... Appellant

In the Appellate Tribunal for Electricity, <u>New Delhi</u> (Appellate Jurisdiction)

Appeal No.210 of 2015

Dated: 15th May, 2017

Present: Hon'ble Mrs. Justice Ranjana P. Desai, Chairperson Hon'ble Mr. I.J. Kapoor, Technical Member

In the matter of :-

Neyveli Lignite Corporation Ltd. Neyveli House, 135, EVR, Periyar Road Kilpauk Chennai- 600 010

<u>Versus</u>

1.	Central Electricity Regulatory Commissior	1
	3rd & 4th Floor, Chanderlok Building	
	36, Janpath, New Delhi- 110001	Respondent No.1

Tamil Nadu Generation and Distribution Corporation Ltd. 7th Floor, NPKRR Maaligai 144, Anna Salai Chennai- 600 002 ...Respondent No.2

- 3.Power Company of Karnataka Ltd.,
Bangalore- 560 001...Respondent No.3
- 4. Kerala State Electricity Board, Vidyuthi Bhawanam, Pottom, P B No. 1028, Thiruvananthapuram – 695 004 ...Respondent No.4
- 5. Puducherry Electricity Department, Puducherry- 605 001 ...Respondent No.5

Counsel for the Appellant(s):	Mr. M G Ramachandran Ms. Poorva Saigal Ms. Anushree Bardhan Ms. Ranjitha Ramchandran Mr. Shubham Arya Mr. J. Dhanasekaran	
Counsel for the Respondent(s):	Mr. K S Dhingra	for R-1
	Mr. S. Vallinayagam	for R-2
	Mr. P V Dinesh Ms. Arushi Singh Mr. Rajesh Mr. M T George Ms. Prerana Chaturvedi Mr. M G Yoganand	for R-4

JUDGMENT

PER HON'BLE MR. I.J. KAPOOR, TECHNICAL MEMBER

1. The present Appeal is being filed by M/s Neyveli Lignite Corporation Ltd.(hereinafter referred to as the "Appellant") under Section 111 of the Electricity Act, 2003 challenging the Order dated 10.6.2015 ("Impugned Order") passed by the Central Electricity Regulatory Commission (hereinafter referred to as the "Central Commission"),in Review Petition No. 6 of 2011 filed for review of the Central Commission's earlier Order dated 31.08.2010 (Main Order) in Petition No. 230 of 2009 related to determination of tariff for 2009-14 period for Neyveli Lignite Corporation (NLC) Thermal Power Station-I Expansion (2x210 MW) (hereinafter referred as the 'Expansion Station'). The present Appeal is concerning about the disallowance of additional capital expenditure on spare TG/ Turbine Rotor projected during the year 2013-14.

- The Appellant, M/s Neyveli Lignite Corporation Ltd. is a Govt. of India Enterprise, a company incorporated under Companies Act, 1956, with its registered office at Chennai, Tamil Nadu.
- The Respondent No.1 is Central Electricity Regulatory Commission, exercising jurisdiction and discharging functions in terms of the Electricity Act, 2003.
- **4.** The Respondent Nos. 2 to 5 are the beneficiaries of the Expansion Station of the Appellant.

5. Facts of the present Appeal:

- a) The Appellant has set up 2x210 MW Expansion Station with Commercial Operation Date (COD) of Unit#1 as 9.5.2003 and COD of Unit#2 as 5.9.2003.
- b) The Appellant filed a Petition No. 230 of 2009 (hereinafter referred as 'Main Petition') before the Central Commission on 14.10.2009 for determination of tariff of its Expansion Station in terms of CERC (Terms and conditions of Tariff), Regulations, 2009 (hereinafter referred as 'Tariff Regulations, 2009'). The Appellant on 17.2.2010 filed amendment to the said Petition after carrying out changes necessitated due to Central Commission's Order dated

18.12.2009 in Petition No. 14 of 2009 for consideration of opening capital as on 1.4.2009.

- c) The Central Commission vide order dated 31.8.2010 (Main Order) in Petition no. 230 of 2009 determined the tariff of the Expansion Station. While doing so the Central Commission disallowed additional capitalisation of Rs. 40 Cr. projected by the Appellant during the year 2013-14 for a spare TG/ Turbine rotor.
- d) The Appellant filed a Review Petition No. 6 of 2011 against the Main Order on 6.12.2010 with the Central Commission. In this petition for the first time the Appellant disclosed that the turbine rotor of Unit#1 had developed cracks and the requirement of spare turbine rotor is essential for sustained performance of the plant. The Appellant also submitted that the price of the turbine rotor is Rs. 100 Cr. as against Rs. 40 Cr. projected in Main Petition. The Central Commission vide its order dated 7.6.2013 in the Review Petition again rejected the claim of the Appellant for capitalisation of the spare TG/ Turbine rotor.
- e) Aggrieved by the Review Petition order dated 7.6.2013 read with Main Order, the Appellant on 5.8.2013 filed an Appeal No. 201 of 2013 before this Tribunal. The Appellant in this appeal contended that the Central Commission had not considered the submissions made by it vide affidavit dated 6.1.2012 while issuing the order dated 7.6.2013. This Tribunal vide Judgement dated 14.7.2014 in this appeal, without expressing any opinion, remanded the matter to the Central Commission with specific direction for fresh consideration of the issues related to the affidavit dated 6.1.2012

submitted by the Appellant to the Central Commission during proceedings of the Review Petition.

- f) The Central Commission vide order dated 10.6.2015 (Impugned Order) in Review Petition No. 6 of 2011 in respect of the Central Commission's Order dated 31.8.2010 again rejected the claim of the Appellant regarding capitalisation of the spare TG/ Turbine rotor after dealing with the issues as per directions of this Tribunal.
- g) Aggrieved by the Impugned Order dated 10.6.2015 passed by the Central Commission, the Appellant has preferred the present appeal.

6. QUESTIONS OF LAW

The Appellant has raised the following question of law in the present appeal:

Whether in the facts and circumstances of the case the Central Commission has rightly disallowed the additional capital expenditure claimed by the Appellant as set out in facts in issue at Para 8 (i)?

Facts in issue at para 8 (i) of the instant Appeal: Disallowance of total capital expenditure amounting to Rs. 100 Crores incurred by the Appellant for the purchase of spare TG/ Turbine rotor for the year 2013-14.

- 7. We have heard at length the learned counsel for the parties and considered carefully their written submissions, arguments put forth during the hearings etc. Gist of the same is discussed hereunder.
- 8. The learned counsel for the Appellant has made following arguments/submissions for our consideration on the issues raised by it:
 - The Central Commission has not considered the matter as per the a) judgement dated 14.7.2014 of this Tribunal directing that the claim of the Appellant to be considered in the light of the affidavit dated 6.1.2012 filed by it. In this affidavit, the Appellant has given in detail the reasons and justifications that why the development of cracks in the turbine rotor is not attributable to the Appellant. This affidavit also dealt with allegations made by M/s Ansaldo, the Original Equipment Manufacturer (OEM) stating therein that its recommendations for preservation of steam turbine has not been followed by the Appellant. The Central Commission without examining the details provided by the Appellant, in the said affidavit, as per directions of this Tribunal, only on the basis of the observations of M/s Ansaldo again denied the claim of the Appellant.
 - b) The Central Commission in the Impugned Order has concluded that the actual reasons for development of cracks was still to be ascertained. However, the Central Commission on this basis held that the Appellant has not made out the case that the damage to the turbine rotor was beyond its control. The Central Commission failed to appreciate the reasons given in affidavit dated 6.1.2012

and submissions made before it which establishes that the developments of cracks on turbine rotor are not attributable to the Appellant. The actual reasons of the cracks, being not known, should not lead to the conclusion that the Appellant is responsible for the cracks. The Central Commission also failed to record the reasons which could conclude that cracks on the turbine rotor were due to the Appellant.

- c) The Central Commission has wrongly proceeded on the basis that the data regarding steam and water parameters after COD of the Expansion Station was not furnished to M/s Ansaldo. The Central Commission during the course of hearings had not sought any clarification on action taken by the Appellant in response to query by M/s Ansaldo. This too particularly when the Central Commission had sought clarifications on various other aspects which were furnished to the Central Commission. The Appellant had extended full co-operation and submitted the details required by M/s Ansaldo from time to time. In case of any inadequate data M/s Ansaldo could have asked the Appellant for the same.
- d) The Central Commission too during the course of hearing did not ask the Appellant for furnishing information asked by M/s Ansaldo and the details submitted by the Appellant in response to that. This has led to the wrong conclusion by the Central Commission that the Appellant had not submitted adequate information because of which reasons for cracks on the turbine rotor could not be determined either by the Appellant or by M/s Ansaldo. The Appellant had followed all the chemical regime, frequency domain

and load profile all the times. The development of cracks cannot be attributed to the Appellant.

- e) The Central Commission failed to appreciate that purchase of spare turbine rotor which became essential for sustained operation of the power plant. If the turbine rotor in operation fails, it will take significant time to acquire new rotor as this rotor is of the customised design for the Appellant. Further, the Central Commission failed to consider that it would not be prudent to run machine continuously on the rotor with cracks without the risk of being damaged.
- f) The Central Commission in a similarly placed case had allowed replacement of exciter rotor at Rihand Station of NTPC vide its order dated 20.1.2011 in Petition No. 182 of 2009.
- g) The Central Commission failed to appreciate that the report dated 12.7.2010 of M/s Ansaldo is based on elimination of the reasons and not on any factual finding through investigative tests. The report has held that environment i.e. chemistry - the third factor is the probable cause for stress corrosion cracks. The report had eliminated two factors i.e. operating stresses and material M/s Ansaldo susceptibility. provided recommendations for preservation of steam turbine during shut down periods, but it has not stated the non-preservation as the exact cause of cracking. Till date M/s Ansaldo had not investigated the design related root causes for development of cracks though the Appellant has been insisting on the same. M/s Ansaldo has also not mentioned

anything regarding manufacturing process in its report. The cracks might have originated due to defect during manufacturing process.

- h) The Central Commission failed to consider that in case of inadequate preservation the cracks should have developed on both inlet and outlet sides of the L-1 steeples and not just on the inlet side of L-1 steeple.
- The Central Commission also failed to exercise the power to relax under Regulation 44 of the Tariff Regulations, 2009 and ignored the criticality of the turbine rotor required for normal functioning of the Expansion Station.
- j) The Central Commission proceeded on the basis of average availability (of 84.56% for the period 2009-10 to 2012-13) of Expansion Station being more than normative availability of 80% as per the regulations. The Central Commission failed to appreciate that the availability was achieved due to efforts taken by the Appellant by removing the last stage blades of LP rotor, keeping unit running at reduced load of about 200 MW as recommended by the OEM till new rotor is procured. Since 9.12.2012 onwards when new rotor was procured, the Appellant was able to achieve higher availability.
- 9. The learned counsel for the Respondent No. 1, 2 & 4 have made following arguments / submissions on the issues raised in the present Appeal for our consideration:
 - a) The Appellant in Petition No. 230 of 2009 claimed additional capital expenditure of Rs. 40 Cr. during 2013-14 for spare turbine rotor

under Regulation 9 (2) (i) of the Tariff Regulations, 2009 reproduced below:

"9 (2) The capital expenditure incurred on the following counts after the cut-off date may, in its discretion, be admitted by the Commission, subject to prudence check:

(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;"

The Central Commission rejected the claim of the Appellant in the Main Order on the ground that the procurement of the spares after the cut-off date was outside the scope of Regulation 9 (2) of the Tariff Regulations, 2009.

- b) The Appellant failed to provide the details of the rotor cracks during hearing in Petition No. 230 of 2009 and as per the Appellant the cracks were noticed on 6.10.2009 during the overhaul. Further, it is the responsibility of the Appellant to negotiate with the OEM to arrange for replacement of the rotor citing cracks along with test reports.
- c) In the Review Petition, the Appellant stated that the OEM had not supplied the spare turbine rotor at the time of initial supply but M/s Ansaldo was persuaded to arrange turbine rotor which is necessary for smooth and uninterrupted operation of the Expansion Station and is also in interest of the beneficiaries. Further, vide additional submissions dated 30.8.2011 in response to the queries of the Central Commission, the Appellant submitted that *"Procurement of turbine rotor was planned earlier and envisaged in the original scope*

of the project. However, while finalizing the project the spare rotor was not included in the specification for tender documents'. The Appellant also submitted regarding detection of cracks in the turbine rotor and recommended its replacement as the existing rotor could not be used continuously without rectifying the defects. The cost was also revised to Rs. 100 Cr. as against Rs. 40 Cr. originally projected.

- d) The Appellant also placed on record the report of M/s Ansaldo. The Appellant sought to make new case in the Review Petition for capitalisation of the turbine rotor. The Central Commission disposed of the Review Petition vide order date 7.6.2013. In this order the Central Commission disallowed the capitalisation of the turbine rotor based on the report of M/s. Ansaldo by holding that the replacement of spare rotor is attributable to the Appellant and the beneficiaries could not be burdened for that.
- e) After remand of the matter from this Tribunal to the Central Commission, the Appellant for the first time sought to invoke the power to relax provision under Tariff Regulations, 2009 for the capitalisation of the turbine rotor. As fresh plea could not be entertained in the Review Petition, the Central Commission rejected it.
- f) The Central Commission further observed that the average availability of the Expansion Station was 84.56% as against the normative availability of 80% during 2009-10 to 2012-13 and came to a conclusion that merely on the ground that need for turbine rotor could arise at some stage in future also, the beneficiaries should not be burdened with the additional cost.

- g) After re-considering the matter in compliance with the directions of this Tribunal, the Central Commission in the Impugned Order had not accepted the claim of the Appellant for capitalisation of spare turbine rotor projected in 2013-14.
- h) The contention of the Appellant that the Central Commission had allowed capitalisation of exciter rotor in case of Rihand Station of NTPC is not sustainable as the same was allowed under Tariff Regulations, 2004. The capitalisation of spare turbine rotor sought under Tariff Regulations, 2009 is not allowed.
- i) The Central Commission has been disallowing the capitalisation of the spare equipment and these decisions have been upheld by this Tribunal in judgement dated 8.5.2014 in Appeal No. 173 of 2013 in case of NTPC Ltd. Vs. CERC and others wherein the disallowance of additional capitalisation of spare generator transformer by Central Commission was upheld by this Tribunal.
- 10. After having a careful examination of all the aspects brought before us on the issues raised in Appeal and submissions made by the Appellant and the Respondents for consideration, our observations are as follows:-
- a. The present case pertains to decision of the Central Commission vide its Impugned Order dated 10.6.2015 regarding disallowance of additional capital expenditure on spare TG/ Turbine Rotor in the year 2013-14.

- b. On Question No.6 i.e. Whether in the facts and circumstances of the case the Central Commission has rightly disallowed the additional capital expenditure claimed by the Appellant as set out in facts in issue at Para 8 (i)?(Para 8 (i):Disallowance of total capital expenditure amounting to Rs. 100 Crores incurred by the Appellant for the purchase of spare TG/ Turbine rotor for the year 2013-14.),we observe as follows:
- i. The Central Commission questioned the maintainability of the instant Appeal. The Appellant and the Central Commission placed on record various judgements of this Tribunal and Hon'ble Supreme Court regarding maintainability issue of this Appeal. Notwithstanding the same, this Tribunal with the consent of the Appellant and the Respondents decided to hear this Appeal on merits.
- ii. The question needs to be analysed with complete facts and circumstances of the present appeal placed on record. The Appellant had not procured spare turbine rotor at the time of execution of the project. Had it been procured at that instant of time, the same might have been allowed to be capitalised if permitted as per regulations prevailing at that point of time. The Appellant filed the tariff petition 230 of 2009 with the State Commission on 14.10.2009 wherein additional capitalisation of spare turbine rotor was projected in year 2013-14 with estimated cost of Rs. 40 Cr. Cracks on turbine rotor of Unit#1 were observed by the Appellant on 6.10.2009 during the overhaul. Date of filing of amended petition no. 230 of 2009 was

17.2.2010. In the petition filed on 14.10.2009 & 17.2.2010, the Appellant claimed for additional Capitalisation of spare turbine rotor under Regulation 9 (2) (i) of the Tariff Regulations, 2009. In the amended petition filed on 17.2.2010 the justification provided for the proposal of spare turbine rotor is as below:

"The provision for procurement of spare turbine rotors (HP, LP & IP) for TPS Expansion (2x210 MW) 420 MW capacity. Since any damage caused to the generating station may cause reduction by 50% capacity, leading to heavy loss in power generation and revenue. Hence the procurement of Turbine Rotor is necessitated. Category under CERC: Under Regulation 9 (2) (i)."

iii. Further vide letter dated 16.3.2010, the Appellant had filed additional information as sought by the Central Commission and vide letter dated 30.4.2010, the Appellant filed rejoinder to reply filed by the Respondent No. 2 with the Central Commission. However, there has been exchange of communication between the Appellant and M/s Ansaldo during Nov/ Dec'2009 regarding cracks observed in turbine rotor of Unit#1. After going through the additional information filed by the Appellant, it is observed that there is no mention of the cracks in the turbine rotor and the Appellant has not sought any appropriate remedy for that.

iv. Regulation 9 (2) (i) of the Tariff Regulations provides as below:

"9 (2) The capital expenditure incurred on the following counts after the cut-off date may, in its discretion, be admitted by the Commission, subject to prudence check:

(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;"

The Central Commission in the Main Order dated 31.8.2010 has held as below while dealing the additional capitalisation of the spare turbine rotor:

"(A) DIRECT ASSETS

Liabilities to meet award of arbitration or for compliance of the order or decree of a court-Regulation 9(2)(i)

23. The petitioner has claimed an amount of Rs. 4000 lakh, for the year 2013-14 under this head, towards the procurement of spare turbine rotor, for the generating station. Since procurement of spares after the cut-off date does not fall under the provisions of the regulations, the same is not allowed."

- v. From the above it is clear that the Appellant being aware of the cracks in the turbine rotor on 6.10.2009 and having option to represent the same in the amended petition filed on 17.2.2010 or before issuance of the Main Order did not avail the opportunity to make appropriate case for capitalisation of the spare rotor at the first instance itself. The Central Commission rightly rejected the claim of the Appellant in the Main Order as the capitalisation of the spare turbine rotor after the cut off date does not fall under the provisions of Tariff Regulations, 2009.
- vi. The Appellant vide its affidavit dated 28.11.2010 filed Review Petition No. 6 of 2011 with the Central Commission against the Main Order which includes review of decision on spare turbine

rotor along with other issues. For the first time the Appellant put on record with the Central Commission regarding cracks in the turbine rotor of Unit#1 and need for spare turbine rotor/ replacement of the existing rotor with the spare turbine rotor to be procured. In response to Central Commission's record of proceedings dated 4.8.2011, the Appellant vide its submissions dated 30.8.2011 brought on record the recommendations of M/s Ansaldo. The recommendations include two options for running the unit.

(a) To operate the unit at full load without sudden load variation and frequent tripping and again inspect the rotor after 12 months.

(b) To remove the 4th stage blades of LP turbine and operate the unit at reduced load of 205 MW.

The Appellant chose option (b). In response to record of proceedings dated 3.11.2011, the Appellant vide its affidavit dated 6.1.2012 submitted Report of M/s Ansaldo dated 12.7.2010 on analysis of IP-LP Turbine Rotors.

vii. The Central Commission in its order dated 7.6.2013 had held as below:

"30. It could be observed from the summary of the recommendations of the OEM in its report that the investigations carried out on the cracked parts on rotors did not show any evidence of abnormal material or geometrical properties and cracking pattern is typical of inter granular stress corrosion cracking which is consistent with the fact that cracking exactly matches with the phase transition zone.

It has also been indicated that the information received was of a general nature lacking the detail needed to develop a clear understanding of the chemistry in the turbine phase transition zone and the origin of crack. It has further been mentioned that inspite of OEM recommendations no preservation procedures have been put in place by the petitioner during shutdown periods and in consideration of this, a suitable protection during shutdown periods with air drying equipment has been recommended for future view of the above operations. In discussions. the replacement of spare rotor is attributable to the petitioner for which the beneficiaries cannot be burdened on this count. Hence, additional capital expenditure of Rs. 4000 lakh projected to be incurred during 2013-14 for replacement of rotor is not permissible. Hence, there is no error apparent on the face of the order and the review on this count fails."

Thus, vide this order the Central Commission based on the report of M/s Ansaldo made the Appellant accountable for the replacement of the spare rotor and as such the additional capital expenditure on this count was not allowed.

viii. Aggrieved by the above order the Appellant filed Appeal No. 201
of 2013 before this Tribunal. This Tribunal vide judgement dated
14.7.2014 has held as below:

".....

But we are not able to accept the submissions made by the learned counsel for the Commission since the perusal of the entire impugned order would make it clear that the Commission has neither referred to Affidavit filed by the Appellant on 6.1.2012 nor analyzed the contents of the same in justification of their claim given in the relevant portions of the order on this issue. Therefore, we deem it appropriate to remand the matter for fresh consideration on this issue. Both the parties are at liberty to raise their respective contentions in regard to their issue".

 ix. Now let us examine the contents of the affidavit dated 6.1.2012
of the Appellant regarding turbine rotor and the relevant extracts are produced below:

> "(i) When Unit I was released for Major overhaul for the first time on 06.10.2009 after commercial operation date (COD), several defects on the steeples of row L1 of LP turbine have been detected which was immediately informed to OEM M/s. AnsaldoEnergia. After conducting Magnetic fluorescent test and a detailed mapping of some of the worst defects one for each type. OEM has given the following consideration for future operation.

> "Considering that a material characterization is not available today, it is not possible to state the actual strength of the rotor on a scientific basis. This, even if it is known that the most likely reasons of the cracks are stress corrosion cracking (mainly) and corrosion fatigue".

With this condition in background M/s. AnsaldoEnergia has given two options for running the unit.

(a) To operate the unit at full load without any sudden load variation and frequent tripping and again inspect the rotor after 12 months.

(b)To remove the 4th Stage blades of LP turbine and operate the unit with a reduced load of 205 MW.

In both the cases it is strongly recommended for the replacement of Rotor by a new one as soon as possible". Hence as per the recommendation of the OEM it was decided to keep the unit in service with a reduced load of 205 MW since then.

(ii) The following issues were enumerated by OEM as leading to development of crack in Rotor and the observations are as under:-

(a) Chemical Regime:- The regime as per the guidelines and values issued by OEM, are being maintained in the system. The guidelines issued by OEM and set of regime values maintained are enclosed as Annexure-II in the petition.

(b) Implementation of Preservation Measures for steam turbine during shut down periods:-

With regard to the remark on preservation, the same was not followed by OEM themselves during their stoppages in both units before completion of warranty period which includes long shut down periods also. The reason indicated by OEM was hence observed to be not appropriate.

Further, OEM had been asked to clarify for aspects concerning with design and material specifications for the cause of crack in Rotor and the reply is awaited.

Therefore, as of now, reason for the development of the crack in Unit I & II Rotor could not be concluded either by NLC or by the OEM.

As the exact cause for crack development is not known, on opening of turbine for inspection it may warrant total replacement of Rotor. In such an exigency availability of full set of Rotors on hand is essential since this type of Rotor is not available elsewhere in the country. Moreover the balancing of the rotor after replacement will be easier when changed as a set.

The cost of rotor and 4th stage fixed blade of LP Turbine separately IP-LP Rotor (Welded Rotor)5315200 Euros (Rs 35.09 Crore) HP Rotor 2306600 Euros (Rs 15.23 Crore) Generator Rotor 3932500 Euros (Rs 25.96 Crores) 4th stage fixed blades 139500 Euros (Rs 0.92 Crore). The total site cost at the exchange rate as on 22.12.2010 (Purchase Order date) is Rs. 92.16 Crores. The cost of LP and IP turbine (WELDED ONE) along with 4th Stage blade can be safely approximated to Rs. 40 Crores."

From the above, it is seen that the Appellant contended that the exact reasons for the development of cracks in the turbine rotor are not concluded. M/s Ansaldo arrived at the decision of chemical regime behind the possible cause of cracks only after the elimination process and not on the scientific basis. The Appellant has taken up the issue of root cause analysis of the cracks with the OEM including design consideration.

 x. The Central Commission after hearing the parties and considering the submissions made by them passed its Impugned Order dated 10.6.2015 which has held as below:

> "12. It is observed from the investigation results in the report of OEM M/s. Ansaldo dated 12.7.2010 (analysis of turbine rotor of Unit-I&II) that the specimen taken from the cracked rotor steeples of Unit-I showed no abnormal properties of material and not consistent with was the design specifications. According to the OEM, corrosion/stress corrosion was the primary cause of cracking. As per experience of the OEM on the other LI 41 rows in operation, stress corrosion cracking occurs when three factors namely, (a) operating stresses, (b) material susceptibility and (c) environment are present. Considering the fact that in Neyveli, stresses and materials are the same as used in

other projects without problems, the OEM has concluded that the environment i.e. chemistry was a critical factor. It is further noticed from the report of the OEM that the petitioner had not furnished detail information as requested by the OEM, in order to have an understanding of the chemistry in the turbine phase transition zone and of the origin of the crack. It is also evident from the said report that the recommendation for preservation of Steam turbine during shut down periods, which is based on instruction manual, has not been adhered to by the petitioner. It is observed that the OEM vide letter dated 20.11.2002 had recommended steam purity value. The petitioner has submitted the steam parameters and water maintained during 2006-07. November, 2008 and May, 2009 as per the log book. The COD of the generating station is 5.9.2003 and thus it appears from letter dated 7.8.2010 of the petitioner addressed to M/s Ansaldo that the steam and water parameters maintained after the COD of the generating station had not been furnished to the OEM.

13. It is observed from the submission of the petitioner that the reason for the development of the crack in Unit I & II Rotor could not be concluded either by NLC or by the OEM. In the above background and since the actual reasons for the development of crack is yet to be reported by the OEM, we are of the considered view that the petitioner has not made out a case that the damage to existing rotors was beyond its control. In the circumstances, we do not find any merit in the claim of the petitioner for capitalisation of expenditure towards spare turbine rotor. Accordingly, the claim of the petitioner is rejected.

14. One more submission of the petitioner is that even if the claim is not covered under any of the provisions of the 2009 Tariff Regulations, necessary relief can be granted by the Commission in exercise of the "Power to relax" under Regulation 44 of the 2009 Tariff Regulations. The petitioner has also referred to the judgments of the Hon'ble Supreme Court in P.K. Palanisamy Vs N. Aruimpugnedmugham & anr (2009 9 SCC 173), Ram Sunder Ram Vs Union of India (2007 13 SCC 255). The respondent TANGEDCO while objecting to the above has submitted that the prayer of the petitioner is not permissible since there are definitive limits to the scope of review and no formal prayer had been made by the petitioner in the original petition or in the affidavit dated 6.1.2012. We have considered the submissions. As already stated, the petitioner in support of its claim for capitalisation of spare turbine rotor has not made out a case on merits for consideration of the same by the Commission. Since there is no basis for considering the claim of the petitioner, there is no reason for us to grant the prayer in exercise of the "Power to relax" under Regulation 44 of the 2009 Tariff Regulations. In other words, the petitioner having not justified the need for Spare turbine rotor cannot seek the capitalisation of the said claim in exercise of the Power to relax."

The Central Commission based on the facts placed before it concluded that the Appellant could not make out a case that the damage to the rotor was beyond its control as the reasons for the development of the cracks in Rotor could not be concluded by the Appellant/OEM. The Central Commission also observed that the actual reasons for the development of crack is yet to be reported by the OEM.

On the issue of exercising power to relax regulation, the Central Commission has held that since Appellant was not able to prove that the damage was beyond its control, the question of application of power to relax regulation does not arise.

xi. The Central Commission while dealing the matter in accordance with the directions of this Tribunal in Appeal No. 201 of 2013, based on the records placed before it had concluded that the Appellant has not made out the case that the cracks in the turbine rotor is beyond its control. The prayer regarding power to relax was not made in the Main Petition, Review Petition and even in the affidavit dated 6.1.2012 which was the basis of the remand order by this Tribunal. Further, for the first time during the proceedings of the Review Petition after remand order the Appellant prayed for allowing the additional capitalisation under power to relax regulation of Tariff Regulations, 2009. The same was opposed by the Respondent No. 2 saying that new prayers allowed a Review Petition. The cannot be in Central Commission had not accepted the prayer of the Appellant under power to relax. We are of the considered opinion that the Central Commission had followed the directions of this Tribunal while dealing with the case on merits.

- xii. The Appellant quoted the case of Rihand Station of NTPC in Petition No. 182 of 2009 wherein NTPC was allowed capitalisation of the exciter rotor vide Central Commission Order dated 20.1.2011 as per Tariff Regulations, 2004. In the present case, Tariff Regulations, 2009 are applicable and the additional capitalisation of the spare turbine rotor beyond the cut off date is not allowed. In this regard, we are in agreement with the view of the Central Commission.
- xiii. Further, as brought out by the Central Commission that it has been disallowing additional capitalisation for procurement of spare as per Tariff Regulations, 2009 and the same has also been upheld by this Tribunal. On perusal of the cases of NTPC Vs. CERC (Judgements of this Tribunal in Appeal Nos. 173 of 2013 & 97 of 2013) quoted by the Central Commission, we observe that the similar approach has been adopted by the Central Commission which was upheld by this Tribunal.
- xiv. In view of our discussions at 10 b. ii. to xiii. above, and submissions made by the Central Commission regarding dealing with the issues raised in affidavit dated 6.1.2012, we observe that the Central Commission based on records available had dealt with all the issues of the said affidavit. The Central Commission was constrained to decide the issue based on the observations in respect of the submissions made by the Appellant/ communications exchanged between the Appellant and M/s Ansaldo, the OEM and the Report of M/s Ansaldo on the reasons stated for developing the cracks on the turbine rotor.

We do not find any infirmity in the conclusion made by the Central Commission.

- However, we observe that the Appellant had not procured spare XV. turbine rotor initially when the project was under execution. stations initial Generally power procure spares during construction/commissioning phase of the power plants according to their requirements. In case of a regulated entity, these initial spares are capitalised based on the regulations applicable to them. In present case, there seems to be something unusual that the turbine rotors designed for useful life of the station developed cracks in about 6 years time of COD of the Expansion Station. It is essential to investigate the root cause for the cracks in the turbine rotors. In the current situation when cracks have been observed in turbine rotor of both the units of the Expansion Station, the requirement of spare turbine rotor has become critical for sustained generation during the balance life of the Expansion Station (Station COD Sep'2003). This is important as any outage of the Expansion Station units on this count will adversely affect both the Appellant and the beneficiaries of the Expansion Station.
- xvi. Taking a note of the submissions made by the Appellant and the observations of the Central Commission while dealing with the issue on merits (during Review Petition hearings before the remand order and after the remand order of this Tribunal) that the root cause of the cracks in turbine rotor is yet to be established, we grant liberty to the Appellant to approach the Central Commission with appropriate petition along with the final detailed root cause analysis report dealing with all the relevant aspects leading to the

cracks in turbine rotor. The Appellant is directed to finalise the said report expeditiously with OEM, M/s Ansaldo and file a fresh petition with the Central Commission for its consideration and decision for which we are directing the Central Commission to hear the matter upon filing of this fresh petition by the Appellant, on merits and decide accordingly.

ORDER

We are of the considered opinion that the issues raised in the present appeal have some merit as discussed above. The Appeal is disposed of with the observations made at 10 b. xvi. above.

No order as to costs.

Pronounced in the Open Court on this 15th day of May, 2017.

(I.J. Kapoor) (Mrs. Justice Ranjana P. Desai) **Technical Member REPORTABLE/NON-REPORTABLE**

Chairperson