times 2/3)) - (CC1+CC2 +CC3 +CC4 + CC5 + CC6 + CC7)$$

$$CC9 = ((AFC \times 3/4) (PAF9 / NAPAF) \text{ subject to ceiling of } (AFC \times 3/4)) - (CC1+CC2 +CC3 +CC4 + CC5 + CC6 + CC7+ CC8)$$

$$CC10 = ((AFC \times 5/6) (PAF10 / NAPAF) \text{ subject to ceiling of } (AFC \times 5/6)) - (CC1+CC2 +CC3 +CC4 + CC5 + CC6 + CC7 + CC8 + CC9)$$

$$CC11 = ((AFC \times 11/12) (PAF11 / NAPAF) \text{ subject to ceiling of } (AFC \times 11/12)) - (CC1+CC2+CC3 +CC4 + CC5 + CC6 + CC7 + CC8 + CC9 + CC10)$$



$$CC12 = ((AFC) (PAFY / NAPAF) \text{ subject to ceiling of } (AFC)) - (CC1+CC2 + CC3+CC4 + CC5 + CC6 + CC7 + CC8 + CC9 + CC10 + CC11)$$

Where,

AFC Annual fixed cost specified for the year, in Rupees.

NAPAF = Normative annual plant availability factor in percentage.

**PAFN = Percent Plant availability factor achieved upto the end of the nth month.**

PAFY = Percent Plant availability factor achieved during the Year

CC1, CC2, CC3, CC4, CC5, CC6, CC7, CC8, CC9, CC10, CC11 and CC12 are the Capacity Charges of 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th and 12th months respectively."

The above formulae are only for computation of total amount of capacity charges payable for a thermal generating station during a tariff year. In the formulae, the computation of the capacity charge for respective month. i.e 1st, 2nd, 3rd ...n<sup>th</sup> month, is based on the cumulative Plant Availability Factor achieved upto that month (n<sup>th</sup> month) in the year as the recovery of full fixed charge in a tariff year is based on the achievement of Normative Annual Plant Availability Factor (NAPAF) and to achieve this, cumulative availability is considered for recovery of monthly capacity charge and annual fixed charge. The reason for providing cumulative plant availability up to the n<sup>th</sup> month has been clearly explained in the Statement of Reasons to the 2014 Tariff Regulations as under:

"34.6 Considering the views of the stakeholders, the Commission has appropriately modified the formula for computing monthly capacity charge. The PAFN has been defined as percent availability factor achieved upto the end of the nth month and not during the month. This will ensure recovery of Annual Fixed Charges on monthly basis on pro-rata basis, subject to cumulative availability achieved upto the respective month. "

As per the above, PAF achieved upto a month is required to be taken on cumulative basis and there is no mention of cumulative allocation of share upto a month.

19. Regulation 42(2) provides for billing of capacity charge and energy charge as under:

“42 (2).Payment of the capacity charge for a thermal generating station shall be shared by the beneficiaries of the generating station as per their percentage shares for the month (inclusive of any allocation out of the unallocated capacity) in the installed capacity of the generating station.”

As per the above provision, the capacity charges shall be shared by the beneficiaries as per shares during the month which includes any allocation out of the unallocated capacity. Therefore, share for the month shall mean all inclusion in or exclusion from the share of a beneficiary during the month. If this provision is read with Regulation 30 (2), it emerges that the net payable capacity charge of the beneficiaries has to be shared by the beneficiaries based on their allocation during the month. That being the case, the cumulative percentage allocation method adopted by the Petitioner does not represent the correct interpretation of the regulations. Further, the cumulative percentage allocation as adopted by the Petitioner may give undue commercial gain to certain beneficiaries and loss to others at different scenarios as illustrated below:

Sharing of capacity charge based on cumulative allocation upto month when allocation of long term beneficiaries A, B, C do not change								Remarks
Beneficiary	April	May	June	C.C. Rs. 80 crore/month	April	May	June	Only 3 months considered for illustration purpose.
					Avail.			
					60%	80%	100%	



A	30%	30%	30%	A	18.00	21.00	24.00	Allocation of long term beneficiaries A, B, C considered remain same. Therefore, they are not affected by the cumulative method of allocation. However, the scenario would be changed if allocation of A, B, C changes .
B	30%	30%	30%	B	18.00	21.00	24.00	
C	25%	25%	25%	C	15.00	17.50	20.00	
D (unallocated)	15%			D (unallocated)	9.00			
E(15% unal. is allocated to E from May )		15%	15%	E		5.25	8.00	On cumulative allocation, there is gain by E
E will pay if allocation is for the month						10.5	12.00	On monthly allocation basis, payable by E

Sharing of capacity charge based on cumulative allocation upto month when allocation of A, B and C changes								
Beneficiary	April	May	June	C.C. Rs. 80 crore/month	April	May	June	Remarks
					Avail.			In May A, B and C would pay on monthly allocation basis
					60.00%	80.00%	100%	
A	30%	25%	30%	A	18.00	19.25	22.67	17.5
B	30%	20%	30%	B	18.00	17.50	21.33	14
C	25%	20%	25%	C	15.00	15.75	18.67	14
D (unallocated)	15%			D (unallocated)	9.00			E & F would pay
E		15%	15%	E		5.25	8.00	10.5
F		20%				7	5.33	14
								Substantial gain by E & F at the cost of long term beneficiaries A, B, C

It is noticed from the above scenarios that the long term beneficiaries are paying more in a month under the sharing of allocation percentage on cumulative



method as adopted by the Petitioner even if there is reduction in the allocation in a month. The long term beneficiaries are not affected if their allocation remains constant in the year. Therefore, for a level playing field, the allocation of beneficiary(ies) ought to be taken “for the month” for sharing of capacity charges amongst the beneficiaries representing allocation of cost in due consideration of available capacity and opportunity to make use of such available capacity.

20. The Petitioner vide Record of Proceedings for the hearing dated 19.11.2015 was directed to furnish Fixed Charge Liabilities of different beneficiaries in a sample computation in regard to Badarpur TPS for the financial year 2014-15. The Petitioner has submitted the details of the same as under:

#### **Billing computation of Capacity Charge for BTPS**

<b>(A) Monthly entitlement (% share)</b>							
<b>Month</b>	<b>BRPL</b>	<b>BYPL</b>	<b>NDPL</b>	<b>NDMC</b>	<b>MES</b>	<b>MP</b>	<b>Total</b>
April' 14	33.42	18.99	22.77	17.73	7.09		100
May'14	33.42	18.99	22.77	17.73	7.09		100
June'14	33.42	18.99	22.77	17.73	7.09		100
July'14	33.42	18.99	22.77	17.73	7.09		100
Aug'14	33.42	18.99	22.77	17.73	7.09		100
Sept'14	33.4	18.98	22.84	17.7	7.09		100
Oct'14	20.22	11.54	13.8	10.72	4.28	39.45	100
Nov'14	19.9	11.31	13.57	10.56	4.23	40.43	100
Dec'14	22.5	12.79	15.4	11.94	4.78	32.6	100
Jan'14	33.42	18.99	22.77	17.73	7.09		100
Feb'14	33.42	18.99	22.77	17.73	7.09		100
March'15	33.42	18.99	22.77	17.73	7.09		100
<b>Fixed charges liability on monthly basis (Rs. crore)</b>							
<b>Month</b>	<b>BRPL</b>	<b>BYPL</b>	<b>NDPL</b>	<b>NDMC</b>	<b>MES</b>	<b>MP</b>	<b>Total</b>
April' 14	9.8	5.57	6.67	5.2	2.08	0	29.31
May'14	10.86	6.17	7.4	5.76	2.3	0	32.5
June'14	10.33	5.87	7.04	5.48	2.19	0	30.91



July14	10.33	5.87	7.04	5.48	2.19	0	30.91
Aug'14	10.24	5.82	6.97	5.43	2.17	0	30.63
Sept'14	6.65	3.78	4.55	3.52	1.41	0	19.9
Oct'14	5.66	3.23	3.87	3	1.2	11.05	28.01
Nov14	7.23	4.11	4.93	3.84	1.53	14.69	36.33
Dec'14	8.37	4.76	5.73	4.44	1.78	12.13	37.22
Jan'14	11.15	6.33	7.59	5.91	2.36	0	33.35
Feb'14	10.33	5.87	7.04	5.48	2.19	0	30.91
March'15	10.33	5.87	7.04	5.48	2.19	0	30.91
<b>Total</b>	<b>111.27</b>	<b>63.24</b>	<b>75.87</b>	<b>59.03</b>	<b>23.61</b>	<b>37.87</b>	<b>370.9</b>
<b>Total annual fixed charges</b>							<b>370.9</b>

<b>(B) Cumulative Entitlement (% Share)</b>							
<b>Month</b>	<b>BRPL</b>	<b>BYPL</b>	<b>NDPL</b>	<b>NDMC</b>	<b>MES</b>	<b>MP</b>	<b>Total</b>
April' 14	33.42	18.99	22.77	17.73	7.09	0	100
May14	33.42	18.99	22.77	17.73	7.09		100
June'14	33.42	18.99	22.77	17.73	7.09		100
July14	33.42	18.99	22.77	17.73	7.09		100
Aug'14	33.42	18.99	22.77	17.73	7.09		100
Sept'14	33.42	18.99	22.78	17.73	7.09		100
Oct'14	31.5	17.91	21.48	16.71	6.68	5.71	100
Nov14	30.08	17.1	20.51	15.95	6.38	9.98	100
Dec'14	29.22	16.61	19.93	15.5	6.2	12.53	100
Jan'14	29.65	16.85	20.22	15.73	6.29	11.26	100
Feb'14	29.96	17.03	20.43	15.9	6.36	10.32	100
March'15	30.26	17.2	20.63	16.05	6.42	9.44	100
<b>Fixed charges liability for the month on cumulative Basis (Rs. crore)</b>							
<b>Month</b>	<b>BRPL</b>	<b>BYPL</b>	<b>NDPL</b>	<b>NDMC</b>	<b>MES</b>	<b>MP</b>	<b>Total</b>
April' 14	9.8	5.57	6.67	5.2	2.08	0	29.31
May14	10.86	6.17	7.4	5.76	2.3	0	32.5
June'14	10.33	5.87	7.04	5.48	2.19	0	30.91
July14	10.33	5.87	7.04	5.48	2.19	0	30.91
Aug'14	10.24	5.82	6.97	5.43	2.17	0	30.63
Sept'14	6.65	3.78	4.55	3.52	1.41	0	19.9
Oct'14	5.49	3.14	3.75	2.91	1.16	11.55	28.01
Nov14	8.04	4.57	5.49	4.27	1.71	12.25	36.33
Dec'14	8.84	5.02	6.04	4.69	1.88	10.75	37.22
Jan'14	11.06	6.29	7.54	5.87	2.35	0.26	33.35
Feb'14	10.24	5.82	6.98	5.43	2.17	0.27	30.91



March'15	10.35	5.88	7.05	5.49	2.2	-0.06	30.91
<b>Total</b>	<b>112.22</b>	<b>63.79</b>	<b>76.52</b>	<b>59.53</b>	<b>23.81</b>	<b>35.02</b>	<b>370.9</b>
<b>Total annual fixed charges</b>							<b>370.9</b>

Perusal of the above computation reveals that the long term beneficiaries, namely BRPL, BYPL, NDPL, etc. have paid more capacity charges during the months of November and December, 2014 under cumulative % share method even though there is substantial reduction in the % share of allocation in the months of October, November and December, 2014. On the other hand, few beneficiaries such as MPPMCL, even though had much higher allocation of 39.45%, 40.43% and 32.60% in October, November and December, 2014 respectively were paying less capacity charges under the cumulative method, than what would have been paid under percentage allocation for monthly basis.

21. It is noticed from the above computation that though the Petitioner is revenue neutral, irrespective of the above two methodologies, there are increased financial liabilities for BRPL, BYPL, NDPL, NDMC and MES, while less liabilities for MP towards fixed charges in the year 2014-15 if cumulative %age allocation is considered for sharing the capacity charges. Therefore, the certain beneficiaries are paying more capacity charges over a year than their actual allocation and vice-versa which is not the intention of Regulation 30 and Regulation 42 (2) of the 2014 Tariff Regulations.

22. According to ERPC, as per Regulation 42(2) of the 2014 Tariff Regulations, payment of the capacity charges for a thermal generation station as determined under Regulation 30 is required to be shared by the beneficiaries of the

generation station as per their percentage shares for the month in the installed capacity of the generating station. WPRC and NRPC have submitted that they are preparing REA for payment of capacity charges by each beneficiary and giving monthly entitlements in kWh and cumulative entitlements in kWh. The Petitioner raises bill directly based on the REA.

23. Based on the above discussions and analysis, we are of the view that the methodology adopted by the Petitioner does not represent the correct interpretation of the regulation. The sharing of capacity charge of the generating station of the Petitioner by the beneficiaries shall be strictly on the basis of percentage allocation of share “for the month” from a generating station which shall take into account all inclusion or exclusion made to the share of the beneficiary during the month. The Petitioner shall bill the capacity charges to the beneficiaries based on the monthly percentage allocation of each beneficiary for the month.

24. The petition along with IA is disposed of in terms of the above.

SD/-  
**(Dr. M.K.Iyer)**  
Member

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

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

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

