CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 66/MP/2017

Coram: Shri P.K.Pujari, Chairperson Dr. M.K. Iyer, Member

Date of Order: 31st of December, 2018

In the matter of:

Petition under Part 7 Regulation 4 of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 (as amended) read with Regulation 111 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 in regard to provision 6.3A of the Grid Code.

And

In the matter of:

NTPC Limited Core-7,SCOPE Complex 7 Institutional Area, Lodhi Road, New Delhi-110 003

... Petitioner

Versus

- 1. Grid Corporation of Orissa Limited Vidyut Bhawan, Janpath Bhubaneshwar-751022 Odisha
- Madhya Pradesh Power Management Corporation Limited Shakti Bhavan Vidyut Nagar, Rampur Jabalpur- 110003
- 3. Maharashtra State Electricity Distribution Limited Prakashgad, Bandra (East)
 Mumbai- 400051
- 4. Gujarat Urja Vikas Nigam Limited Sardar Patel Vidyut Bhawan Race Course Vadodara- 390007
- 5. Chhattisgarh State Power Distribution Company Limited

P.O- Sundernagar, Danganiya Raipur- 492013

6. Electricity Department, Government of Goa, Vidyut Bhavan, Panaji- 403001, Goa

7. Electricity Department Administration of Daman and Diu Daman- 396210

8. Electricity Department Administration of Dadra & Nagar Haveli Silvasa- 396230

9. Andhra Pradesh Eastern Power Distribution Company Limited Corporate Office, P & T Colony, Seethamadhara, Vishakhapatnam- 530013

10. Andhra Pradesh Southern Power Distribution Company Limited Corporate office, Back Side Srinivasa Kalyana Mandapam Tiruchhanur Road, Kesavayana Gunta, Tirupathi- 517503

11. Telangana Northern Power Distribution Company Limited H. No. 2-5-31/2, Vidyut Bhavan, Nakkalagutta, Hanamkonda, Warangal- 506001

12. Telangana Southern Power Distribution Company Limited Mint Compound, Corporate Office Hyderabad- 500063

13. Bangalore Electricity Supply Company Limited Krishna Rajendra Circle, Bangalore- 560001

14. Mangalore Electricity Supply Company Limited Paradigm Plaza, A.B. Shetty Circle, Pandeshwar, Mangalore- 575001

15. Chamundeshwari Electricity Supply Corporation Limited Corporate Office, No. 29, Ground Floor, Kaveri Grameena Bank Road, Vijaya Nagar 2nd Stage, Mysore- 570017

16. Gulbarga Electricity Supply Company Limited

Main Road, Gulbarga- 585102

17. Hubli Electricity Supply Company Limited Corporate Office, P.B. Road, Navanagar, Hubli- 580025

18. KSEB Ltd Vaidyuthi Bhavanam, Pattom, Thiruvananthapuram- 695004

19. Tamil Nadu Generation & Distribution Corporation Limited 144, Anna Salai, Chennai- 600002

20. Electricity Department Govt. of Puducherry, 137, NSC Bose Salai, Puducherry- 605001

21. Uttar Pradesh Power Corporation Limited Shakti Bhavan Extn., 10th Floor, 14, Ashok Marg, Lucknow- 226001

22. Rajasthan Urja Vikas Nigam Limited Shed No. 5/5, Vidyut Bhavan, Janpath, Jyoti Nagar, Jaipur- 302005

23. Tata Power Delhi Distribution Limited 33 kV Substation, Hudson Lines, Kingsway Camp, Delhi- 110009

24. BSES Rajdhani Power Limited BSES Bhawan, Nehru Place, New Delhi- 110019

25. BSES Yamuna Power Limited Shakti Kiran Building, Karkardooma, Delhi- 110092

26. Haryana Power Purchase Centre Shakti Bhavan, Sector- 6, Panchkula Haryana- 134109

27. Punjab State Power Corporation Limited The Mall, Patiala- 147001

28. Himachal Pradesh State Electricity Board

Kumar Housing Complex Building-II, Vidyut Bhavan, Shimla- 171004

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

30. Uttarakhand Power Corporation Limited Urja Bhavan, Kanwali Road, Dehradun- 248001.

31. New Delhi Municipal Council Palika Kendra Building, Opp. Jantar Mantar, Parliament Street, New Delhi- 110001

32. Military Engineering Services
Delhi Cantonment, New Delhi- 110010

33. Power Development Department Govt. of J & K, Civil Secretariat, Jammu

34. Power Department Govt. of Sikkim, Kazi Road, Gangtok- 737101, Sikkim

35. Jharkhand Urja Vikas Nigam Limited Engineering Building, HEC, Dhurwa, Ranchi- 834004

36. Damodar Valley Corporation DVC Towers, VIP Road, Kolkata- 700054.

37. Bihar State Power (Holding) Company Limited Vidyut Bhawan, Bailey Road, Patna-800001

38. North Bihar Power Distribution Company Limited Vidyut Bhawan, Bailey Road, Patna- 800001

39. South Bihar Power Distribution Company Limited Vidyut Bhawan, Bailey Road, Patna- 800001

- 40. West Bengal State Electricity Distribution Company Limited Vidyut Bhawan, Bidhannagar, Block DJ, Sector-II, Salt Lake City, Kolkata- 700091
- 41. Assam Power Distribution Company Limited Bijulee Bhawan, Paltan Bazar, Guwahati- 781001
- 42. Meghalaya Energy Corporation Limited Lum Jingshai, Short Round Road, Shilling- 793001
- 43. Department of Power Government of Arunachal Pradesh, Itanagar-791111
- 44. Department Of Power Govt. of Mizoram, Khatla, Aizawl- 796001
- 45. Manipur State Power Distribution Company Limited Keishampat, Imphal- 795001
- 46. Department of Power Govt of Nagaland, Kohima- 797001
- 47. Tripura State Electricity Corporation Limited Bidyut Bhaban, Banamalipur, Agartala- 799001
- 48. National Load Despatch Centre 1st Floor, NLDC Office, B-9, Qutab Institutional Area, KatwariaSarai, New Delhi-110016
- 49. Northern Regional Load Despatch Centre 18-A, ShaheedJeet Singh SansanwalMarg, Katwaria Sarai, New Delhi-110016
- 50. Eastern Regional Load Dispatch Centre 14, Golf Club Road, Tollygunje, Kolkata- 700033
- 51. Southern Regional Load Despatch Centre 29, Race Course Cross Road Bangalore-560009
- 52. Western Regional Load Despatch Centre F-3, MIDC Area, Marol, Andheri (East), Mumbai-400093

53. North Eastern Regional Load Despatch Centre Dongteih Lower Nongrah, Lapalang Shillong-793006

54. Northern Regional Power Committee 18-A, Shaheed Jeet Singh Sansanwal Marg, Katwaria Sarai, New Delhi-110016

55. Southern Regional Power Committee 29, Race Course Cross Road Bangalore-560009

56. Eastern Regional Power Committee 14, Golf Club Road, Tollygunje, Kolkata- 700033

57. Western Regional Power Committee F-3, MIDC Area, Marol, Andheri (East), Mumbai-400093

58. North Eastern Regional Power Committee NERPC Complex, Dong Parmaw, Lapalang Shillong-793006

....Respondents

Parties Present:

Shri Venkatesh, Advocate, NTPC
Shri Somesh Srivastava, Advocate, NTPC
Shri Nishant Gupta, NTPC
Shri Umesh Ambati, NTPC
Shri P.B. Venkatesh, NTPC
Shri R.K. Mehta, Advocate, GRIDCO
Ms. Himanshi Andley, Advocate, GRIDCO
Shri R.B. Sharma, Advocate, BRPL
Shri Anand K. Ganesan, Advocate, GUVNL
Shri Ashwin Ramanathan, Advocate, GUVNL
Ms. Neha Garg, Advocate, GUVNL
Shri Ashok Rajan, NLDC
Shri G. Chakraborty, POSOCO

ORDER

The Petitioner, NTPC Limited, has filed the present petition with the following

prayers:

- "(a) Allow conducting repeat of trial run of the Unit without the need of prior notice to the beneficiaries /RLDC in case the repeat trial run is started within 7 days of the interruption of trial run for which the notice was served on the beneficiaries and RLDC:
- (b) Allow interruption of cumulative 8 hours in case of trial run;
- (c) Clarify that as provided in the Regulations, for a successful trial run, the average loading during the 72 hour period considered for trial run has to be equal or more than MCR and partial loading in any number of time blocks is allowed."
- 2. The Petitioner in the Petition has mainly submitted as under:
 - (a) The Petitioner is a generating company within the meaning of Section 2 (28) of the Electricity Act, 2003 and has generating stations/projects across the country having total installed capacity of 48,028 MW including JV/ subsidiary company.
 - (b) The Commission notified the Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Fourth Amendment) Regulations, 2016 (hereinafter referred to as 'Grid Code') and included Regulation 6.3.A which laid down the procedure and mechanism for declaration of commercial operation of Central inter-State inter-State Generating Stations. Generating Stations and Transmission Systems. In case of thermal generating stations, the declaration of commercial operation among other conditions requires demonstrating the unit capacity corresponding to its Maximum Continuous Rating (MCR) through a successful trial run after a notice of not less than seven days to the beneficiaries/buyers and concerned RLDC.
 - (c) As per Regulation 6.3A of the Grid Code, in case of interruptions of more than 4 hours/average load condition not met, repeat trial run is required and a notice of

7 days is to be given to the beneficiaries for repeat trial run to be conducted. There could be trial run interruption due to outage of any auxiliary equipment, malfunctioning of any relay and other minor reasons, etc. Such leakages/outages could not be attended to in a short period and trial operation can commence immediately thereafter. However, difficulty is being faced in implementing the provision as the repeat of trial run requires a notice of minimum seven days which delays the trial run and subsequent declaration of commercial operation. Seven days' notice period may have been kept to enable the beneficiaries to be physically present and witness the trial run. However, in the past, none of the trial operations conducted by the Petitioner was with prior notice to the beneficiaries. Moreover, the actual performance of the unit is assessed by the data of the energy meters installed at the generating stations. Therefore, the Commission may do away with the requirement of 7 days' notice in case the repeat trial run is started within 7 days of the interruption of trial run for which the notice is served on the beneficiaries and RLDC. Delay of commercial operation is not in the interest of either the generating company or the beneficiaries and is also not the intent of the Regulations.

- (d) Regulation 6.3A of the Grid Code further provides that the maximum interruption period allowed during the trial run is four hours. The period of four hours is less due to the following reasons:
 - (i) In case of super-critical units, such as the one installed at Sipat Stage-I,Mouda Stage-II, Barh Stage-II and other under construction units of the

Petitioner, if the units trips, the boiler temperature and pressure parameter reduces rapidly. The turbine temperature is also affected. To start rolling of turbine, raising of boiler steam parameters, as per the permissible gradient to match turbine metal temp takes considerable time. It takes around seven hours from unit tripping to bring back unit parameters for synchronization and full load, including intermediate activities, namely,(a) tripping analysis and rectification of tripping cause-approximately one hour, (b) achieving required chemical parameters for boiler light up and turbine rolling approximately one hour and (c) HP heater charging, feed water loop change over, FW pump operation and wet to dry mode changeover require more than 90 minutes.

- (ii) In case of tripping of the unit, it is not possible to bring back the unit to full load within the specified period of 4 hours due to inherent design of the system. Total time of interruption may be increased to 8 hours for the trial run considering that each start up requires an average of seven hours.
- (e) Regulation 3 of the Grid Code provides that the partial loading may be allowed with the condition that average load during the duration of the trial run shall not be less than MCR/IC/NPR. There is no limit of quantum/duration of partial loading. The overall condition of achieving average loading of above 100% itself restricts the quantum/duration of partial loading. A unit can be overloaded (upto

100% of MCR) for a short period only and this limits the quantum and duration of partial loading.

- (f) The words at the end of para 4.3.2 of the Statement of Reasons to the Grid Code 'Any cumulative period of partial loading and interruption of more than 4 hours will require repeat of trial operation for a further period of 72 hours' appear to convey that overall partial loading cannot be more than 4 hours, which is not in the Grid Code. Since, the Grid Code do not provide for time limit of 4 hours of partial loading within the period of 72 hours, it may be clarified that as per the Grid Code, partial loading is allowed with the condition that the average loading shall be equal or more than 100% excluding the period of exclusion as specified in the Grid Code.
- 3. Accordingly, the Petitioner has prayed for relaxation of Regulation 6.3 A of the Grid Code pertaining to the declaration of CoD of the generating station.
- 4. The matter was heard on 25.5.2017 and the Commission after hearing the Petitioner issued notice to the Respondents on 'admissibility' of the Petition, with directions to the parties to complete pleading in the matter. Replies to the Petition have been filed by the Respondents, namely, GRIDCO, UPPCL, GUVNL, BSP (H)CL and MPPMCL. The Petitioner has filed rejoinders to the replies filed by the parties.

Submissions of the Respondents:

5. The Respondent No. 1, GRIDCO vide its affidavit dated 30.6.2017, has submitted as under:

- (a) The Petitioner is not clear whether it alone is facing such difficulties or the other Inter State Generators in their super critical thermal units are also facing the same problem. Moreover, the Petitioner has not come out with the details of super critical units which have faced such difficulties after the 4th Amendment to the Grid Code. In the absence of specific generating stations facing difficulties, it is to be construed that the difficulties are common and general in nature, which are applicable to both Central Generating Stations and Inter-State Generating Station. Therefore, the Petitioner in the guise of seeking relaxation of the provisions of Regulation 6.3 of the Grid Code, is seeking amendment to the said Regulations which is only permissible after conducting public hearing and following the prescribed procedure.
- (b) COD is important not only from commercial point of view but also to conform to the specified technical parameters of the newly established generating units. Trial operation for COD confirms whether the generating unit can run successfully for continuous 72 hours with MCR so that the installed capacity as per investment approval of the generator is established. Any compromise on the capacity of the generating unit would be tantamount to violation of Section 61(d) of the Electricity Act, 2003 in terms of safeguarding of consumer interest and at the same time recovery of the cost of electricity in a reasonable manner. GRIDCO has placed its reliance on the judgment of the Hon`ble Supreme Court in the case of the All India Power Engineering Federation Vs. Sasan Power Limited [(2017) 1 SCC 487].

- (c) NTPC's internal circular dated 1.12.2009 confirms the 72 hours continuous trial run having objective to provide the capability of the BTG unit along with auxiliaries to run at installed capacity.
- (d) With regard to the Petitioner's submission to dispense with notice to the beneficiaries of not less than 7 days and concerned RLDCs for repeat trial run, GRIDCO has submitted that since the beneficiaries have to pass on the cost of electricity to the consumers, they have a right to be apprised of the trial run for which 7 days prior notice has been provided by the Commission in the Grid Code after due consideration. The Petitioner's submission that the beneficiaries have not been physically present in the trial operations does not absolve NTPC from the obligation to give notice to the beneficiaries to witness the trial run test.
- (e) Any relaxation of the requirement of trial run test in terms of consecutive 72 hours continuous run at MCR loading on the ground of unavoidable reasons not within the control of the generator, paves the way to find out some lacunae/loophole in the regulation so as to take advantage of the same to cover up one's inefficiency, deficiency, compromise on the quality and standard of construction and finally results in the consumers not getting the full benefit of the investment, meant for a particular installed capacity and with 25 years plant life.
- (f) Any dilution of the Regulation on the pretext of different plea, the generator tries to cover up its inability to prove the capacity of the generating unit as per the national standard but recovers the cost of electricity on the basis of its design capacity, which goes against the interest of consumers and unreasonable

- recovery of cost of electricity from the consumers in violation of the mandate of Section 61 (1) of the Act.
- (g) It would not be prudent to relax the Regulations, violating the national standard, which opens the door for compromise on design, quality, safety factor and rating of the BTG unit along with auxiliaries and quality /standard of construction, which is against public interest.
- (h) Recovery of cost of electricity through tariff from such non-compliant generating stations in terms of trial run test is against the interest of consumers as per Section 6 (d) of the Act.
- (i) The Petition is devoid of any merit and is liable to be rejected summarily to prevent the misuse of the Regulations and to protect the interest of consumers, as enshrined in the Act and as affirmed by the Hon`ble Supreme Court in the case of the All India Power Engineering Federation.
- 6. The Respondent No. 2, MPPMCL vide its affidavit dated 19.4.2018, has submitted as under:
 - (a) The Grid Code already allows short interruptions for a cumulative duration of four hours with corresponding increase in the duration of the test for small break downs/mal-functioning/leakage, etc. and cumulative interruption of more than four hours shall only call for repeat of trial run. Therefore, the contention of the Petitioner is baseless that interruption on account of minor reasons may cause notice of clear 7 days. On the contrary, the Fourth Amendment to the Grid Code

- generously allowed short interruption for a cumulative duration of four hours which was never there in any of the definition of trial run prior to this amendment.
- (b) The very purpose of 7 days' notice condition is to create transparency in the process of trial run and the beneficiaries have every right to witness the trial run operation in their own interest. Two recent controversial incidences of declaration of COD had made the issue more important from the point of view of the beneficiaries and it is felt that in future, the presence of representatives of the beneficiaries to witness the trial run operation may gradually increase. Therefore, the contention of the Petitioner in this regard is liable to be rejected.
- (c) Before amendment to the Grid Code, the concept of interruption period of 4 hours was not provided. However, due to the practical difficulties of the generator, the Commission has provided a window to them observing that it may not always be possible throughout 72 hours to maintain sustained unit load at rated capacity due to various reasons such as low system demand during off peak hours, system constraints, unit partial loading owing to operational reasons, etc. Therefore, the Commission allowed the generators with a cumulative interruption of 4 hours during 72 hours testing with corresponding increase in total duration of test. Cumulative interruptions of more than 4 hours would call for re-testing. The generator must first itself ensure regarding the capability of the unit to withstand the trial run in all respect before conducting the same and the expenditure on successful trial operation should be allowed and capitalization and expenditure on all successful trial run operation should be borne by the

generator which would make the generator more accountable and would result in alleviating unjustified loading of expenditure of unsuccessful trial run on the beneficiaries for no fault of theirs.

- (d) As regards partial loading, the intent of the Commission could not be captured in notified Regulations. It is a basic principle that the Statement of Reasons forms the basis of a Regulation and in case of any inconsistency, the 'Statement of Reasons' is always referred to settle this issue, as has been done in past on several occasions by the Commission. Therefore, the contention of the Petitioner is inconsistent with the spirit of the SOR and is liable to rejected.
- 7. The Respondent No.4, GUVNL in its affidavit dated 29.8.2017, has submitted as under:
 - (a) The prayer of the Petitioner for relaxation of Grid Code can only be granted in view of specific difficulties being faced by specific generating units. The Petitioner cannot seek a general relaxation of the Grid Code for all generating units as it would essentially amount to amendment of the Grid Code.
 - (b) The Petitioner, in support of its case of relaxation, has not placed on record any data with regard to any of its generating stations about to be commissioned.
 - (c) The need for repeating trial run would only arise in case the cumulative interruptions are more than 4 hours. The Petitioner has contended that such interruptions could be due to outage of any auxiliary equipment, malfunctioning of any relay and other minor reasons. Grid Code only provides for these minor

interruptions to be permitted. If such interruptions cumulatively take more than 4 hours, they would be considered as a major issue that the generator is responsible for and hence needs to rectify the same. Such a case would necessarily call for repeat of operation or trial run, as the Grid Code provides.

- (d) The solution for a generator is not to seek relaxation of the Regulation but to make sure that no major interruptions take place. If such interruptions take place, there is another option to the generator to begin the trial run. There is also no restriction on the number of trial runs a generator can take. However, the trial run needs to be carried out with the proper 7 days' notice.
- (e) Grid Code provides for a right to the beneficiaries to be present and witness the trial run. Whether the beneficiaries actually claim the right or not does not affect the existence or validity of such right. The Petitioner cannotseek to take away such right of the beneficiaries merely because they may not have exercised such a right in the past.
- (f) The Petitioner has not provided any technical material in support of its contention that the interruption period of 4 hours is less. The Petitioner should approach the Commission with the specific case of any one generating unit which is actually facing the problem.
- (g) Grid Code does not provide for any time limit for partial loading. The only qualification in the Grid Code in regard to partial loading is that of maintaining the

average load during the trial run which shall not be less than the MCR. Therefore, petition need to be dismissed.

- 8. BSP(H)CL and BRPL vide their affidavits dated 5.4.2018 and 26.4.2018have submitted as under:
 - (a) APTEL in its judgment dated 24.3.2015 in Appeal Nos. 55 of 2013 and others has drawn the distinction between the 'Power to Relax' provision and the 'Power to Remove Difficulty' provisions. The Petitioner in the present Petition is seeking amendment of the provision related to the COD of the thermal generating stations/units which becomes integral part of the parent regulation itself which is permissible only invoking the provision related to the "Power to Remove Difficulty'. However, the Petitioner has invoked the "Power to Relax' provision which cannot be applied in the present case. Since, the provision relating to 'Power to Remove Difficulty' does not exist in the Grid Code, the present petition is not maintainable.
 - (b) The contention of the Petitioner, if accepted, would amount to doing away with the transparency in exercising the powers and discharging the functions of the Commission as laid down in Section 79 (3) of the Act. The Petitioner cannot question whether or not the beneficiaries are visiting the trial operation but the question is whether the opportunity to witness the trial operation should be denied? The Petitioner is expected to ensure that the unit is fully ready for commercial operation and all these minor and major problems are required to be duly attended during the course of synchronization of the unit. The narration of

the problems during the trial period for declaration of commercial operation only speak of non-serious attitude which is not desirable and thus, the demand to do away with the requirements of 7 days' notice is unnecessary and without any basis.

- (c) The Petitioner was accorded ample opportunity during the course of amendment of Grid Code seeking relaxation on declaration of commercial operation of Central Generating Stations contained in Regulation 6.3A of the Fourth Amendment of the Grid Code. However, no such demand was raised by the Petitioner during the finalization of Fourth Amendment to the Grid Code and the Petitioner along with other generators had only sought a period of 4 hours which was incorporated in the Grid Code. This interruption of 4 hours is permitted only on account of reasons beyond the control of the generator in the period of 72 hours due to non-availability of load and grid constraints and no such constraint in the case of the Petitioner is anticipated. The power to relax is exercised only in exceptional cases and the party seeking to exercise such power by the Commission has to establish that the circumstances are not created due to the act or omission attributable to the party claiming the relaxation. This principle has been laid down by the Appellate Tribunal in its judgment dated 24.3.2015 in Appeal Nos. 55 of 2013 and others (BSES Yamuna Power Limited Vs. Central Electricity Regulatory Commission and others.
- (d) The provisions of the Grid Code on the issue of partial loading during trial operation are required to be read in its totality. The Grid Code prescribes that the

short interruptions which may be on any ground are limited for a period of 4 hours and thus, there is hardly any need for clarification on the issue.

9. The Respondent No. 21, UPPCL vide its affidavit dated 12.7.2017 has submitted that seven days' notice for re-trial is necessary in case the cumulative interruption during the trial run exceeds 4 hours. NTPC may be directed to furnish data in case of other generating stations to substantiate its claims. UPPCL has placed its reliance on the Regulation 6.3A (ii) and Para 4.3.2 of the SOR.

Rejoinder of the Petitioner

- 10. The Petitioner has filed its rejoinder to the above replies of the Respondents which are summarized as under:
 - (a) The relaxation has been sought in certain provisions of Regulation 6.3 A of the Grid Code pertaining to procedure for trial operation based on specific problems being faced by NTPC in its units for which trial operations has been conducted. The relaxation sought does not compromise the capacity of the unit i.e IC and MCR rating. The performance of the unit is assessed by readings of energy meters and verified by RLDC. However, if a generator compromises on the capacity of the unit under the present regulatory framework, the generator will be penalized i.e. through under recovery in fixed charges for not achieving the target availability which is function of IC or MCR.
 - (b) The contention of GUVNL that the Petitioner has not substantiated the relaxation sought for seeking cumulative interruption of 8 hours in case of trial run, is

misplaced. The Petitioner has provided the actual hot start up curves of unit-2 of Sipat STPS Stage-I. The said hot start up curve at a stable supercritical 660 MW unit takes about 8 hours to reach full load i.e. MCR rating from time of trip due to inherent design of the system. However, a new unit may take some more time where the systems are newly commissioned.

- (c) Trial run is conducted for the purpose of assessment of the performance of the generating unit. The minor accidents occur only during the continued period of operation of the generating unit. It is noteworthy that the minor incidents may also occur subsequent to commissioning/COD of the generating unit. Therefore, it is misconceived to state that minor incident viz, outage of auxiliary equipment, malfunctions in relay and other minor reasons must be resolved prior to conducting trial run.
- (d) With regard to interruption period of 4 hours, the Petitioner has annexed the graphs which reveal that technically 4 hours interruption period can never be a sufficient interruption period. As soon as a slipper critical unit trips a time period of minimum 45 minutes is lost on account of turbine coasting down i.e. reduction in rotations per minute of the turbine. Turbine can be reset only after achieving the barring speed i.e. minimum speed of rotations of the turbine. After the barring speed is obtained, a minimum time period of 45 minutes is required to analyze the smallest technical problems and rectification of the same even if the said analysis and rectification activity is being carried out parallel in time with the turbine attaining barring speed. After the ascertainment and rectification of cause

for tripping of the generating unit, a time period of 5 hours is consumed in lighting up the boiler and firing the coal so that the stem parameters can be raised. Thereafter, turbine can be rolled, synchronized and full load can be achieved. In view of the above, it is evident that even for rectification of a miniscule technical problem, the cumulative interruption period of 4 hours cannot be enough.

- (e) The Respondents are agreeable with the Petitioner's submission that as per Regulation 6.3 A (ii) of the Grid Code, there is no limitation of nos. of blocks of partial loading provided that the average loading should be equal to or more than 100% for the period of 72 hours excluding the period of exclusion as specified in the Regulations. However, clarification is required to the affect that as per the Regulations, partial loading is allowed subject to condition that average loading should be equal or more than 100% for the period 72 hours excluding the period of exclusion as specified in the Regulations.
- (f) The Commission has inherent power under Regulation 111 of the Conduct of Business Regulations to issue directions and orders in the interest of justice. The said power has been exercised by the Commission from time to time through the various orders.

Analysis and Decision:

11. The Petitioner has filed the present petition invoking the power to relax under clause (4) of Part 7 of the Grid Code for relaxation of the following provisions of the Fourth Amendment to the Grid Code:

- (a) Proviso (i) to Regulation 6.3A.2 regarding seven days' notice in case of repeat trial run.
- (b) Proviso (i) to Regulation 6.3A.3 providing for short interruption for a cumulative duration of four hours, and
- (c) Proviso (ii) of Regulation 6.3A.3 regarding providing partialloading in any number of time blocks.
- 12. The Respondents have submitted that the issue of maintainability of the Petition should be decided first and then the issues on merit should be considered if the Petition is held maintainable. In this regard, the Respondents have relied upon the judgments of the APTEL dated 24.3.2015 in Appeal No. 55 of 2013 and Batch matters and in the case of Ratnagiri Gas Power Private Ltd. Vs. Central Electricity Regulatory Commission [(2011) APTEL 44]. The Petitioner has submitted that as per the judgment of the Hon`ble Supreme Court dated 18.10.2012 in Civil Appeal No. 7524 of 2012 [PTC India Ltd. Vs. GERC] all issues, whether maintainability or jurisdiction, need to be dealt with together for expeditious adjudication of the matter.
- 13. We have considered the submissions of the Parties. The Hon`ble Supreme Court in its judgment dated 18.10.2012 in Civil Appeal No. 7524 of 2012 [PTC India Ltd. Vs. GERC] has held has under:

"We have considered the argument of the learned senior counsel but have not felt impressed. Since, one of the objectives of disputes raised by the parties, there is no warrant for entertaining preliminary/interlocutory objections raised by either party and decide the same by long-drawn hearing and by recording lengthy orders. The State Commission and the Tribunal should, while deciding the main matter consider all

objections including the one relating to their jurisdiction to entertain the matter. Any attempt by the parties to delay adjunction of the dispute deserves to be deprecated and the State Commission and the Tribunal are not expected to water their time in dealing with objections of different hues."

14. In the light of the above judgment, the Commission proceeds to decide the issue on maintainability as well as on merit.

A. Maintainability of the Petition

15. GRIDCO has submitted that the Petitioner in the guise of seeking relaxation, has in effect sought amendment of the provisions of the Fourth Amendment to the Grid Code which is not permissible in terms of the Commission's order dated 11.4.2017 in Petition No. 83/MP/2017. GRIDCO has submitted that Power to relax can be exercised only in a given factual situation and cannot be invoked for a general relaxation of the Regulations as held by APTEL in its judgment dated 6.5.2011 in Appeal No. 170/2010 (MPPGCL Vs. MERC & other). GRIDCO has submitted that difficulties, if any, can only be addressed by amendment of the Grid Code through a public hearing after following the prescribed procedure. GRIDCO has submitted that Hon'ble Supreme Court in the case of All India Power Engineers Federation Vs. Sasan Power Ltd. has clearly held that if there is any element of public interest involved, the court steps in to thwart any waiver which may be contrary to such public interest. Referring to the Hon'ble Supreme Court judgments in K.K. Velusamy Vs. N. Palaisamy [(2011)11SCC 275 Para 12] and Mahadeva Upendra Sinai Vs. Union of India [(1975) SCR (2) 640], GRIDCO has submitted that during the proceedings in respect of Fourth Amendment to the Grid Code, the Petitioner had made similar submissions as have been made in the present petition which were duly considered by the Commission in the SOR. Therefore, similar

prayer of NTPC in the guise of relaxation is an abuse of the process of the Commission.

GUVNL has submitted that a general relaxation in the present Petition can by no stretch of imagination be considered as a minor or peripheral adjustment requiring the Commission to exercise the power to remover difficulty.

16. The Petitioner has submitted that three issues need to be considered, namely, (i) whether the court has the powers to decide the issue raised therein; (ii) whether the court has the jurisdiction to take cognizance of the cause of action; and (iii) whether the court is satisfied that the person filing the petition is an interested person or an affected person has the locus standi. The Petitioner has submitted that if all the above criteria are satisfied, then the petition is maintainable and the court may adjudicate upon the merits of the case and pass a detailed reasons order. According to the Petitioner, in the present case, all the conditions are satisfied. The Commission by virtue of Part 7 of the Grid Code has been vested the power to grant relaxation. Secondly, since the Petitioner is a Central Government owned generating station, the Commission by virtue of Section 79 of the Act has the power to take cognizance of the cause of action pleaded in the Petition. Thirdly, the Petitioner being a generating company is an interested party qua the operation of the Grid Code and has requisite locus standi. Therefore, all above ingredients are present in the petition and accordingly, the petition is maintainable. Referring to the judgment of the Hon'ble Supreme Court dated 4.7.2016 in the case of R.K. Raju Vs. U.S Rayudu [(2016) 14 SCC 275] and judgment of the Hon'ble High Court of Punjab and Haryana dated 8.8.2005 in Civil Revision No. 4-071 of 2005 (Rajesh Grover Vs. Smt. Rita Khurana and Other], the Petitioner has submitted that certain principles emerge for consideration, namely (i) the court should be cautious of rejecting a petition at the threshold and the Petition should only be rejected at that stage if the conditions enumerated in clauses (a) to (f) of Order 7 Rule 11 are satisfied, (ii) Rejection on maintainability shall be done in exceptional circumstances; (iii) The Petition should not be rejected on the basis of the allegations/averments raised by the Respondents. However, it should only be rejected if it falls within the situation prescribed under Order 7 Rule 11.

17. Part 7, Regulation 4 of the Grid Code provides as under:

- "(4) The Commission may by general or special order, for reason to be recorded in writing, and after giving opportunity of hearing to the parties likely to be affected by grant of relaxation, any relax any of the provisions of these regulations on its own motion or on an application made before it by an interested person."
- 18. The above provision empowers the Commission to relax any of the provisions of the Grid Code. The power of relaxation is in general terms and its exercise is discretionary. It is a well settled position of law that the power to relax cannot exercised in a manner to make a statutory provision redundant or otiose. Further, exercise of discretion must not be arbitrary and must be exercised reasonably and with circumspection, consistent with justice, equity and good conscience, always in keep with the given facts and circumstances of a case. In the present case, the Petitioner is facing certain difficulties in applying the provisions of the Grid Code with regard to the commercial operation of the transmission system. The Petitioner has invoked the provisions of Regulation 4 of Part 7 of the Grid Code and has sought relaxation of the said provision. The Petitioner being an affected party is entitled to approach the Commission for relief. Therefore, we do not find any reason to reject the Petition on

maintainability. We hold that the Petition is maintainable under Regulation 4 under Part 7 of the Grid Code.

B. Merit of the Petition

19. Fourth Amendment to the Grid Code was issued by the Commission on 6.4.2014. Regulation 6.3A of the Grid Code provides for procedure and mechanism for declaration of COD of Central Generating Stations, inter-State Generating Station and inter-State Transmission System. Relevant provisions of the Regulation 6.3A of the Grid Code is extracted as under:

"6.3A Commercial operation of Central generating stations and inter-State Generating Stations

1. Date of commercial operation in case of a unit of thermal Central Generating Stations or inter-State Generating Station shall mean the date declared by the generating company after demonstrating the unit capacity corresponding to its Maximum Continuous Rating (MCR) or the Installed Capacity (IC) or Name Plate Rating on designated fuel through a successful trial run and after getting clearance from the respective RLDC or SLDC, as the case may be, and in case of the generating station as a whole, the date of commercial operation of the last unit of the generating station:

Provided that:

- (i) Where the beneficiaries/buyers have been tied up for purchasing power from the generating station, the trial run or each repeat of trial run shall commence after a notice of not less than seven days by the generating company to the beneficiaries/buyers and concerned RLDC or SLDC, as the case may be.
- (ii) Where the beneficiaries / buyers have not been tied up for purchasing powerfrom the generating station, the trial run or each repeat of trial run shall commence after a notice of not less than seven days by the generating company to the concerned RLDC or SLDC, as the case may be.
- (iii) The generating company shall certify that:
- (a) The generating station meets the relevant requirements and provisions of the technical standards of Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2010 and Indian Electricity Grid Code, as applicable:

- (b) The main plant equipment and auxiliary systems including Balance of Plant, such as Fuel Oil System, Coal Handling Plant, DM plant, pre-treatment plant, fire-fighting system, Ash Disposal system and any other site specific system have been commissioned and are capable of full load operation of the units of the generating station on sustained basis.
- (c) Permanent electric supply system including emergency supplies and all necessary instrumentation, control and protection systems and auto loops for full load operation of unit have been put in service.
- (iv) The certificates as required under clause (iii) above shall be signed by the CMD/CEO/MD of the generating company and a copy of the certificate shall be submitted to the Member Secretary of the concerned Regional Power Committee and the concerned RLDC / SLDC before declaration of COD. The generating company shall submit approval of Board of Directors to the certificates as required under clause (iii) within a period of 3 months of the COD.
- (v) Trial run shall be carried out in accordance with Regulation 6.3A.3 of these Regulations.
- (vi) Partial loading may be allowed with the condition that average load during the duration of the trial run shall not be less than Maximum Continuous Rating or the Installed Capacity or the Name Plate Rating excluding period of interruption and partial loading but including the corresponding extended period.
- (vii) Where on the basis of the trial run, a unit of the generating station fails to demonstrate the unit capacity corresponding to Maximum Continuous Rating or Installed Capacity or Name Plate Rating, the generating company has the option to de-rate the capacity or to go for repeat trial run. Where the generating company decides to de-rate the unit capacity, the demonstrated capacity in such cases shall be more or equal to 105% of de-rated capacity.
- (viii) The concerned RLDC or SLDC, as the case may be, shall convey clearance to the generating company for declaration of COD within 7 days of receiving the generation data based on the trial run.
- (ix) If the concerned RLDC or SLDC, as the case may be, notices any deficiencies in the trial run, it shall be communicated to the generating company within seven (7) days of receiving the generation data based on the trial run.
- (x) Scheduling of power from the generating station or unit thereof shall commence from 0000 hrs after declaration of COD.

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3. Trial Run or Trial Operation: Trial Run or Trial Operation in relation to a thermal Central Generating Station or inter-State Generating Station or a unit thereof shall mean successful running of the generating station or unit thereof on designated fuel at Maximum Continuous Rating or Installed Capacity or Name Plate Rating for a

continuous period of 72 hours and in case of a hydro Central Generating Station or interstate Generating Station or a unit thereof for a continuous period of 12 hours:

Provided that:

- (i) The short interruptions, for a cumulative duration of 4 hours, shall be permissible, with corresponding increase in the duration of the test. Cumulative Interruptions of more than 4 hours shall call for repeat of trial operation or trial run.
- (ii) The partial loading may be allowed with the condition that average load during the duration of the trial run shall not be less than Maximum Continuous Rating, or the Installed Capacity or the Name Plate Rating excluding period of interruption and partial loading but including the corresponding extended period.
- (iii) Where the beneficiaries have been tied up for purchasing power from the generating station, the trial run or each repeat of trial run shall commence after a notice of not less than seven days by the generating company to the beneficiaries and concerned RLDC or SLDC, as the case may be.
- (iv) Units of thermal and hydro Central Generating Stations and inter-State Generating Stations shall also demonstrate capability to raise load upto 105% or 110% of this Maximum Continues Rating or Installed Capacity or the Name Plate Rating as the case may be."

The Petitioner is seeking relaxation of the above provisions with regard to notice period for repeat trial run, extension of time period for interruptions from 4 hours to 8 hours and partial loading during operation. Therefore, aspects have been examined hereinafter.

(a) Seven days' notice to the beneficiaries:

20. As per Regulation 6.3 A1 (i), 6.3A2 (i) and 6.3 A3 (iii) of the Fourth Amendment to the Grid Code, the generator is required to issue notice to the beneficiaries at least 7 days before start of the trail run for declaring the COD. The Petitioner, however, has submitted that there could be trial run interruption due to outage of any auxiliary equipment, malfunctioning of any relay and other minor reasons. Such outage could be attended to in a short period and trial operation can commence immediately. The Petitioner has submitted that it is facing difficulty in implementing this provision as the

repeat of trial run requires minimum seven days' notice which may have been kept to enable the beneficiaries to be physically present and witness the trial run. Accordingly, the Petitioner has requested to relax the provision of first proviso of Regulation 6.3A providing seven days' notice in case of each repeat trial run.

- 21. GUVNL and MPPMCL have submitted that since the Grid Code provides cumulative period of hours for short interruptions viz. small 4 break downs/malfunctions/leakages, etc. with corresponding increase in cumulative duration of trial run, minor interruptions cannot cause trial failure and would not necessitate a repeat trial run. All minor incidents, namely, outage of auxiliary equipment, malfunctions in relay and other minor reasons must be resolved prior to conducting trial run. GRIDCO and GUVNL have further submitted that the Petitioner has not submitted any data and/or information to substantiate its claim for relaxation of the provisions of the Grid Code. BRPL, BSP(H)L and MPPMCL have submitted that removal of seven days' notice period for re-trial would do away with the transparency and non-attendance of beneficiary does not mean that the beneficiaries are ready to forego their right to witness trial run.
- 22. We have considered the submissions of the Petitioner and the Respondents. The issue raised by the Petitioner whether 7 days' notice in case of re-trial is required if the re-trial of any unit is performed immediately after the short interruption/minor failure. We are of the firm view that adequate notice should be given to the beneficiaries in case of trial run. However, the procedure should not be such that it delays CoD of the Unit, as delaying CoD of the unit is not in the interest of either the beneficiaries or the generator.

Many times retrial can be started when the unit is in hot condition. Restarting the unit in hot condition would save oil as well as start-up/re-trial costs which are part of the project capital cost. In such cases, a short notice to beneficiaries may serve the purpose. However, we are of the view that such change in provisions of the Grid Code need to be implemented following due procedure for amendment of Regulations.

(b) Extension of time period for interruption from 4 hours to 8 hours:

- 23. The Petitioner has prayed to relax the provisions regarding interruption period of 4 hours during the trial run. The Petitioner has submitted that in case of tripping of the unit, it is not possible to bring back the unit to full load within the specified period of 4 hours due to inherent design of the system. The Petitioner has requested to increase the total time of interruption from 4 hours to 8 hours for the trial run considering that each start up requires an average of 7 hours by relaxing the provisions of Regulation 6.3A.3 of the Grid Code.
- 24. The Respondents have submitted that as per the SOR dated 6.4.2016, the Petitioner itself had sought for a period of 4 hours as interruption period and the Petitioner should satisfy itself regarding the capability of generating unit to withstand trial run before conducting trial run. The Respondents have submitted that the Petitioner is seeking relaxation in terms of interruption to cover up its inability to achieve successful trial run. GUVNL has submitted that the Petitioner should approach the Commission with specific case of any one generator so that beneficiaries of that generating station would get a fair opportunity to appoint its own technical consultants to assist the Commission.

- 25. We have considered the submissions of the Petitioner and the Respondents. As per SOR dated 6.4.2016 to the Fourth Amendment of the Grid Code, the Petitioner including other generators had pleaded to allow an interruption of four hours which is extracted as under:
 - "4.2.2 APP, TATA Power and NTPC has submitted that a suitable provision may be included to address interruptions on account of reasons beyond the control of the generator. If the unit is not able to run at Maximum Continuous Rating (MCR) for the specified time period of 72 hours due to non-availability of load and grid constraints then such unit be considered for deemed COD. The system operator may ask such unit to demonstrate its performance later if they believe that unit is operating below par. The period of 4 hours may be allowed to extend appropriately based on the actual experience".
- 26. It is pertinent to mention that earlier there was no provision in the Grid Code with regard to interruption for trial run of the unit. After considering the submissions of the generators, including the Petitioner, the Commission consciously made provisions in the Grid Code for extension of trial operation by 4 hours in case of interruption during the trial run. In our view, further relaxation in the interruption of more than 4 hours will undermine the proper assessment of machine in respect of efficiency and sustainability of its operation at installed capacity as the longer period of extension for interruptions would make provision of running machine at MCR continuously for 72 hours meaningless. In our view, there is no change in technical requirement of trial run of the generating stations within this period. Therefore, we do not find sufficient justification in the submission of the Petitioner for exercise of power of relaxation in this regard.

(c) Partial loading during trial operation:

27. The Petitioner has submitted that Regulations 3 of the Grid Code provides that the partial loading may be allowed with the condition that average load during the trial

run shall not be less than MCR/IC/NPR. The Petitioner has submitted that the overall condition of achieving average loading of above 100% itself restrict the quantum/duration of partial loading and the unit can be overloaded (upto 105% of MCR) for a short period only. The Petitioner has submitted that as per Para 4.3.2 of the SOR, any cumulative period of partial loading and interruption of more than 4 hours would require repeat of trial operation for a further period of 72 hours. However, the time limit of 4 hours of partial loading within the period of 72 hours is not envisaged in the Grid Code. The Petitioner has requested to clarify that as per the Grid Code partial loading is allowed with the condition that the average loading should be equal or more than 100% excluding the period of exclusion as specified in the Grid Code.

- 28. GUVNL has submitted that Grid Code is clear regarding partial loading and do not provide for any time limit for partial loading. Therefore, the Petitioner's prayer in this regard is liable to be rejected. GRIDCO has submitted that such relaxation may encourage the OEMs to go for compromise on design, quality and safety factor of BTG unit along with auxiliaries which will be detrimental to the Sector.
- 29. We have considered the submissions of the Petitioner and the Respondent. The Petitioner is seeking clarification on the partial loading during trial operation. The Petitioner has argued that Grid Code provides that partial loading is allowed with the condition that average load during the trial run shall not be less than MCR and IC/NPR. However, there is no limit of quantum/duration of partial loading. The Petitioner has submitted that the overall condition of achieving average loading of above 100% itself restricts the quantum/duration of partial loading. The Petitioner has requested to clarify

that as per the Regulations partial loading is allowed with the condition that the average loading should be equal or more than 100% excluding the period of exclusion as specified in the Regulations. In support of its contention, the Petitioner has relied upon the SOR to the Fourth Amendment to the Grid Code. The Petitioner has submitted that the words at the end of para 4.3.2 of the SOR 'Any cumulative period of partial loading and interruption of more than 4 hours will require repeat of trial operation for a further period of 72 hours' appear to convey that overall partial loading cannot be more than 4 hours, which is not in the Grid Code. The Petitioner has submitted that since, the Grid Code does not provide for time limit of 4 hours of partial loading within the period of 72 hours, the Commission may clarify that as per the Grid Code, partial loading is allowed with the condition that the average loading shall be equal or more than 100% excluding the period of exclusion as specified in the Grid Code. The Respondents (other than GUVNL) have submitted that the regulations on the issue are required to be read in its totality and Regulation provides that the short interruptions which may be on any ground are limited for a period of four hours and therefore, no clarification is required on this issue. GUVNL has stated that Regulations are clear and it does not provide any time limit for partial loading.

30. It is pertinent to mention that there was no provision of partial loading during the trial run of 72 hrs in Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014. Considering the practical difficulty in running the unit constantly at MCR/IC/NPR in view of load variations due to system fluctuations, equipment behavior, etc., the Commission amended the Grid Code and has allowed partial loading during the trial operation of 72 hrs, with only one condition that average

load during the period of trial run shall be corresponding to MCR/IC/NPR. The same has been stated in the Regulation6.3A of the Grid Code as under:

"The partial loading may be allowed with the condition that average load during the duration of the trial run shall not be less than Maximum Continuous Rating, or the Installed Capacity or the Name Plate Rating excluding period of interruption and partial loading but including the corresponding extended period."

- 31. The wording of Regulations are unambiguous. The overall condition of the successful trial run is that the average loading during the period of trial run should be equal to or more than 100% of MCR/ IC. The words in the SOR thatany cumulative period of partial loading and interruption of more than 4 hours will require repeat of trial operation for a further period of 72 hours' are in the context of interruption in the trial run and the resultant exclusion of the period of 4 hours as provided in provisions as quoted above. We make it clear that in case there is no interruption in the 72 hour trial run and unit achieves the average load not less than the MCR/IC, the partial loading period is not to be seen. Only when there is/are interruption(s), the maximum period that can be excluded is 4hrs and such period would include the interruption as well as the period of partial loading. In such case, average loading including the extended period of trial run but excluding the period of interruption shall be equal to or more than MCR/IC. The same is clarified accordingly.
- 32. Petition No. 66/MP/2017 is disposed of in terms of the above.

Sd/-(Dr. M. K. Iyer) Member sd/-(P.K.Pujari) Chairperson