

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

**Petition No. 130/MP/2015
alongwith
I.A. No. 67/2017**

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

Date of order: 20th of September, 2017

In the matter of

Petition filed under Section 79 (1) (a) and (f) of the Electricity Act, 2003 read with Regulation 110 & 111 of the CERC (Conduct of Business) Regulations, 2010 for implementation/ enforcement of the provisions of the CERC (Terms and Conditions of Tarff) Regulations, 2014 regarding declaration of Commercial Operation Date in respect of Unit-IV of Barh Super Thermal Power Station Stage-II (660MW) and for consequential directions.

**And
In the matter of**

GRIDCO Limited
Janpath,
Bhubaneswar-751 022

....Petitioner

Vs

- 1) NTPC Limited,
NTPC Bhawan, Core-7
Scope Complex
7 Institutional Area
Lodhi Road
New Delhi-100 003

- 2) West Bengal State Electricity Distribution Company Limited,
Vidyut Bhawan,
Block DJ
Sector-II, Salt Lake City
Kolkata-700 091



- 3) Bihar State Power Holding Company Limited
1st Floor, Vidyut Bhawan
Bailey Road
Patna-800 001
- 4) Jharkhand Urja Vikas Nigam Limited
Engineering Bhawan
Heavy Engineering Corporation,
Dhurwa
Ranchi-834 004
- 5) Damodar Valley Corporation,
DVC Towers
CIP Road
Kolkata-700 054
- 6) Eastern Regional Power Committee
14, Golf Club Road
Tollygunge
Kolkata,
- 7) Eastern Regional Load Despatch Centre
14, Golf Club Road
Tollygunge
Kolkata

....Respondents

The following were present:

Shri Raj Kumar Mehta, Advocate, GRIDCO
Shri Abhishek Upadhyay, Advocate, GRIDCO
Ms. Himanshi Audley, Advocate, GRIDCO
Shri A.K. Samantaray, GRIDCO
Shri Umakanta, GRIDCO
Shri S.R. Sarangi, GRIDCO
Shri M.G. Ramachandran, Advocate, NTPC
Ms. Poorva Saigal, Advocate, NTPC
Ms. Anushree Bardhan , Advocate, NTPC
Shri Umesh Ambali, NTPC
Shri A.K. Bishnoi, NTPC
Shri Rajesh Bhagat, NTPC
Ms. Abiha Zaidi, POSOCO
Ms. Pragya Singh, POSOCO
Shri S.S. Barpanda, POSOCO
Shri P.S. Das, ERLDC



ORDER

The Petitioner, GRIDCO Limited, has filed the present petition to declare the commercial operation of Unit-IV of Barh Super Thermal Power Station, Stage-II (660 MW) as null and void.

2. Brief facts of the case as stated by the Petitioner leading to the filing of the present petition are as under:

(a) NTPC Ltd. has set up a Super Thermal Power Plant Barh Stage-II 1320 MW (2x660MW) (hereinafter referred to as 'the generating station') at Barh in the State of Bihar. NTPC, vide its letters dated 25.7.2014, 26.7.2014 and 6.8.2014 informed the Petitioner about the trial run operation of one unit (hereinafter referred to as 'unit') of the generating station. However, due to certain reasons, the successful trial run could not be completed. NTPC vide its letter dated 4.11.2014 informed the Petitioner that first unit has been synchronized on 3.11.2014 at 07:13 hrs and achieved full load operation at 18:40 hrs. NTPC vide its letter dated 14.11.2014 informed the Petitioner that commercial operation of first unit of the generating station has been declared w.e.f 00:00 Hrs of 15.11.2014.

(b) GRIDCO could not attend the trial run at MCR test due to short notice. However, the data pertaining to the period from 3.11.2014 to 14.11.2014 was downloaded from the website of ERLDC site. Perusal of said data reveals as under:

- (c) Unit of the generating station was synchronized on 3.11.2014. However, NTPC unilaterally declared commercial operation at 00:00 hrs of 15.11.2014.
- (d) As per the prevailing Regulations, considering the installed capacity of the unit as its Maximum Continuous Rating (MCR), the unit should have generated 165 MWH (660MW) in every 15 minutes block period continuously for 288 blocks (72hrs.) or the unit should have generated 156 MWH (622MW) at ex-bus after allowing auxiliary consumption of 5.75%. However in none of the 15 minutes block periods in the total period in question i.e., from 00:00 Hrs of 12.11.2014 to 24:00 Hrs of 14.11.2014, the unit has achieved even 156 MWH. The unit ran at an average of 111MWH (444 MW) from 00:00Hrs of 12.11.14 till 24:00 hrs of 14.11.14 instead of atleast 156 MWH continuously for 72 Hrs.
- (e) GRIDCO vide its letter dated 26.12.2014 informed NTPC that the unit has failed the trial run test and such unilateral mis-declaration of commercial operation of the unit is not acceptable to GRIDCO. GRIDCO requested NTPC to start the trial run process afresh strictly in terms of the provisions of the 2014 Tariff Regulations and to withdraw the bill served by it and not to serve any further bill till the unit completes MCR test successfully. In response, NTPC vide its letter dated 31.12.2014 followed by another letter dated 14.1.2015 informed the Petitioner that unit of the generating station was synchronized on 4.8.2014 at 21:56 hrs and trial operation was conducted thereafter. NTPC further informed that during the trial operation, unit ran successfully for 72 hours plus, demonstrating MCR and fulfilling the requirements of the 2014 Tariff Regulations.

NTPC further informed that Meter Data regarding the said trial operation would be submitted soon. However, no Meter Data was submitted by NTPC.

- (f) Since NTPC failed to supply the Meter Data from the date of synchronization to the date of successful MCR test i.e. 4.8.2014 to 8.8.2014, the Petitioner vide its letters dated 24.2.2015 and 9.3.2015 requested ERPC and ERLDC respectively to provide meter data for the above period. On 9.3.2015, ERPC furnished the soft copy of the block-wise actual injection data of the generating station during the month of August 2014.
- (g) Perusal of the downloaded data revealed that the unit in question started injecting power on 4.8.2014 at 22:00 hrs and continued up to 00:00 hrs of 5.8.2014. Thereafter, the said Unit had stopped injecting power upto 04:00 hrs. of 5.8.2014 and the injection again started at 4:15 hrs of 5.8.2014. Therefore, the contention of NTPC that the Unit had attained full load in the early hours of 5.8.2014 is not correct. As per the provisions of 2014 Tariff Regulations, considering the installed capacity of the Unit as its Maximum Continuous Rating (MCR), the Unit should have generated 165 MWH (660MW) in every 15 minutes block period continuously for 288 blocks (72hrs.) or the unit should have generated 156 MWH (622MW) at ex-bus after allowing auxiliary consumption of 5.75%. However, none of the 15 minutes block period in the total period in question i.e. from 22:00 Hrs of 4.8.2014 to 22:00 Hrs of 7.8.2014, the Unit has achieved even 156 MWH. The unit ran at an average of 148 MWH (593 MW) from 4:15 Hrs of 5.8.2014 till 22:00 hrs of 7.8.2014 i.e for 53.30 hrs only instead



of at least 156 MWH continuously for 72 Hrs. The unit had stopped on 7.8.2014 at 22:00 Hrs and again started injection of power from 2:30 Hrs of 8.8.2014. The unit has neither attained the full load of 660 MW or 622 MW (considering Auxiliary Consumption) nor run at continuous 72 Hrs as per the provisions of the 2014 Tariff Regulations. Since during the entire period, the unit had never reached the generation figure of 718.6 MW, claim of NTPC that the machine ran for a period of 77.95 Hrs. and reached the maximum generation of 718.6 MW is not correct.

(h) Subsequent to the declaration of commercial operation of the unit, NTPC has been raising bills to GRIDCO and GRIDCO has already paid around Rs. 51.33 crore towards such bills. The energy charge rate of the generating station is very high (approx. Rs. 3.60 per unit) as against the offered indicative rate of 87 paise per unit in the offer letter of NTPC. Moreover, the landed cost of domestic coal as claimed by NTPC is more or less at par with the landed cost of imported coal or sometimes more than the imported coal which is not understandable.

(i) Since the unit has not completed the MCR test necessary for declaration of commercial operation as per the provisions of the 2014 Tariff Regulations, the injection of power after 15.11.2014 should be considered as infirm power and charged accordingly as per the provisions of the 2014 Tariff Regulations.

3. Against the above background, the Petitioner has made the following prayers:

(a) Declare the Commercial Operation of Unit-IV of Barh Stage-II as null and void;



- (b) Direct NTPC to start the trial run process afresh strictly in accordance with the provisions contained in CERC (Terms and Conditions of Tariff) Regulations, 2014;
- (c) Direct NTPC to withdraw the Bills served to GRIDCO from November, 2014 till date;
- (d) Direct NTPC not to serve any such Bills till the said Unit of Barh STPS-II completes the MCR test successfully in accordance with the provisions contained in CERC (Terms and Conditions of Tariff) Regulations, 2014;
- (e) Direct NTPC to treat the power injected till date as infirm power;
- (f) Direct NTPC to refund the amount paid by GRIDCO pursuant to the Bills raised by NTPC along with interest;
- (g) Defer consideration of the Tariff petition filed by NTPC in respect of Barh STPS till finalization of instant petition filed by GRIDCO.

4. Notice was issued to the Respondents to file their replies. Reply to the petition has been filed by NTPC and ERLDC. The Petitioner has filed its rejoinder.

5. NTPC in its reply has submitted as under:

- (a) NTPC has substantially complied with the requirements to demonstrate the reliability of the generating units considered, namely the units are capable of



reliably operating on normative level. The break in the generation for about 4.18 hrs was not on account of any reason or inability of the generating unit to continuous function.

(b) There was a spurious tripping which was required to be analyzed. After the spurious tripping and having found nothing wrong in the operation of machines and equipment, immediately within four hours without the need for any rectification, etc. of the machines and equipments, the operation was re-started. The operation was continued for another six hours, demonstrating sustained and continuous performance. Therefore, there was substantial compliance with the purpose and objective of demonstrating the performance of the generating station for a period of 72 hrs.

(c) The Commission in the Statement of Reason to the 2014 Tariff Regulations has clarified that the objective of specifying provisions related to trial run and trial operation is to ensure that the generating unit is capable of reliably operating at normative levels. The primary purpose of the provisions of trial run is to demonstrate reliable operation of the plant and to ensure that the unit is capable of operating at full load on a sustained basis thereafter.

(d) The interpretation and application of the 2014 Tariff Regulations w.e.f. trial operation and trial run in literal matter by the Petitioner is not correct. These provisions have to be considered in a purposive manner consistent with the object sought to be achieved. The object sought to be achieved is to ensure that the equipment would be capable of performing on a sustained basis.



(e) With regard to high energy cost of the generating station, it was envisaged that the coal for the generating station would be sourced from the captive coal blocks of Chatti-Bariatu and Kerandari mines. NTPC planned to develop these mines so as to coincide with the commissioning of the units of the generating station. These coal blocks were de-allocated by the Ministry of Coal vide its letter dated 24.6.2011 and were subsequently reallocated on 23.1.2013. Meanwhile, the Hon'ble Supreme Court vide its judgment dated 24.9.2014 cancelled the coal blocks and same were reallocated to NTPC by the Ministry of Coal on 24.3.2015. As the coal is being sourced through the MoU route, the landed cost of coal at the generating station is high. However, NTPC is making all possible efforts to reduce the energy charge rate with the materialization of the captive mines.

6. Eastern Regional Load Despatch Centre (ERLDC) in its reply has submitted as under:

(a) The role of RLDC is limited to initiation of scheduling of the generating station after declaration of COD by the respective generating stations as per the 2014 Tariff Regulations.

(b) NTPC, vide letter dated 14.11.2014, declared the unit of the generating station on commercial operation w.e.f 00:00 hrs of 15.11.2014. The declaration of COD of unit was also recorded in the 29th TCC (Technical Coordination Committee) meeting of ERPC held on 13.2.2015.

(c) Regarding annulment of COD of unit, it is felt that the views of other beneficiaries should be taken into consideration, before arriving at any final decision. Further, the beneficiaries of unit and their percentage shares have undergone changes over time subsequent to declaration of COD. Madhya Pradesh subsequently surrendered its shares in entirety while the percentage shares of other constituents have undergone changes. Presently, BSPHCL (Bihar) holds majority share of around 77% while GRIDCO (Odisha) holds a share of around 15%.

7. The Respondent, vide Record of Proceedings for the hearing dated 6.11.2015, was directed to submit (i) actual generation data at generator terminal and ex-bus generation block-wise during trial run carried out in November 2014 prior to declaration of commercial operation on 15 November, 2014; (ii) actual generation at generator terminal and ex-bus generation for three months from 15.11.2014.

8. NTPC, vide its affidavit dated 11.3.2016, has submitted as under:

(a) The performance of unit during trial operation in August, 2014 is as under:

(i) Average PLF of 94.45% (623 MW average load) was achieved by the Unit during 258 time-blocks (more than 64 hours) of continuous/ consecutive run i.e. from 24th time-block on 5.8.2014 to 89th Block on 7.8.2014 (excluding the initial ramp-up period).

(ii) On 7.8.2014 at 22:30 hrs, unit was tripped due to spurious operation of protective system due to control system voltage/parameter fluctuation which is beyond the control of NTPC.



(iii) The unit was immediately brought back on bar on 8.8.2014 at 02:15 hrs without repair or rectification of the equipment/ component. If the period of minor outage (4hrs 15mins) and ramp up period thereafter (30 mins) is excluded, the unit operated for 72 hrs at an average PLF of 93.22% and average output of 615 MW.

(iv) Unit has achieved ~100% and more load in 29 time-blocks (more than 7 hrs) and more than 95% load in 183 time-blocks (more than 45 hrs) during the above trial run. The maximum average load of 672 MW (101.82%) during two time blocks of (11:30-11:45 hrs and 21:45-22:00 hrs) on 7.8.2015 was achieved.

(v) During the initial period, generating station did not have a firm source of coal supply. The generating station was sourcing through MOU route. The coal characteristics of these sources are different. Usage of mix of coals led to fluctuation in coal quality and non-achievement of 100% average PLF.

(vi) Unit achieved PLF of 93.22% during the 72 hours trial run despite reasons beyond control of NTPC.

(b) Special circumstances: The generating station is the supercritical project implemented by BHEL in technological collaboration (design, manufacturing, supply and erection) with Alstom (for SG package) and Siemens (for TG package). During the course of execution of project since initial erection to commercial operation of the unit, NTPC has faced number of issues, challenges and teething problems due to absorption/indigenous development of the

associated new technology which would ultimately benefit the entire power sector and country as a whole in terms of future reduction in new equipment/ maintenance/ spares cost.

(c) Power requirement of the beneficiaries met: Subsequent to declaration of COD of the unit, the beneficiaries have been provided the full quantum of power requisitioned by them. There is no instance that due to any fault, the generating station could not supply the power requisitioned by the beneficiaries. Therefore, neither the beneficiaries nor the grid operation has ever been adversely affected by this unit not generating at MCR during trial run. NTPC has substantially complied with the purpose and objective of demonstrating the performance of the generating unit for a period of 72 hours. During subsequent post-COD operation, unit of the generating station has been complying with the provisions of the 2014 Tariff Regulations and Grid Code.

(d) With regard to actual generation data at generator terminal and ex-bus generation block-wise during trial run in November, 2014 prior to COD declaration on 15.11.2014, NTPC has submitted that unit of the generating station was synchronized to grid during trial run in month of November 2014 i.e. on 3.11.2014 prior to declaration of COD on 15.11.2014. NTPC has placed on record the actual generation data at generator terminal and ex-bus generation block-wise during the period of operation i.e. in firm power injection for the period from 3.11.2014 to 5.11.2014 prior to declaration of commercial operation on 15



November, 2014 as **Annexure-A2**. The operation of Unit during 3.11.2014 to 5.11.2014 is summarized as under:

Total no. of 15 min. time-blocks of operation	179 blocks (about 45 hrs)	From 07:00 hrs. (3.11.2015) to 3:45 hrs. (5.11.2015)
No. of time blocks at full load or more	46 blocks (about 11 hrs)	
No. of time blocks between 95% to 100% load	65 blocks (about 16 hrs)	
Average load for consecutive 34 hours (18:00 hrs/ 3.11.2015 to 5.11.2015/ 3:45 hrs)	646 MW (98%)	

(e) With regard to actual generation at generator terminal and ex-bus generation for 3 months from 15.11.2014, NTPC has submitted as under:

(i) Before COD i.e. w.e.f. 00:00 hrs of 15.11.2014, the unit was operated based on the schedule given by the beneficiaries and grid conditions and about 65% of this period, the availability of unit was around 100%. However, in the absence of schedule from the beneficiaries, the unit was not operated at desired level.

(ii) After the COD, the unit has run continuously in the months of February 2015 and March 2015 with only single outage in each month. During the period from 15.11.2014 to 31.3.2015, unit has achieved Availability of 83%, which is the normative availability as per the provisions of the 2014 Tariff Regulations.

(iii) During the subsequent year 2015-16 (till February 2016) the unit had surpassed the normative performance level achieving availability of more than 90%. However, post COD unit operation at MCR load

continuously for all blocks during 2-3 days was not possible due to lower power requisitioned by the beneficiaries.

(iv) The technical capability of the generating station is amply proven as 2nd unit has been declared COD w.e.f. 00:00 hrs of 18.2.2016 after successful trial run of 72 hrs continuously at MCR from 9.2.2016 to 12.2.2016. With this, the generating station was declared COD w.e.f. 18.2.2016. Accordingly, NTPC had gone ahead to demonstrate 72 hrs continuous operation of unit at 100% MCR load w.e.f. 4.3.2016 to 7.3.2016 and unit has generated 48.356 MUs at a PLF of more than 101.7%.

(f) Unit of the generating station was the first unit being taken up for commercial operation after enactment of the 2014 Tariff Regulations, wherein regulatory provisions related to trial run for COD has been substantially modified. NTPC, based on its understanding that Regulation 5 of the 2014 Tariff Regulations is of enabling nature towards conducting trial run of the unit in the integrated grid operation, proceeded for declaration of COD of unit based upon August 2014 trial run and subsequent trial operation performance in November 2014 after getting assurance of unit capability to achieve normative performance level to meet the power requirement of the beneficiaries. NTPC has requested to relax the requirement of 72 hrs continuous run at 100% MCR under trial operation for declaration of unit commercial operation to the extent of brief outage of 4 hrs and



average load of 93.22% achieved by the unit during trial operation from 5.8.2014 to 8.8.2014 under Regulation 54 of the 2014 Tariff Regulations.

Analysis and Decision:

9. We have considered the submissions of the Petitioner and the Respondents and perused documents on record. The following issues arise for our consideration:

(a) Whether the provisions of the 2014 Tariff Regulations regarding trial run for declaration of COD have been complied with before the declaration of COD on 15.11.2014?

(b) If not, on which date the unit has demonstrated the trial run of unit at MCR/IC continuously for 72 Hours.

(c) Whether the declaration of COD by NTPC on 15.11.2014 is accepted/recognized by the Respondents and ERLDC and whether the Respondents and ERLDC had been scheduling power since declaration of COD (15.11.2014)?

(d) What should be the COD for unit ?

The above issues have been dealt with as under:

Issue No. 1: Whether the provisions of the 2014 Tariff Regulations regarding trial run for declaration of COD have been complied with by NTPC before the declaration of COD of the generating station on 15.11.2014?

10. The Petitioner has submitted that NTPC had declared the COD of unit of the generating station on 15.11.2014. The trial run for declaration of COD was conducted



from 5.8.2014 to 8.8.2014. The Petitioner has submitted that after the implementation of the project, NTPC vide its letters dated 25.7.2014, 26.7.2014 and 6.8.2014 informed the Petitioner and other beneficiaries about trial run operation of the unit. However, due to certain reasons, the trial run could not be completed. The Petitioner has submitted that NTPC, vide its letter dated 4.11.2014 further informed GRIDCO that unit has been synchronized at 7.13 hrs on 3.11.2014 and achieved full load operation at 18.40 hrs. In the said letter dated 4.11.2014, NTPC also informed that subsequent to completion of trial run, it intends to declare the unit on commercial operation. Finally, NTPC vide its letter dated 14.11.2014 informed that unit of the generating station has been declared under commercial operation w.e.f. 00.00 hrs of 15.11.2014. The Petitioner has submitted that NTPC vide its letter dated 14.1.2015 further informed the Petitioner that unit was synchronised on 4.8.2014 at 21:56 hrs for the purpose of trial operation and attained full load in the early hours of 5.8.2014. Thereafter from 04.30 hrs of 5.8.2014, the said unit ran successfully at full load till 10:27 hrs of 8.8.2014 for a period of 77.65 hrs with a brief outage due to spurious operation of protection. During the said trial operation, the unit attained maximum load of 718.6 MW, demonstrated MCR (including 105% MCR) and completed the trial operation in line with NTPC's specifications and provisions of the 2014 Tariff Regulations. However, before the declaration of COD of the unit, no trial run was conducted by NTPC as per the provisions of the 2014 Tariff Regulations.

11. NTPC has submitted that the Commission in the Statement of Reasons of the 2014 Tariff Regulations has clarified that the objective of specifying provisions regarding trial run and trial operation is to ensure that the generating unit is capable of

reliably operating at normative levels.

12. We have considered the submissions of the Petitioner and NTPC. Regulation 4 of 2014 Tariff Regulations provides as under:

“4. Date of Commercial Operation: The date of commercial operation of a generating station or unit or block thereof or a transmission system or element thereof shall be determined as under:

(1) Date of commercial operation in case of a generating unit or block of the thermal generating station shall mean the date declared by the generating company after demonstrating the maximum continuous rating (MCR) or the installed capacity (IC) through a successful trial run after notice to the beneficiaries, if any, and in case of the generating station as a whole, the date of commercial operation of the last generating unit or block of the generating station: Provided that

(i) where the beneficiaries have been tied up for purchasing power from the generating station, the trial run shall commence after seven days notice by the generating company to the beneficiaries and scheduling shall commence from 0000 hr after completion of the trial run:

(ii) the generating company shall certify to the effect that the generating station meets the key provisions of the technical standards of Central Electricity Authority (Technical Standards for Construction of Electrical plants and electric lines) Regulations, 2010 and Grid Code: 22

(iii) the certificate shall be signed by CMD/CEO/MD of the company subsequent to its approval by the Board of Directors in the format enclosed at Appendix VI and a copy of the certificate shall be submitted to the Member Secretary, (concerned Regional Power Committee) and concerned RLDC before declaration of COD”

Further, Regulation 5 of the 2014 Tariff Regulations provides as under:

“5. Trial Run and Trial Operation Trial Run in relation to generating station or unit thereof shall mean the successful running of the generating station or unit thereof at maximum continuous rating or installed capacity for continuous period of 72 hours in case of unit of a thermal generating station or unit thereof and 12 hours in case of a unit of a hydro generating station or unit thereof:

Provided that where the beneficiaries have been tied up for purchasing power from the generating station, the trial run shall commence after seven day notice by the generating company to the beneficiaries”

As per the above provisions, the trial shall commence after seven days notice by the generating company to the beneficiaries.

13. The Petitioner has submitted that it could not attend the trial run at MCR test due to short notice. It is noted that the Ministry of Power, Govt. of India vide its letter dated 3.7.2012 allocated 85% of 1320 MW Power from the generating station to the beneficiaries, namely Bihar, Orissa, Jharkhand, West Bengal and Sikkim. Therefore, it is understood that the beneficiaries were tied up for purchasing power from the generating station. Therefore, as per provisions of Regulation 4 and 5 of 2014 Tariff Regulations, 2014, the generating company is required to give notice to the beneficiaries seven days prior to conducting trial run before declaration of COD.

14. It is noted that NTPC conducted the trial run for declaration of COD of the unit from 5.8.2014 to 8.8.2014 and notice in this regard was given to the beneficiaries on 26.7.2014. Therefore, NTPC has complied with the requirement of seven days notice to the beneficiaries for conducting the trial run of the unit.

15. With regard to trial run conducted from 5.8.2014 to 8.8.2014, NTPC has submitted that the unit was immediately synchronized to the Grid at 04:08 hrs of 5.8.2014 to restart the trial operation. Thereafter, the Unit ran successfully at almost full load till 10:27 hrs of 8.8.2014 (amounting to 78 hours) with a brief outage from 22:10 hrs of 7.8.2014 to 02:28 hrs of 8.8.2014 i.e. with an outage period of about 04 hrs and 18 minutes. During trial operation, the unit ran continuously for about 66 hrs and again for a period of about 06 hrs generating 43:80 MUs i.e. at 92.21% PLF and had achieved a maximum instantaneous load of 718 MW. NTPC has submitted that the brief outage of

about 4 hrs was caused by spurious tripping which is very much inherent in the system but not due to any system deficiency or due to non-readiness of the system.

16. Perusal of the trial run data reveals that the unit started the injection of power at 04:15 hrs of 5.8.2014 and attained the full load at 16:30 hrs (block no 66) on 5.8.2014 and unit continued to run up to 22:00 Hrs of 7.8.2014. The unit could run continuously from 04:15 Hrs of 5.8.2014 till 22:15 hrs of 7.8.2014 i.e for 65.45 Hrs only instead of continuously for 72 Hrs and unit could attain the full load in 29 time blocks out of 258 blocks. Unit had stopped at 22:00 Hrs of 7.8.2014 and again started injecting power from 02:45 Hrs of 8.8.2014, and continued operating upto 10:30 hrs. In view of above, trial run could not be stated to be in terms of the 2014 Tariff Regulations.

17. With regard to trial run conducted from 11.11.2014 to 15.11.2014, NTPC has submitted that trial run from 11.11.2014 to 15.11.2014 was conducted subsequent to the rectification work of the boiler structure and was intended to establish the satisfactory boiler structure behavior only and not carried out for the trial run of the unit as per MCR/IC for declaration of the COD of unit.

18. Perusal of the actual generation data at generator terminal block-wise during trial run in November, 2014 prior to declaration of COD on 15.11.2014 reveals that unit of the generating station was synchronized to grid during trial run on 3.11.2014. The trial run was conducted from 07:00 hrs of 3.11.2015 to 03:45 hrs. of 5.11.2014 i.e. 179 blocks (about 45 hrs). The unit has been run on full load and above only for 46 time blocks (discontinuous pattern) out of 179 time blocks. Also, trial run data for the period 11.11.2014 to 15.11.2014 is not relevant to be considered for declaration of the COD of

the unit as Respondent No. 1 has stated that this trial run was for establishing boiler structure behavior.

Issue No. 2: If not, on which date the unit has demonstrated the continuous full load running capability of unit for 72 Hours.

19. NTPC has argued that during the subsequent year 2015-16 (till February 2016), unit had also surpassed the normative performance level achieving availability of more than 90%. NTPC has submitted that post COD, unit operation at MCR load continuously for all block during 2-3 days was not possible due to lower power requisitioned by the beneficiaries. NTPC had not been able to get the same even on request from ERLDC for carrying out efficiency tests. NTPC vide letter dated 30.11.2015, approached ERLDC for full schedule generation corresponding to declared capacity.

20. We have considered the submissions of NTPC. NTPC vide its affidavit dated 11.3.2016 has submitted that having increased schedule generation subsequent to COD of Unit on 18.2.2016, opportunity has emerged to demonstrate unit capability in case of unit also. NTPC has contended that it had gone ahead to demonstrate 72 hrs continuous operation of unit at 100% MCR load w.e.f. 4.3.2016 at 4:00 Hrs to 7.3.2016 at 14:00 Hrs and unit had generated 48.356 MUs at a PLF of more than 101.7%. It is noted that during continuous operation of the unit from 4.3.2016 to 7.3.2016 for 72 Hrs, load of each block was more than 100% (660 MW). Therefore, the unit had demonstrated the full load running capability at MCR during 4.3.2016 to 7.3.2016 i.e. much after the declaration of COD on 15.11.2014 as per the provisions of the 2014 Tariff Regulations.

Issue 3: Whether the declaration of COD by NTPC on 15.11.2014 is accepted/recognized by the other Respondents and ERLDC and whether the Respondents and ERLDC had been scheduling power since declaration of date of commercial operation of the unit, i.e.15.11.2014?

21. ERLDC, vide its affidavit dated 19.10.2015, has submitted that presently, BSPHCL (Bihar) holds majority share of around 77% while GRIDCO (Odisha) holds a share of around 15%. The other beneficiaries are JUVNL (Jharkhand), Sikkim and Madhya Pradesh (Western Region).

22. ERLDC has submitted that the role of RLDC is limited to initiation of scheduling of the generating stations after declaration of date of commercial by the respective generating stations as per provisions of the 2014 Tariff Regulations. ERLDC has submitted that NTPC vide its letter dated 14.11.2014, declared the unit on commercial operation w.e.f 00:00 hrs of 15.11.2014 which was also recorded in the 29th TCC (Technical Coordination Committee) meeting of ERPC held on 13.2.2015.

23. We have considered the submissions of ERLDC. GRIDCO (Odisha) having a share of around 15% have only raised the issue of COD whereas other Respondents such as BSPHCL (Bihar) holding majority share of around 77% and other beneficiaries such as JUVNL (Jharkhand), Sikkim and M.P. have not objected the date of COD of the unit. Having known the status of trial run and the declaration of COD as on 15.11.2014 by NTPC, the Petitioner and other beneficiaries have been scheduling power from the unit of the generating station after 15.11.2014 as per their requirement and making the payments. In view of the above, other beneficiaries of the generating station have accepted the COD of the generating station as 15.11.2014.

24. Despite the fact that other Respondents have not raised objection to COD claimed by the Respondents, it is clear (paragraph 16) that trial run of the Unit did not comply with provisions of the 2014 Tariff Regulations. Subsequent trial run of 3-5 November, 2014 too could not demonstrate compliance with the 2014 Tariff Regulations. Neither could it be possible for trial run during 11-15 November, 2014. Thus, even though other Respondents have accepted COD as stated by the Respondent No. 1, it is not fully correct.

Issue No. 4: What should be the COD for unit of the generating station:

25. In the light of above discussion, it is evident that the unit has successfully run on full load for 72 hours in March, 2016 for the first time though the Petitioner declared the date of the commercial operation as 15.11.2014. However, the beneficiaries have been scheduling and making payment since declaration of the COD of the unit. Except GRIDCO (share of 15%), other beneficiary have not raised their objections to the declaration of COD of the unit as 15.11.2014. However, it is clear that though the unit of the generating station demonstrated the super critical parameters, it could attain the full load only in 29 time blocks and more than 95% load only in 183 time blocks out of total 258 time blocks, during August, 2014. Similarly, during trial run for synchronization during 3-5 November, 2014 for 179 time blocks, the Unit could run on full load or above for only 46 time blocks (discontinuous pattern) and more than 95% load for only 111 time blocks.

26. It is also observed from the data submitted by NTPC that the unit operated at an average load of 615 MW (93.22% PLF) including the extended trial run after the brief



outage on account of spurious tripping and excluding the outage period and ramp up period as stated by Respondent No. 1. Post COD, as declared by Respondent No. 1, the Unit couldn't be operated at full load continuously for 2-3 days due to less power requisition from the beneficiaries. However, the unit demonstrated successful trial run at MCR during the period from 4.3.2016 to 7.3.2016. Though it is a fact that various beneficiaries have scheduled and availed the power generated by the unit, the Unit had not demonstrated its capacity to run at required capacity as required under provisions of the 2014 Tariff Regulations. It is possible that the unit was capable of delivering rated capacity since it was able to achieve normative availability of 83% in the financial year 2014-15 and more than 90% in 2015-16 (till February, 2016). Since, trial run did not achieve required capacity, we are not inclined to accept COD of 15.11.2014 as claimed by the Respondent No. 1. We are also not inclined to exercise our powers to relax the provisions under Regulation 54 of the 2014 Tariff Regulations as there is no case made out for the same. Accordingly, COD of 15.11.2014 as declared by Respondent No. 1 is set aside.

27. The Hon'ble Supreme Court vide its judgment dated 8.12.2016 in Civil Appeal Nos. 5881-5882 of 2016 (AIPEF & Ors. Vs. Sasan Power Limited & Ors.) had expressed concerns on waiver of condition of achieving 95% of capacity for COD declaration.

28. Power injected by Respondent No. 1 in respect of the Unit before 8.3.2016 shall be treated as infirm power even though power was scheduled by the beneficiaries

during the period. The revenue earned over and above fuel cost from sale of infirm power from 15.11.2014 to 7.3.2016 shall be adjusted in the capital cost.

29. The Petition No. 130/MP/2015 along with IA No. 67 of 2017 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