

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 155/MP/2012**

**Coram:**

**Shri Gireesh B. Pradhan, Chairman**

**Shri V.S. Verma, Member**

**Shri M. Deena Dayalan, Member**

**Shri A. K. Singhal, Member**

**Date of Hearing: 08.11.2013**

**Date of Order : 21.02.2014**

**In the matter of**

Application under Section 79 of the Electricity Act, 2003 for evolving a mechanism for regulating including changing and/or revising tariff on account of frustration and/or of occurrence of force majeure (Article 12) and/or change in law (article 13) events under the PPAs due to change in circumstances for the allotment of domestic coal by GOI-CIL and enactment of new coal pricing Regulations by Indonesian Government.

**And**

**In the matter of**

Adani Power Limited

**Petitioner**

**Vs.**

1. Uttar Haryana Bijli Vidyut Nigam Ltd.
2. Dakshin Haryana Bijli Vidyut Nigam Ltd.
3. Gujarat Urja Vikas Nigam Ltd.

**Respondents**

**Parties present:**

Shri Amit Kapur, Advocate, APL

Shri Vikram Nankani, Advocate, APL

Ms. Poonam Verma, Advocate, APL

Shri Gaurav Dudeja, Advocate, APL

Shri Malav Deliwala, APL

Shri Jatin Jalundhwala, APL

Shri Kandarp Patel, APL

Shri M G Ramachandran, Advocate, GUVNL and HPPC

Shri K.P.Jangid, GUVNL

Shri K.P.Jani, GUVNL

Shri Avineash Menon, Advocate, Haryana

Ms. Anushree Badhan, Advocate

Ms. Poorva Saigal, Advocate

Shri Vikrant Saini, HPPC  
Shri Ravi Juneja, HPPC  
Shri Jayant Bhushan, Senior Advocate for the Applicant for impleadment  
Shri Salim Inamdar, Advocate for the Applicant for Impleadment

### **ORDER**

The petitioner, a subsidiary of Adani Enterprises Ltd, has set up a generating station, Mundra Power Project, with a total capacity of 4620 MW in the Special Economic Zone at Mundra in the State of Gujarat. The generating station has four phases, namely, Phase I & II comprising Unit Nos. 1 to 4 (4x330 MW), Phase III comprising Unit Nos. 5 and 6 (2x660 MW) and Phase IV comprising Unit Nos.7 to 9 (3x660 MW). The petitioner has entered into two PPAs dated 2.2.2007 and 6.2.2007 for supply of 2X1000 MW power to Gujarat Urja Vikas Nigam Limited (GUVNL) from Phase I & II and from Phase III and PPA dated 7.8.2008 with Uttar Haryana Bijli Vidyut Nigam Ltd and Dakshin Haryana Bijli Vidyut Nigam Ltd (Haryana Utilities) for supply of 1424 MW power from Phase IV of the generating station. The present petition is concerned with the sale of power through PPA dated 2.2.2007 to GUVNL and PPA dated 7.8.2008 to the Haryana Utilities.

2. On account of the non-availability of domestic coal linkage, the petitioner is importing coal from Indonesia to meet the entire requirement of coal for supply of power to the third respondent under the PPA and about 58% of the requirement of coal for supply of power to the first and second respondents. To meet the coal requirement, the petitioner had entered into several Coal Supply Agreements with Adani Enterprises Limited of supply of imported coal from Indonesia which were merged into a Consolidated Coal Supply Agreement dated 26.7.2010 which provided for supply of 10

MMT of coal per annum for use in Phase I to IV of the Mundra Power Project at CIF USD 36/MT for a period of 15 years from the scheduled commercial operation date of last unit of Phase IV of the project.

3. On 23.9.2010, Minister of Energy and Mineral Resources, Republic of Indonesia promulgated "Regulation of Ministry of Energy and Mineral Resources No.17 of 2010" (hereinafter referred to as 'Indonesian Regulations') which recognized the direct sale contract (spot) and term sale contract (long term) which had been signed by the holders of mining permits and special mining permits and further provided that the existing direct sale contracts and term sales contracts would adjust to the regulations within a period not later than 6 months and 12 months respectively. In case of violation, the holders of mining permits and special mining permits were liable for administrative sanction in the form of written warning, temporary suspension of sales or revocation of mining operations permits. Accordingly, the Indonesian Regulations were to come into force in respect of term sale contract (long term) with effect from 23.9.2011. After promulgation of Indonesian Regulations, Adani Enterprise Ltd vide its letter dated 27.9.2010 addressed to the petitioner had expressed its inability to perform its obligations under the CSA dated 26.7.2010 w.e.f 24.9.2011. Further, PT Dua Samudera Perkasa in its letter dated 20.9.2011 addressed to Adani Global PTE Ltd, a subsidiary of Adani Enterprise Ltd, had conveyed that as coal supply at a price other than the Harga Batubara Acuan (HBA) prices would be considered as violation of Indonesian Regulations resulting in suspension of license, suitable amendment in the price arrangement was required. In view of the promulgation of the Indonesian Regulations having an impact on the export price of coal from Indonesia, the petitioner has

submitted that the cost of production of electricity from the Mundra Power Plant has increased tremendously which has rendered it commercially unviable to supply power to the respondents at the PPA price. The petitioner informed GUVNL vide its letter dated 25.7.2011 about the existence of "force majeure" events and sought urgent adjustment of tariff to get supply under the PPA dated 2.2.2007. On achievement of the SCODs of Units I & II of the generating station on 2.2.2012, the petitioner informed GUVNL vide its letter dated 6.2.2012 that it was in the process of approaching the appropriate authority for seeking relief under "force majeure" clause and supply of power from the project is subject to the decision of the appropriate authority with retrospective effect i.e. from SCOD. GUVNL in its letter dated 13.2.2012 has replied that it would take suitable view upon final decision of the appropriate authority or Court. The petitioner also took up the matter with Haryana Power Purchase Centre by its letter dated 25.5.2012, notifying the occurrence of "change in law" and '*force majeure*' and seeking relief under Article 12.7(b) of the PPA for mitigation of the effect of force majeure/change in law, resulting in change of generation cost by adjusting the tariff to cover the revised coal prices. The Haryana Utilities are stated to have not responded to the request of the petitioner. Thereafter, the petitioner filed the instant petition on 5.7.2012 before this Commission seeking the following reliefs:

"a) to evolve a mechanism to restore the Applicant to the same economic condition prior to occurrence of Subsequent Events mentioned in respective Part I & II hereinabove by adjudicating the disputes between the Applicant and the Respondent(s) in relation to regulate including changing and/or revising the price/tariff under PPAs dated 7.8.2008 with UHBVNL and DHBVNL and 2.2.2007 with GUVNL;

b) in the alternative, to declare that the Applicant is discharged from the performance of the PPAs on account of frustration of the PPAs due to Subsequent Events in respective Part I & II;

- c) this Hon'ble Central Commission be pleased to declare that the revised tariff shall be applicable from the Scheduled Commercial Operation Date (SCoD) of the PPAs;
- d) that during the pendency of the present Application Hon'ble Central Commission may direct the Respondent(s) to procure power on the cost plus basis, alternatively, the Hon'ble Central Commission may suspend the operation of the PPAs till the final disposal of the Application;
- e) pass such further or other orders as the Hon'ble Central Commission may deem just and proper in the circumstances of the case."

4. The Commission after hearing the parties came to the conclusion that the petitioner had entered into a composite scheme for generation and sale of electricity to more than one State and upheld its jurisdiction to adjudicate the dispute between the petitioner and the respondents by order dated 16.10.2012. Haryana utilities sought review of the said order dated 16.10.2012 in Review Petition No. 26/2012 which was dismissed vide order dated 16.1.2013. Thereafter, the petition was taken up for hearing on merits.

5. The petitioner had claimed relief under 'Change in Law' (Article 12 of the PPA), "force majeure" (Article 13 of the PPA), frustration of contract and regulatory jurisdiction of the Commission under section 79 of the Electricity Act 2003 (the Act). After detailed hearings and due consideration of various documents and submissions filed by parties, this Commission vide order dated 2.4.2013 flagged the issues as under:

"45. ....The main issues that arise for our consideration is whether the promulgation and coming into effect of Indonesian Regulations and non-availability of domestic coal linkage have resulted in a situation where the project of the petitioner has become commercially unviable, making it impossible for the petitioner to supply power to the respondents at the tariff agreed in the PPAs. If the answer to this question is in the positive, we have to consider whether the case of the petitioner falls under "*force majeure*" or "change in law" for the purpose of granting relief to the petitioner under the provisions of the PPA. Alternatively, whether the Commission has power under the Act and the National Electricity Policy and tariff policy to grant relief to the petitioner without revisiting the tariff agreed in the PPAs....."

6. The Commission in para 54 and 57 of the order dated 2.4.2013 came to the conclusion that the petitioner is suffering hardship on account of Indonesian Regulations as under:

“54. From the above analysis, we have come to the conclusion that the promulgation of Indonesian Regulations which required the sale price of coal in Indonesia to be aligned with the international benchmark price has, *prima facie*, altered the premise on which the energy charges were quoted by the petitioner in the bids submitted to GUVNL and Haryana Utilities. No doubt, the petitioner had taken huge risk by quoting the energy charges under non-escalable head as a result of which the benefits of escalation index are not available to the petitioner. Though the petitioner had quoted non-escalable energy charges to keep the bid price low, it was however factored on the basis of the then prevailing coal price for import from Indonesia. In fact the petitioner had got MoUs with two firms for supply of coal from Indonesia at the time of submission of bids and had subsequently acquired interest in the coal mines in Indonesia. The petitioner through its subsidiary had also entered into the long term agreement with coal suppliers in Indonesia at the CIF rate of around USD 36/MT. Moreover, quotation of low bid price was in the interest of the consumers as the power would be available at the levelized tariff as low as ₹2.94/kWh in case of Haryana Utilities and ₹2.34/kWh in case of GUVNL. The petitioner would have continued to supply power at this price, had the Indonesian Regulations not made it mandatory for sale of coal from Indonesia at international bench-mark prices. Therefore, the competitive advantage of hedging in coal prices that the petitioner was enjoying by acquiring mining rights in Indonesia or by entering into long term contract with the coal suppliers in Indonesia appears to have been wiped out, after the coal sales are required to be aligned with international benchmark prices of coal. It is pertinent to note that the coal price in the international market is fluctuating. Therefore, the exact impact of the Indonesian Regulations will vary from time to time. We are also aware that other sources of imported coal are presently costlier than the Indonesian coal and it would not serve any purpose to say that the petitioner has got other viable options to source imported coal. It is also not expected that the petitioner would be able to meet the entire coal requirement from the domestic sources given the availability of domestic coal.”

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“57. Considered against the prevailing scenario of availability of domestic coal, promulgation of the Indonesian Regulations requiring the existing agreements to align with the International benchmark price has created problems regarding project viability of the generating stations to supply power at the rates agreed to between the parties in the PPAs. Therefore, there is an imminent need to find out a practical and acceptable solution to the problem for ensuring supply of power to the consumers at competitive price while seeking to ensure sustainability of the electricity sector.”

7. The Commission next proceeded to examine whether the relief for impact of Indonesian Regulations on the project viability of the petitioner can be granted under the provisions of the PPA, namely under “force majeure” and “change in law” and came to

the conclusion that the petitioner is not entitled for relief under “force majeure” and “change in law” clauses of the PPA. As regards force majeure, the Commission concluded as under:

“63.....In the light of the above settled principle of law, it emerges that the parties must have envisaged an event under the “*force majeure*” clause to save them from the consequences of the events over which they do not have any control and must have provided for it in the contract. In the present case, there is no provision in the PPAs to cover the change in procurement of power as an event of “*force majeure*”. In Case 1 bids, arrangement of fuel is the responsibility of the seller. The petitioner has quoted the entire energy charges as non-escalable element of tariff and thereby eliminating the prospect of being compensated on account of escalation in prices of fuel. The parties have intended that the rise in fuel cost would not be treated as a “*force majeure*” event and accordingly have not factored rise in fuel cost under “*force majeure*”. In Alopi Parshad case, the test laid down is whether the terms of the contract shows that the parties had never agreed to be bound by a fundamentally different situation which has now unexpectedly emerged. In the present case, the parties have never agreed that the petitioner would supply power based on fuel at a fixed price from Indonesia and therefore, change in price of fuel in Indonesia cannot be said to have changed the original situation. Sourcing of fuel from Indonesia as per the rates agreed in the Coal Supply Agreement is a decision between Adani Power Limited and Adani Enterprises Ltd which decision could be said to be affected by “*force majeure*” under the Coal Supply Agreement and cannot bind the respondents who are neither parties to the Coal Supply Agreement nor the PPAs were premised on the basis of said Coal Supply Agreement. Therefore, Indonesian Regulations affecting the agreed price under Coal Supply Agreement cannot be said to be a “*force majeure*” event under the PPAs with the respondents. Article 12.4 of the PPAs is exclusions to Article 12.3 which means that even if any event falls within the scope of Article 12.3, it will not be regarded as “*force majeure*” if it falls within the exclusion provided in Article 12.4. Even the double negative in Article 12.4.(a) which provides that “unavailability, late delivery or changes in cost of plant, machinery, equipment, materials, spare parts, fuel or consumables for the project” shall be considered as “*force majeure*” if they are consequences of the events of “*force majeure*” cannot advance the case of the petitioner. The PPAs do not provide that the petitioner shall supply power by procuring coal from Indonesia under the Coal Supply Agreement between the petitioner and respondents and therefore, the Indonesian Regulations requiring the coal export at the international benchmark price cannot be said to be a “*force majeure*” event affecting the price of fuel under the PPAs.

64. The petitioner has submitted that change in supply of domestic coal policy by GOI/CIL and the prohibition introduced by Government of Indonesia through Indonesian Regulations are circumstances beyond the control of the petitioner and constitute “*force majeure*” events under Article 12 of the PPAs with the respondents. It is noted that the PPAs were not premised on the availability of full coal linkage by Government of India or Coal India Ltd. For the Phase III of the Project, the petitioner had submitted the MoUs from Kowa Company and Coal Orbis and a commitment letter from GMDC. All these MoUs did not result in Fuel Supply Agreement. The petitioner made its application to the Standing Linkage Committee (Long Term), Ministry of Coal for coal linkage for the entire capacity of the project (i.e. 4620 MW) on 28.1.2008 after the petitioner has been awarded

the Lols by the respondents. Therefore, it follows that the bids were not premised on the coal linkage to be provided by Ministry of Coal under the New Coal Development Policy. In case of GUVNL, the petitioner contracted for the coal by entering into a Coal Supply Agreement with Adani Enterprises Ltd. on 24.3.2008. Therefore, change in Government policy to allocate 70% of the coal requirement of coastal projects cannot be considered as a “force majeure” event affecting the petitioner. In case of Haryana bid, the petitioner entered into a Fuel Supply Agreement with Adani Enterprises Ltd. on 15.4.2008 for import of coal from Indonesia, even before the issue of letter of assurance by Standing Linkage Committee. Moreover, the petitioner has got the linkage for Phase-IV of the project as per the policy of the Government. Non-availability of full coal linkage cannot be considered as a force majeure event. As regards the impact of Indonesian Regulations, we are of the view that the said regulation neither prohibits nor delays the petitioner in performance of its duties under the PPAs. The petitioner is required to pay more for the coal in comparison to the price agreed in the Coal Supply Agreements as a result of Indonesian Regulations, but the said regulations have not rendered the PPAs impossible to perform. In our view, no case is made out in favour of the petitioner under Article 12 of the PPAs.”

On the question of “change in law”, the Commission came to the following conclusion:

"68. We have considered the submissions of the parties. In our view, "all laws" would refer to the laws of India, which includes Electricity Laws. An examination of the various provisions of the PPAs show that only Indian Laws are applicable. Moreover, the term governing laws has been defined in the PPAs as the laws of India. If the term "all laws" is interpreted as to include the foreign law, it will lead to absurd results as any change in foreign law would be given effect to, which would result in the changes in the rights and liabilities of the parties under the contract. In our view, if any foreign law can be made applicable, it should be specifically provided for in the contract. For example, in some international contracts, the adjudication of the dispute is conferred on the courts of a third country. In the absence of any provision in the PPAs that the “change in law” of the fuel exporting country would have to be given effect to as “change in law” under the PPAs, change in the Indonesian Regulations cannot be considered as “change in law”.

69. The petitioner has submitted that after the promulgation of Indonesian Regulations, the fuel cannot be supplied at the agreed rate as it would result in violation of the regulations / laws of Indonesia. The petitioner has submitted that the change in license / consent to the mining companies is a change in the consent for the project and consequent non-supply at the agreed price is on account of change in law. We have already held that Indonesian Law cannot be covered under the definition of 'law' under the provisions of PPAs. Moreover, the Indonesian Regulations has not prohibited extraction of coal from its mines and export to other countries including India. In fact, there is no change in consent or license. In any case, this cannot bind the petitioner since it is not a party to the Fuel Supply Agreement from the mining companies of Indonesia. The petitioner has further submitted that change in allotment policy of domestic coal is covered under the purview of change in law provision. Since the petitioner applied for linkage of domestic coal to Coal India Ltd on 28.1.2008 after the petitioner was awarded Lol by GUVNL and Haryana Utilities, it cannot be said that the bids were premised on the linkage of domestic coal, and hence the change in policy of GoI/CIL cannot be considered as “change in law”.



8. Next, the Commission proceeded to examine its power under section 79(1) (b) of the Act in the context of the case of the petitioner and came to the following conclusion:

“83. We have come to a conclusion in para 54 of this order that the escalated price at which the petitioner is buying coal from Indonesia subsequent to the promulgation and operation of Indonesian Regulations for supply of power to the respondents has rendered the project unviable which will adversely affect the electricity sector and interest of the consumers. The possibility of the petitioner’s inability to discharge its obligations under the PPAs on the face of the high cost of Indonesian Coal cannot be totally ruled out which will affect the consumers in two ways. Firstly, the respondents shall be required to invite fresh bids and till the selected project or projects are operationalized, the consumers will be deprived of power. Secondly, the ruling tariff for the new projects discovered through competitive bidding works out in the range of ₹3.5/kWh to ₹7.00/kWh which the consumers of Mundra Power Project shall also be required to pay. At macro level, it will be a serious setback for the electricity sector and will adversely affect the investment for the sector. Accordingly, as a regulatory body, this Commission deems its responsibility to intervene in the matter in the interest of the consumers, investors and the power sector as a whole to consider adjustment in tariff in view of the unanticipated increase in price of imported coal. This Commission cannot remain oblivious to the interest of consumers and lenders.”

9. The Commission next considered the relief which could be granted to the petitioner for the hardship which it was suffering on account of Indonesian Regulations and CIL coal supply shortages. The Commission while strongly disapproving the renegotiation of tariff as discovered through the competitive bidding emphasizing that the sanctity of the PPAs and the tariff agreed therein should be maintained and expressed the inclination to explore all possible measures which are practicable and commercially sensible to address the situation. The Commission decided to grant of relief in the form of compensatory tariff over and above the tariff agreed in the PPAs in the following terms:

“87. Though the study provides sufficient guidelines for renegotiation of all long-term contracts in the light of the international practice, we are not inclined to favour any renegotiation of the tariff discovered through the process of competitive bidding as in our view, the sanctity of the bids should be maintained. The parties should not renegotiate the tariff discovered through the competitive bidding as that will bring uncertainty to the power sector and is prone to misuse. In our view, the parties should confer to find out and agree for a compensation package to deal with the impact of subsequent event resulting

from the operation of Indonesian Regulations which has adversely affected performance under the PPAs while maintaining the sanctity of the PPAs and the tariff agreed therein. In other words, the compensation package agreed should be over and above the tariff agreed in the PPAs and should be admissible for a limited period till the event which occasioned such compensation continues to exist and should also be subject to periodic review by the parties to the PPAs.

88. In the present case, the escalation in price of imported coal on account of Indonesian Regulation and non-availability of adequate fuel linkage from Coal India Limited for the project of the petitioner is a temporary phenomenon and is likely to be stabilized after some time. Therefore, the petitioner needs to be compensated for the intervening period with a compensation package over and above the tariff discovered through the competitive bidding. The compensation package to be called 'compensatory tariff' could be variable in nature commensurate with the hardship that the petitioner is suffering on account of the unforeseen events leading to non-availability of coal linkage or increase in international coal price affecting the import of coal which has affected its performance under the PPAs. As and when the hardship is removed or lessened, the compensatory tariff should be revised or withdrawn. In our view, this is the most pragmatic way to make the PPAs workable while ensuring supply of power to the consumers at competitive rates.

89. We are also conscious of our statutory responsibility to balance the interest of the consumers with the interest of the project developers while regulating the tariff of the generating companies covered under our jurisdiction. In our view, under the peculiarity of the facts of the case and keeping in view the interest of both project developer and consumers, there is a need to direct the parties to set down to a consultative process to find out an acceptable solution in the form of compensatory tariff over and above the tariff decided under the PPAs to mitigate the hardship arising out of absence of full domestic coal linkage and the need to import coal at benchmark price on account of Indonesian Regulations. Accordingly, we direct the petitioner and the respondents and the respective State Governments to constitute a committee within one week from the date of this order. The committee shall consist of the Principal Secretary (Power), Govt. of Gujarat / Managing Director of GUVNL and Principal Secretary (Power), Govt. of Haryana / Managing Directors of UHBVNL and DHBVNL, the Chairman of Adani Power Ltd. or his nominee, an independent financial analyst of repute and an eminent banker of the commensurate level. The nominees of financial analysts and banker should be selected on mutual consent basis. The Committee shall go into the impact of the price escalation of the Indonesian coal on the project viability and obtain all the actual data required with due authentication from independent auditors to ascertain the cost of import of coal from Indonesia and suggest a package for compensatory tariff which can be allowed to the Petitioner over and above the tariff in the PPAs. The Committee shall keep in view inter-alia the following considerations while working out and recommending the compensatory tariff applicable upto a certain period:

(a) The net profit less Govt. taxes and cess etc. earned by the petitioner's company from the coal mines in Indonesia on account of the bench mark price due to Indonesian Regulation corresponding to the quantity of the coal being supplied to the Mundra Power Project should be factored to pass on the same in full to the beneficiaries in the compensatory tariff.

(b) The possibility of sharing the revenue due to sale of power beyond the target availability of Mundra Power Project to the third parties may be explored.

(c) The possibility of using coal with a low GCV for generation of electricity for supply to the respondents without affecting the operational efficiency of the generating stations.

90. The Committee is also at liberty to suggest any further measures which would be practicable and commercially sensible to address the situation. The Committee shall submit its report to the Commission by 30th April 2013 for consideration and for further directions.

91. The petitioner has prayed as an alternative prayer to declare that the applicant is discharged from the performance of the PPAs on account of frustration due to subsequent events. The petitioner has further prayed that during pendency of the present petition, the Commission may direct the respondents to procure power on cost plus basis or alternatively suspend the PPAs till the final disposal of the petition. Since, we have come to the conclusion that there is no case for “*force majeure*” and “change in law”, the PPAs are not frustrated and therefore, the prayers cannot be granted. As regards the prayer at para (c), the same will be decided in the light of the recommendations of the Committee.”

### **Constitution of the Committee**

10. In order to give effect to the directions of the Commission, the petitioner and the respondents took the necessary steps to constitute a committee comprising of the representatives of the petitioner, State Government, the concerned distribution companies and the independent experts. The constitution of the committee was as under:

- (a) Shri Deepak Parekh, Chairman HDFC: Eminent Banker and Chairperson of the committee;
- (b) Ms Arundhati Bhattacharya, MD & CEO, SBI Capital Markets Ltd.: Independent Financial Analyst'
- (c) DrDevi Singh, Director IIM, Lucknow: Independent Member (as mutually agreed by the parties);

#### Representatives of Govt of Gujarat and Gujarat Discoms

- (d) Shri . D.J. Pandian, IAS, Principal Secretary (EPD), Govt. of Gujarat;
- (e) Shri. Raj Gopal, IAS, MD, GUVNL;

Representatives of Govt of Haryana and Haryana Discoms

(f) Shri. Ajit M. Sharan, IAS Addl. Chief Secretary (Power), Govt. of Haryana;

(g) Shri. Devender Singh, IAS, CMD, Haryana Discoms; and

Representative of the petitioner

(h) Shri. Gautam Adani, Chairman, Adani Power Ltd.

11. The Committee appointed M/s. KPMG as the consultant for carrying out accounting due diligence specific aspects of profits at the Indonesian coal mines of Adani Group and procurement of coal and sale of power by APL. The Committee constituted a Finance Sub-Group consisting of Shri Deepak Parekh, Dr. Devi Singh and representative of SBI Capital Markets Limited (SBICAP) to work out the compensatory tariff package and seek guidance/approval from the committee at regular interval. The Committee also appointed Shri A.G. Karkhanis, former ED and Legal Advisor IDBI Ltd as the Legal Consultant and Shri Chandra Pratap Singh, former Director (Engineering and R&D) as Technical Consultant to assist the Finance Sub-Group and to provide their expert advice on various legal, technical matters and also to authenticate/opine on the inputs to find out an acceptable solution in the form of compensatory tariff.

12. The Committee held meetings on 11.5.2013, 26.6.2013, 11.7.2013, 17.7.2013 and 30.7.2013 and submitted its report on 16.8.2013 to the Commission. The report of the Committee was signed by Shri Deepak Parekh, Chairman of the Committee and Smt Arundhati Bhattacharya, Independent Financial Analyst. After receipt of the report, the Commission directed the staff to seek a copy of the report signed by all members including the representative of the petitioner and the respondents. Accordingly, the staff

of the Commission vide letter dated 5.9.2013 addressed to Chairman of the Committee with copy to the representatives of the petitioner and the respondents, sought copy of the report duly signed by all the members. Chairman of the Committee in his response dated 10.9.2013 has clarified that during the last Committee meeting, the issue of signing of the report by all members of the committee was deliberated and the representatives of the procurer States felt that they would not be able to sign the report without obtaining the approval of their respective State Governments which might take some time. It was also decided in the meeting held on 30.7.2013 that "all the procurers mentioned that their formal approval on Compensatory Tariff mechanism may be obtained only after the CERC order is issued after the submission of report. It was then decided that Committee would submit its final report to CERC after incorporating feedback/suggestion from the members." GUVNL in its affidavit dated 13.9.2013 has submitted that Government of Gujarat has given in principle consent to the committee's report subject to certain modifications suggested to the report and subject to the approval of the Government of Gujarat and Gujarat Urja Vikas Nigam Limited through the High Level committee in respect the compensatory tariff to be paid to the said generating company. Haryana Utilities in their reply filed vide affidavit dated 4.10.2013 stated "in line with the approval of Government of Haryana, Haryana Utilities give in principle consent as regards the committee report with the observations raised by Haryana Utilities which have not been properly addressed in the report forwarded by the Committee to the Hon'ble Commission". The petitioner in para 6 of its affidavit dated 25.9.2013 has conveyed its approval to the recommendation of the committee as under:

"6. I say that the petitioner has carefully analysed the recommendations of the committee. I further say that the petitioner's entire hardship will not be mitigated

even if all recommendations of the Committee are accepted and implemented. However, the Petitioner accepts the aforesaid Committee recommendations in entirety.”

### **Report of the Committee:**

13. The Committee Report has eight chapters comprising of overview of CERC order, committee proceedings, scope of the committee, company analysis, industry analysis, compensatory tariff determination and other concerns, and Annexures containing the chronology of events in respect of Phase-III and IV of the Mundra Power Project, Minutes of the meetings of the Committee, illustrative computation for compensatory tariff, impact of Indonesian regulation on coal prices and copies of correspondence of Government of Gujarat, GUVNL and Haryana utilities.

14. Summary of the recommendations of the Committee as given at page 73 of the report are as under:

"Considering the guidance provided under the CERC order and acknowledging the procurers' right to make submissions before CERC/any other legal forum, the Committee recommends the following:-

A. Company may be reimbursed for past losses of energy costs from SCOD till cut-off date of 31st March, 2013. CERC may recommend payment methodology for reimbursement.

B. The provisional Compensatory Tariff for each period (beyond cut-off date) may be calculated using the mechanism as recommended in Chapter 7 of this report.

C. True-up of Provisional Compensatory Tariff at the end of each financial year will be done in a time bound manner based on audited financial statements of the Company with adjustments for:

- ✓ Actual/Normative Fuel Energy expenses
- ✓ Share of profit from the Indonesian mining companies pertaining to coal supplied under respective PPAs. APL's share of profits/dividends shall be the summation of the dividends available to APL/AEL/holding company in India and the profits at the Indonesia mining level (reduced to the extent of dividends declared)

D. Third party sale of power beyond the target availability of 80% may be permitted after making appropriate modifications in the extant PPA and the profit from such sale may be shared equally between the procurers and generator.

E. The usage of low GCV coal (such that weighted average GCV is less than designed plant parameters) for generation of electricity is not commercially beneficial at prevailing prices and expected to adversely affect the performance of power plant in the long run causing extra cost.

F. Procurers and Generator may jointly continue to pursue all possible options with the concerned authorities for reduction in duties and taxes.

G. Lenders to the Project may explore all possible options including reduction of interest rates, extending moratorium on principal payment for a period of 2-3 years and elongation of loan repayment tenor to reduce the hardship of capacity charges on the power producer.

H. Domestic Banks/FIs, with the support of CERC, may approach RBI for forbearance from the ambit of restructuring guidelines for reduction of interest rate and elongation of loan tenor."

15. The Committee has analyzed the financial status of the petitioner company Adani

Power Limited (APL) and has concluded as under:

"During FY11-12, total income of APL was ₹4240 Cr. with EBIDTA of ₹1531Cr. and net loss of Rs. 294 Cr. (cash profit of Rs. 743 Cr.). For FY12-13, total income of APL was ₹6868 Cr. with EBIDTA of ₹1332 Cr. and loss of ₹1952 Cr. (cash loss of ₹355 Cr.)".

The Committee has also analyzed the financial condition separately for Phase III and Phase IV of the Company with reference to the capital cost and has depicted the following information:

#### APL Phase III – Gujarat PPA

- The project cost as appraised by lenders in June 2011 was around ₹5926Cr. (excluding around ₹113 Cr. of Margin Money). The completed project cost as per Statutory Auditor Certificate is ₹7697 Cr. The phase III project has suffered a cost over-run of about ₹1771 Cr. comprising primarily increase in EPC cost. The increase in EPC cost is mainly on account of adverse currency movement.
- The company has suffered a loss of about ₹ 839 Cr. in Phase III (about ₹ 966Cr. for supply under PPA) since SCOD (2<sup>nd</sup> February 2012) till 31<sup>st</sup>March2013. The loss is mainly on account of increase in fuel cost and increase in completed cost of the project on account of adverse currency movement.

- The per unit energy charge as on 30<sup>th</sup> June 2013 is ₹ 2.24/unit as against the PPA quoted energy charge of ₹1.35/unit. The energy cost has been arrived at after considering blending ratio of 53:47 by weight for 3000 GCV coal with landed cost of ₹2407/ton and 6322 GCV coal with landed cost of ₹5934/ton respectively. (Annexure IV for illustrative calculations).
- For FY13-14, the capacity charge on normative basis after including estimated hedging cost (as on date ECB loans are not hedged) is ₹1.88/unit and on actual basis ₹1.90/unit. Also, in this case, the levelized capacity charges on normative and actual basis approximate to ₹1.59/unit and ₹1.54/unit respectively.

#### APL Phase IV-Haryana PPA

- The project cost as appraised by lenders in November 2010 was about ₹7626Cr. (excluding about ₹160 Cr. of Margin Money). As per Statutory Auditor's Certificate, the completion cost of Phase IV of Project was ₹ 9889Cr. and cost incurred on FGD as on 31<sup>st</sup> March 2013 was ₹ 614 Cr. Phase IV of the project has suffered a cost over-run of about ₹ 2263 Cr. The increase in EPC cost is mainly on account of adverse currency movement.
- The company started supply under Haryana PPA (1424 MW on Net basis) as follows:
  - Unit 1: 7<sup>th</sup> August 2012
  - Unit 2&Unit 3: 7<sup>th</sup> February 2013
- Losses of about ₹798 Cr. (₹604 crore for supply under PPA) from SCOD till 31<sup>st</sup> March 2013.
- As set out in the figure above, the illustrative per unit energy charge as on 30<sup>th</sup> June 2013 was ₹ 2.75/unit (excluding electricity duty but including transmission charge) and quoted energy charge as per PPA was ₹.2.145/unit. The energy cost was arrived at considering blending ratio of 58:42(by weight) for 3300 GCV domestic coal with landed cost of ₹2786/ton and 6322 GCV coal with landed cost of ₹ 5934/ton respectively. (Annexure IV for illustrative calculations).
- The total under-recovery on account of energy cost is 61p/unit comprising 12p/unit on account of change in law and 49 p/unit on account of fuel costs.
- Of the shortfall of 49p/unit on account of under recovery of fuel costs, 20p/unit is on account of cost of use of imported coal due to shortfall in supply of domestic coal (falling under the purview of CCEA order) and balance 29 p/unit is on account of under-recovery of imported coal portion.
- Capacity charge on normative basis is ₹2.01/unit and on actual basis ₹1.95/unit for the F/Y 2014. Levelized capacity charge on normative and actual basis at CERC's current bid evaluation discount rate of 13.10% is ₹ 1.67/unit and ₹ 1.70/unit respectively.



16. The Committee analyzed various options/ alternatives to determine Compensatory Tariff in Chapter 6 of the report. The Committee has stated as under:

“.....the Committee has followed the consultative process and was guided by the following principles:

- The compensation tariff should be variable in nature and commensurate with hardship
- It should be balanced and in the best interest of both Procurers/Consumers and Developers
- Simplicity in application and sustainability of the solution in the ever-changing business environment and multiple geographies.

For calculation purpose, all scenarios are computed based on common technical parameters mentioned below:

- Station heat rate: 2354 kcal/kWh and auxiliary consumption of 6.5% (Technical parameters as per Technical Consultant Report). In the GERC order no 1210/2012 dated 7<sup>th</sup> January 2013, the station heat rate was considered as 2150 kcal/kWh. However, as per the Technical Consultant's report, based upon prevailing site conditions and technical parameters, the achievable station heat rate, is 2354 kcal/kWh. The SHR as per CERC norm is 2380 kcal/kWh. The Technical Consultant has hence recommended SHR of 2354 kcal/kWh. The detailed calculation is mentioned in chapter 8 of the Report.
- HBA index calculated as on 30<sup>th</sup> June 2013 for 6322 kcal/kg coal at USD 78.76.
- Forex rate applied is ₹59.70/ USD.
- Discount of 9% considered for duly adjusted lower GCV coal
- Ocean freight has been assumed at USD 12/ton
- Insurance and Transactional charges assumed @ 3%

#### **Alternative 1: Considering Coal price differential at 6322 kcal/kg**

At the time of the bid, Company had envisaged obtaining coal with GCV of 5200 kcal/kg at CIF of USD 36/ton from Indonesia for meeting the coal requirement of the Plant. Subsequently, promulgation of Indonesian law has impacted the coal prices. So, in this alternative, differential fuel cost per unit has been computed on the basis of price differential with contracted coal vis-à-vis current coal prices adjusted for the same design coal.

In this case, the following has been considered:

- Contracted coal with GCV of 5200 kcal/kg @ CIF of USD 36/ton
- Current HBA linked price for GCV of 6322 kcal/kg and freight of USD 12/ton

These workings have been set out below:

The table below shows the computation of price differential:

	GCV (GAR) (kcal/kg)	Cost Price	
		USD/ton	INR/ton
Contracted coal- CIF	5200	36.000	2149.20
Adjusted Contracted Price – CIF	6322	43.770	2613.06
HBA Linked coal- FOB	6322	78.760	4701.97
HBA linked Coal-CIF	6322	93.480	5580.92
Price Differential		49.715	2967.99

Differential fuel cost per unit approximates to ₹1.182/unit.

**Alternative 2: Considering Coal price differential at 4500 kcal/kg**

As per report of the technical consultant, as per design parameters of the boiler, the GCV of coal required is around 4500 kcal/kg. So, in this alternative, while computing the differential fuel cost per unit, the following has been considered:

- FOB prices for 4500 kcal/kg (GAR) based on current HBA price for the 6322 kcal (GAR) coal,

The tables below show the computation of price differential:

	GCV (GAR) (kcal/kg)	Cost Price	
		USD/ton	INR/ton*
Contracted coal- CIF	5200	36.000	2149.20
Adjusted contracted coal- CIF	4500	31.150	1859.65
HBA Linked coal- FOB	6322	78.760	4701.97
Adjusted HBA for 4500- FOB	4500	51.020	3045.89
Adjusted HBA for 4500- CIF	4500	64.910	3875.12
Price Differential		33.750	2014.87

The differential fuel cost per unit works out to ₹ 1.127/unit.

**Alternative 3: Fuel Cost Adjustment in Energy charge**

In this case, Fuel Cost Adjustment (FCA) i.e. difference between actual/normative energy charge and quoted energy charge would be allowed as Compensatory Tariff.

The following assumptions have been applied in the computation of FCA:

- GCV of Blended coal: 4556 kcal/kg (Required GCV as per Technical Consultant Report)
- Price of Blended coal: ₹ 4060/ton
- Station heat rate: 2354 kcal/kg and auxiliary consumption of 6.5% (Technical parameters as per Technical Consultant Report explained in Section 8.2 A of this report)

- Blending ratio by weight has been assumed to 53:47 for Bunyu and imported coal with high GCV respectively. This will result into lower energy cost.

Imported Coal - Low CV			
GCV	ARB basis	kcal/kg	3000
Landed Cost	Imported Bunyu Coal Invoice	Rs/ton	2407
Per Unit Coal Used		kg/unit	0.294
Imported Coal - (High CV)			
GCV	Imported high GCV Coal Invoice	kcal/kg	6322
Landed Cost	Imported Coal Invoice	Rs/ton	5934
Per Unit Coal Used		kg/unit	0.259

Fuel cost per unit is the weighted average price of the above coal which equates to ₹2.24/unit (i.e.  $0.294 \times 2407 / 1000 + 0.259 \times 5934 / 1000$ ). Quoted tariff is ₹1.35/unit. Thus, the fuel cost adjustment factor approximates to 89p/unit.

**Conclusion:**

- The FCA satisfies the twin principles of simplicity and long term sustainability.
- Being dynamic in nature, the current compensatory package seeks to provide relief to developers; procurers will be benefitted on reduction of imported coal prices.
- FCA is consistent with the recently issued CCEA guidelines allowing pass through of the cost of imported coal being used, due to shortage in supply of domestic coal with linkage.
- To determine the most equitable level of compensation to the Developers as well as Procurers.
- The compensation determined is lowest as compared to other methods evaluated, thereby reducing the prospective financial burden on the discoms.
- This FCA alternative takes into account all the currently known issues affecting coal cost, thereby giving a credible solution, which is sustainable in the long term. In fact the Ministry of Power, GoI recognizing that there will be number of dynamic local and global factors, which affect fuel availability and fuel price, which are not predictable for the tenure of the PPA, has suggested to invite bids on SHR basis under the revised draft SBD. The FCA alternative suggested is consistent with these principles.

In the light of the above, the Fuel Cost Adjustment method is applied to determine Compensatory Tariff to the Company”.

17. As could be seen from the above, the Committee after deliberations at the meetings, discussions with the Finance sub-group, inputs and findings from various consultants comments and views of the procurers and developers has recognized that computing Compensatory Tariff as difference of actual fuel cost and quoted energy charges is preferable over other alternative of computing Compensatory Tariff on

incremental coal cost. The advantages over the other alternatives are indicated in the conclusion above.

18. The Committee has recommended compensatory tariff in two parts, i.e. compensatory tariff from the Scheduled Date of Commercial Operation (SCOD) till 31.3.2013 and mechanism for determination of compensatory tariff for the period beyond 31.3.2013. The Committee has also made various other recommendations/ suggestions in Chapter 8, such as reduction in taxes and duties by Government of India, reduction in port charges by Adani Group Company, allocation of domestic coal linkages to Mundra Project, impact of Change in Law in regard to Haryana PPA, etc. Recommendations have been given in case of Gujarat PPA and Haryana PPA separately which are discussed in paras below.

### **Compensatory tariff for Gujarat PPA – APL Phase III**

19. In respect of Gujarat PPA, the Committee has recommended the compensatory tariff from SCOD till 31.3.2013 as under vide page 46 of the report. The extract of the report is given below:

“Committee Recommendations: Compensation for actual hardship from SCOD till 31<sup>st</sup> March 2013:

As per Statutory auditor’s certificate provided by the Company, the total hardship faced by the Company on energy charges in supplying power under PPAs from Scheduled Commercial Operation Date (SCOD) till cutoff date i.e. from 2<sup>nd</sup> February 2012 to 31<sup>st</sup> March 2013 is set out below:

Particulars	Unit	FY 11-12 (from 02.02.2012)	FY 12-13	Total from SCOD to 31 <sup>st</sup> Mar 2013
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PPA sale	MUs	609	4100	4709
Total PPA Revenue	₹Cr.	134	921	1055
Quoted Capacity charge per unit	₹/unit	1.00	1.00	
Net Realized Capacity Charge Per Unit*	₹/unit	0.813	0.854	
Quoted Energy charge per unit	₹/unit	1.35	1.35	
Total Fuel Cost	₹ Cr.	139	983	1122
Capacity cost per unit	₹/unit	2.39	1.79	
Energy cost per unit	₹/unit	2.28	2.40	
<b>Under-recovery (capacity)</b>	<b>₹ Cr.</b>	<b>96</b>	<b>383</b>	<b>479</b>
<b>Under recovery (energy)</b>	<b>₹ Cr.</b>	<b>57</b>	<b>430</b>	<b>487</b>

Source: Statutory Auditor Certificate\* adjusted for discount for prompt payment, other operating income, etc.

As observed from the table above, the total under- recovery on account of energy charges approximates to about ₹487 Cr. This loss would however be ₹451 Cr. (₹0.958/unit) considering normative plant operating parameters.

Aforesaid under-recovery figure of energy losses, have been computed on the basis of PPA sale as per actual invoices raised by company and fuel cost incurred by the Company. Invoices relating to both – the fuel cost and revenue have been checked by KPMG on a sample check basis.

Besides, as submitted by the Company, there is hardship on account of capacity charges. The total under- recovery on the account of capacity charges approximates to around ₹479 Cr. Company is also incurring carrying cost associated with the under- recovery.

Further, APL in their petition to CERC has explicitly prayed that the Hon'ble Central Commission be pleased to declare that the revised tariff shall be applicable from the scheduled commercial operation (SCOD) of PPAs. The petition has been duly admitted by CERC.

.....

In the light of the mandate given to the Committee and Committee observations as discussed in the preceding section, it is recommended that the Company's hardship on account of energy charges to the extent of ₹451 Cr., be compensated in respect of power supplied during the period from SCOD till 31<sup>st</sup> March 2013.

Methodology for Payment: Considering the continued hardship and deteriorating financials, the Committee hereby recommends CERC to approve the methodology for payment of past losses in a time bound manner. In case payment is deferred beyond this period, the outstanding amount should also have a carrying cost."

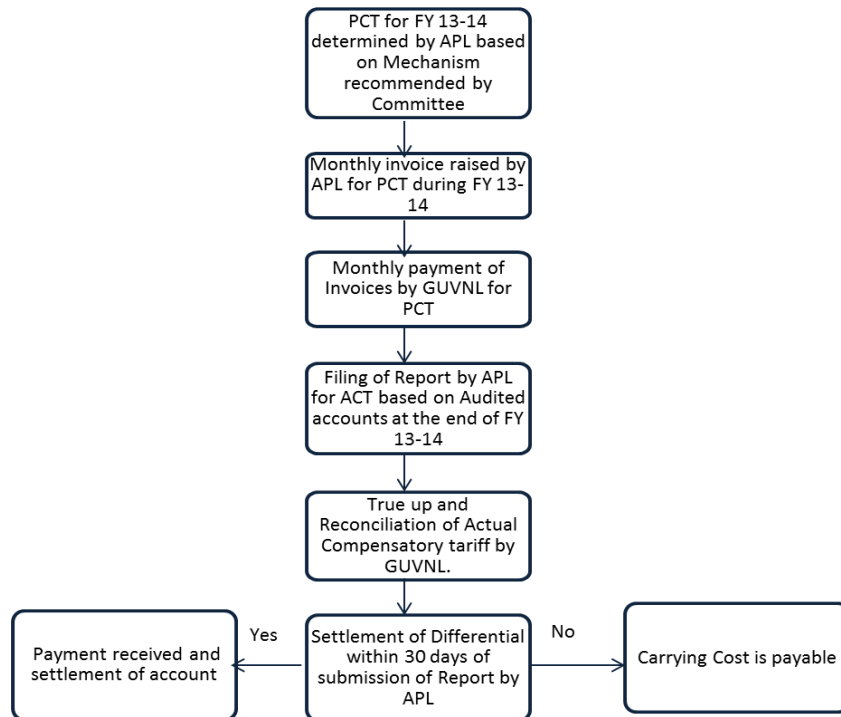
20. The Committee has recommended the following formula for computation of compensatory tariff for the period beyond 31.3.2013:

Compensatory Tariff/Fuel Cost Adjustment Charge for a particular year (₹ Cr.)	= Energy Costs at PPA defined delivery point (₹ Cr.) for that particular year corresponding to units supplied during the year	- Energy charges revenue @ Quoted Energy Charges under the PPA for that particular year(₹ Cr.) corresponding to units supplied during the year
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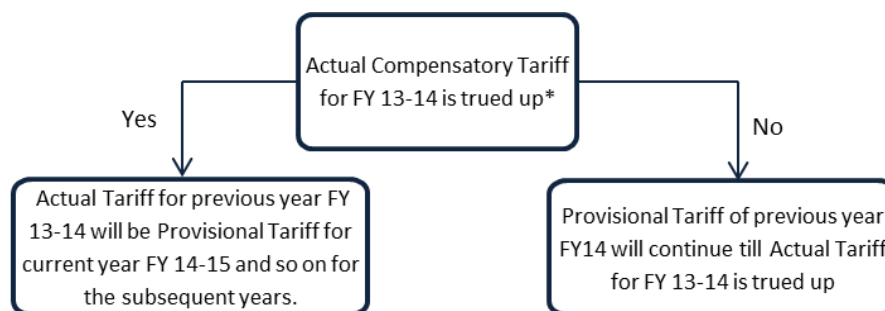
21. The Committee has recommended following process flow for determination of compensatory tariff:

“The Process flow diagram as an illustration for the methodology of recovery of CT is as follows:

**For FY 13-14**



**For FY 14-15 & onwards**



\*After truing up and reconciliation of ACT, the differential would be settled in a time bound manner.

The Committee has followed the following principle for determining the actual energy charges vide page 49 of the report. The appropriate recommendation is reproduced below:

### Principles for Actual Cost determination:

The following principles may be followed while determining the actual energy charges:

	Particular	Gujarat PPA
A	Cost of Coal (₹ Cr. for the year) corresponding to the Energy Supplied under the PPA.	To be computed at Plant Bus bar using the cost of imported coal (based on details of actual cost incurred during the year) and other operating parameters as discussed below#
B	Transmission Charges (₹Cr. for the year)	Not Applicable, since delivery point is plant bus bar
C	Total Revised Energy Charges (₹Cr. for the year)	Sum of the above i.e. (A) +(B)
D	Less: Profit from Indonesian coal mining operations	Actual Profit from coal mining operation in Indonesia (as per audited figures) in proportion to the revenues from coal used for energy supplied under PPA in Phase III to total revenues, duly adjusted with applicable tax structure upto Indonesia (if profits are retained in Indonesia) and applicable tax structure upto India (if profits are remitted to India) (₹Cr.);(As per principles set out in the formulae agreed with and computations performed by KPMG)
E	Less: Profit from sale of power beyond Normative Availability on merchant basis (If any)	The actual excess realization from sale on merchant basis, net of all related expenses, over total generation cost to be shared
F	Net Actual Cost towards	(C)-(D)-(E)

Energy Charges
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**Cost components of Actual Energy Charges may be determined as under:**

Particulars	Gujarat PPA	Present CERC norms
Station Heat Rate	2354 kcal/kWh (as assessed by Tech Consultant i.e. Design SHR plus maximum site conditions allowance @6.5%) or applicable CERC norms or actual, whichever is lowest.	2380 kcal/kWh
Auxiliary Consumption	Design of 7.05% (as assessed by Tech Consultant) or applicable CERC norms, whichever is lower.	6.5%.
Transmission Losses	Not Applicable (Since PPA off-take is at Bus bar)	
GCV of Coal	As Certified by Third Party Sampling Agency of Repute based on sampling at Plant	
Blending Ratio of Low Grade Coal	Bunyu or any other low grade coal will be used in such a proportion that GCV (ARB) of blended coal is within the range of $\pm 5\%$ of design CV of 4500 kcal/kg	Low Grade coal will be used maximum, to the extent available, keeping the GCV of Blended coal not less than 4500 kcal/kg.
<b>Landed Cost of Fuel</b>		
	<b>Imported Coal</b>	<b>Remark</b>
FOB prices of Imported Coal#	As per Actual or benchmarked with HBA index or any other relevant indices	In case of change in pricing framework in Indonesia or change in source of coal to other country, relevant coal indices will be used.
Ocean Freight#	Actual as incurred by the Company on the basis of Contracts.	Capped to freight index or guidance suggested by CERC
Transaction L/C and Insurance Charges	Actual as incurred by the Company	This will include cost in regard to LC, Bank and financial charges, insurance and other transaction costs
Port handling Charges at Mundra	As per Port Service Agreement with APSEZ less agreed discount	The Discount of ₹ 20 per MT to be continued
Transit & Handling Losses	Actual or CERC norms, whichever is lower	



#Cost of imported coal (FOB and Ocean freight) should not increase beyond HBA benchmark + actual transportation cost from Indonesia.

Based on the above recommended mechanism, imported coal prices prevalent on 30<sup>th</sup> June 13 and various assumptions, an estimate of per unit CT for FY 13-14 has been computed and the said illustrative calculation of Compensatory Tariff is attached as Annexure IV.

The Power producer is incurring losses not only on account of energy charges but also on account of capacity charges over quoted tariff. However the scope of Committee is limited to evaluating and evolving a mechanism to mitigate the hardship on account of energy charges. Therefore, with respect to hardship on account of capacity charges, the Committee suggests that this may be mitigated by way of sharing of hardship with other stakeholders i.e. lenders by interest rate reduction, sacrifice of ROE, sharing of profit beyond normative availability on merchant basis, etc.

With respect to hardship on account of energy charges, the Committee recommends that CERC may allow Compensatory Tariff to the extent of actual hardship till cut-off date. The CT beyond that period may be paid by way of Fuel Cost Adjustment Charges to the Company towards hardship on account of energy charges, as per the mechanism and methodology for CT explained at chapter 7.5A of this report". (Ref page 44 – 51).

22. Based on the mechanism suggested by the Committee and extracted in paras 19 and 20 above, the Committee has worked out an illustrative computation of the per unit compensatory tariff for the year 2013-14 based on the imported coal price prevailing as on June, 2013 and key assumptions at Annexure IV of the report at page 93, which is extracted below:

**"Annexure-IV: Illustrative Computation for Compensatory Tariff for FY14 & Key assumptions**

**Phase III Gujarat PPA:** Illustrative Compensatory tariff computation for FY13-14: Compensatory tariff computation for FY 13-14 on illustrative basis is shown below. The gross compensation works out to ₹ 0.89/unit and net compensation after adjustment of Share of Merchant Sales above Normative Availability for Contracted Capacity for PPA works out to Rs. 0.71/unit.

## Imported Coal

		High CV (6322 GAR)	Low CV (3000 GAR)
FOB Coal Prices assumed as on 30 <sup>th</sup> June 2013	USD/MT	78.76	22.00
Ocean Freight	USD/MT	12.00	12.00
Insurance, Finance & Transaction Charges @3%	USD/MT	2.72	1.02
CIF	USD/MT	93.48	35.02
Transit losses upto Mundra @ 0.8%	USD/MT	0.75	0.28
Total Coal Cost (CIF) incl Transit losses	USD/MT	94.23	35.30
Exchange Rate	INR/USD	59.70	59.70
CIF	INR/MT	5626	2107
Custom Duty	INR/MT	0	0
Port Handling Charges of Mundra	INR/MT	294	294
Handling Losses of Mundra Port @0.25%	INR/MT	15	6
Landed Price of Imported coal Ex TPS	INR/MT	5934	2407

## Assumptions & Basis

### A. Operating Parameter

Station Heat Rate	kcal/unit	2354
Auxiliary Consumption	%	6.50%
Transmission Loss	%	NA
Transmission Charges	₹/MW/Month	NA
Annual PLF (At the Delivery Point)	%	80.00%

### B. Coal Supplies

Low CV Imported coal

GCV (ARB)	kcal/kg	3000
Landed Cost Ex TPS	INR/MT	2407

### Imported Coal

GCV (ARB)	kcal/kg	6322
Landed Cost Ex TPS	INR/MT	5934
Blending Ratio (Low Grade: High Grade) by weight	%	53%:47%*
Blended GCV	kcal/kg	4,556
Blended Price	INR/MT	4,060

<b>Fuel Cost per unit Sent Out /At the Delivery Point (At Generator Bus Bar)</b>	<b>INR/kWh</b>	<b>2.24</b>
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Quoted Energy Charges as per PPA for FY 13-14	INR/kWh	1.35
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<b>Per Unit Compensatory Tariff</b>	<b>INR/kWh</b>	<b>0.89*</b>
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Less: Likely share of Income from Merchant sale above Normative Availability	INR/kWh	0.19
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Less: Expected profit from Indonesian Coal mining (As per KPMG)	INR/kWh	0.00
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<b>Likely net per unit Compensatory Tariff</b>	<b>INR/kWh</b>	<b>0.71</b>
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*\*If blending ratio of 60:40 (Melawan and Bunyu by weight) is considered, then the compensation would be on similar lines.*

*Note: The above calculation is only for the purpose of illustration. Actual figures may change based on change of variables considered in the calculations.*

### **Share of Income from Merchant sale above Normative Availability**

Normative Availability	%	80%
Merchant Sale*	%	20%
Merchant Price*	INR/kWh	4.00
Energy Charges	INR/kWh	2.24
Per Unit Surplus	INR/kWh	1.76
Incentive to Generator	INR/kWh	0.19
Balance Surplus	INR/kWh	1.57
Share of Procurers @50% of balance surplus	INR/kWh	0.79
Per Unit Share to Procurers	INR/kWh	0.19

\*Based on the prevailing trend of the merchant sale on a medium term basis. The prices may vary depending on the market condition at the time of sale and type of sale contract i.e. short term or medium term”.

### **Compensatory tariff for Haryana PPA - Phase IV**

23. In respect of HaryanaGujarat PPA, the Committee has stated as under:

“APL submitted that it has received LoA for domestic coal linkage from MCL equivalent to 70% of the Phase IV capacity of 1980 MW. This is in accordance with decision taken by SLC (LT) meeting dated 12<sup>th</sup> November 2008 to grant linkage to coastal power plant for only 70% capacity from domestic source of CIL. Therefore APL planned for procurement of balance 30% of imported coal from Indonesia.

In view of inadequate availability of domestic coal linkage from MCL and promulgation of the Indonesian Regulations which had an impact on the export price of coal from Indonesia, APL has submitted that the cost of production of electricity from the Mundra Power Plant has increased significantly which has rendered it commercially unviable to supply power to the respective Haryana discoms at the PPA prices. APL has submitted that if it continues to use imported coal purchased at prices prevailing in the spot market in Indonesia, its net worth would be eroded in around 2 years and the Mundra Project is at risk of lenders foreclosing and recalling the loans due to deteriorating creditworthiness.

APL had submitted in its petition to CERC that the levelised energy charges quoted were ₹1.963/kWh, and included transmission charges and losses of HVDC line of ₹0.48/kWh. The fixed cost did not include the HVDC charges which were included in the energy charges based on the structures permitted in the bid documents.

APL has submitted that in such a situation, APL will be left with no option but to shut down the plant at the earliest, rather than continuously incur losses. APL has submitted that if the shutdown of Mundra Plant is to be prevented, the only solution is to adjust or revise the tariff”.

24. The Committee has recommended the compensatory tariff in respect of Phase IV from SCOD till 31.3.2013 as under:

“Committee Recommendations: Compensation for Actual Hardship from SCOD till 31<sup>st</sup> March 2013:

It was submitted by APL that due to non- availability of domestic coal from linkage and thereafter enactment of Indonesian regulation had an adverse impact on coal prices. As per Statutory auditor’s certificate provided by Company, the total hardship faced by the Company on energy charges in supplying power under PPAs from Scheduled Commercial Operation Date (SCOD) till cutoff date i.e. from 7<sup>th</sup>August 2012 to 31<sup>st</sup> March 2013 is set out below. It may be noted that the SCOD for 474 MW is 7<sup>th</sup>August 2012 and balance 950 MW is 3<sup>rd</sup>February 2013.

Particulars	Unit	FY 12-13 (from 7 <sup>th</sup> Aug 2012)
PPA sale	MUs	2712
Total PPA Revenue	₹ Cr.	631
Quoted Capacity charge per unit	₹/unit	1.155
Net Realized Capacity charge per unit*	₹/unit	1.121

Quoted Energy charge per unit	₹/unit	1.190
Total Fuel Cost	₹ Cr.	655
Transmission Cost	₹ Cr.	179
Capacity cost per unit	₹/unit	1.544
Energy cost per unit	₹/unit	2.415
Transmission Cost per unit	₹/unit	0.661
<b>Under-recovery (capacity)</b>	<b>₹Cr.</b>	<b>115</b>
<b>Under recovery (energy)</b>	<b>₹Cr.</b>	<b>511</b>

Source: Statutory Auditor Certificate\*adjusted for discount for prompt payment, other operating income, etc.

As observed from the table above, the total under- recovery on account of energy charges approximates to about ₹511Cr. for the Company. This loss however would be about ₹496 Cr. (₹1.83/unit) considering normative plant operating parameters. The under-recovery figures include DTA duty and cess.

Aforesaid under-recovery figure of energy losses, have been computed on the basis of PPA sale as per actual invoices raised by company and fuel cost incurred by the Company. Invoices relating to both - the fuel cost and revenue have been checked by KPMG on a sample check basis.

Besides, as submitted by the Company, there is hardship on account of capacity charges. The total under- recovery on the account of capacity charges approximates to around ₹115 Cr. which is the hardship being borne by the Company. Company is also incurring some carrying cost associated with the under- recovery.

Further, APL in their petition to CERC has explicitly prayed that the Hon'ble Central Commission be pleased to declare that the revised tariff shall be applicable from the scheduled commercial operation (SCOD) of PPAs. The petition has been duly admitted by CERC.

Considering, APL's explicit prayer to CERC to allow compensation for power supply w.e.f. SCOD, CERC vide para 91 of its order dated 2<sup>nd</sup> April 2013 has sought for Committee's recommendation for the same. In the light of the mandate given to the Committee and Committee observations as discussed in the preceding section, it is recommended that the Company's hardship on account of energy charges to the extent of ₹496 Cr. be compensated in respect of power supplied during the period from SCOD till 31<sup>st</sup> March 13.

Methodology for Payment: Considering the continued hardship and deteriorating financials, the Committee hereby recommends CERC to approve the methodology for payment of past losses in a time bound manner. In case payment is deferred beyond this period, the outstanding amount should have a carrying cost also".

25. The Committee has recommended the following formula for computation of

compensatory tariff beyond 31.3.2013:

Compensatory Tariff/Fuel Cost Adjustment Charge for a particular year (₹ Cr.)#	=	Energy Costs at PPA defined delivery point (₹ Cr.) for a particular year corresponding to units supplied during the year*	-	Energy charges revenue @ Quoted Energy Charges under the PPA for that particular year(₹ Cr. ) corresponding to units supplied during the year
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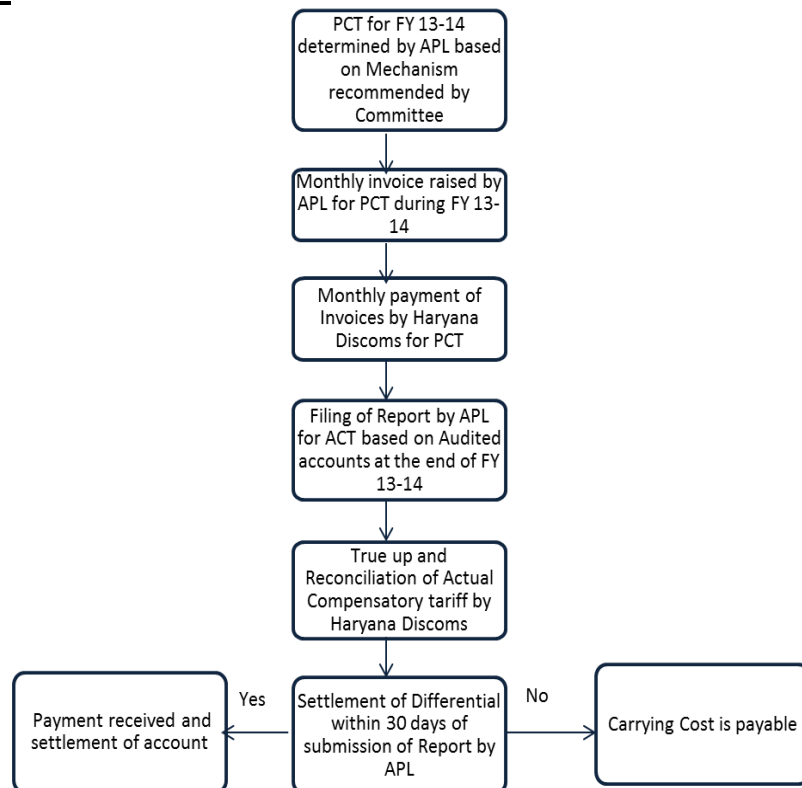
\*Including transmission charges & transmission losses. In case of shortfall in domestic coal, imported coal would be used.

# In case optimization of coal linkage/swapping is allowed by GoI/CIL, there shall not be any impact on Haryana Discoms.

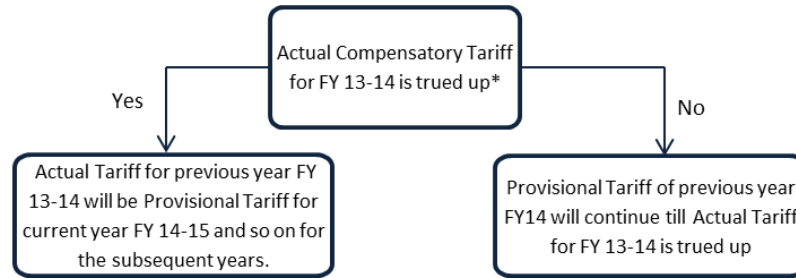
26. The Committee has recommended following process flow for determination of compensatory tariff:

“The Process flow diagram as an illustration for the methodology of recovery of CT is as follows:

**For FY 13-14**



**For FY 14-15 & onwards**



\*After truing up and reconciliation of ACT, the differential would be settled in a time bound manner”

27. The Committee has followed the following principle for determining the actual energy charges:

	Particular	Haryana PPA
A	Cost of Coal (₹ Cr. for the year) corresponding to the Energy Supplied under the PPA.	To be computed at Plant Bus bar using the cost of imported coal and domestic coal (based on details of actual cost incurred during the year) and other operating parameters as discussed below#
B	Transmission Charges (₹Cr. for the year)	<ul style="list-style-type: none"> <li>▪ On actual cost plus basis for use of HVDC system*, till transmission license is granted</li> <li>▪ Once transmission license is granted, paid as per CERC norms</li> </ul>
C	Total Revised Energy Charges (₹ Cr. for the year)	Sum of the above i.e. (A) +(B)
D	Less: Profit from Indonesian coal mining operations	Actual Profit from coal mining operation in Indonesia (as per audited figures) in proportion to the revenues from coal used for energy supplied under PPA (if any)in Phase IV to total revenues, duly adjusted with applicable tax structure upto Indonesia (if profits are retained in Indonesia) and applicable tax structure upto India (if profits are remitted to India) (₹ Cr.)
E	Less: Profit from sale of power beyond Normative Availability on merchant basis (If any)	The actual excess realization from sale on merchant basis, net of all related expenses, over total generation cost to be shared
F	Net Actual Cost towards Energy Charges	(C)-(D)-(E)

\* HVDC system will include 500 KV Mundra Mohindergarh line along with associated HVDC terminal, substations & Electrode line, 400 KV Mohindergarh-Dhanonda line & 400 KV Mohindergarh –Bhiwani line (if used)

# In case optimization of coal linkage/swapping, is allowed by GoI/CIL,APL will continue to claim energy charges on notional usage of domestic coal at Mundra for the actual quantum supplied against linkage i.e. the mechanism to determine Actual cost toward Energy Charges will be continued without any change, taking into account landed cost of domestic coal for Mundra Project as if domestic coal is being used at Mundra. Any

*financial advantage on account of Optimization of coal linkage/swapping will be allowed to be retained with APL to adjust against under recovery of Capacity Charge.*

**Cost components of Actual Energy Charges may be determined as under:**

Particulars	Haryana PPA	Present CERC norms
Station Heat Rate	2354 kcal/kWh (as assessed by Tech Consultant i.e. Design SHR plus maximum site conditions allowance @6.5%) or applicable CERC norms or actual, whichever is lowest.	2380 kcal/kWh
Auxiliary Consumption	Design of 8.97% (Plant Aux of 7.05% and FGD Aux of 1.92%)(As assessed by Technical Consultant) or applicable CERC norms for plant Aux plus Design Aux of FGD, whichever is lower.	6.5%. For FGD, there are no norms at present.
Transmission Losses	On actual, or as per CERC norms, whichever is lower	Losses as per CERC norms after Transmission License is granted
GCV of Coal	As Certified by Third Party Sampling Agency of Repute based on sampling at Plant	
Blending Ratio of Low Grade Coal	Domestic coal or any other low grade coal will be used in such a proportion that GCV (ARB) of blended coal is in the range of $\pm 5\%$ design CV of 4500 kcal/kg	Low Grade coal will be used maximum, to the extent available, keeping the GCV of Blended coal not less than 4500 kcal/kg.

**Landed Cost of fuel- Imported and Domestic Coal**

**IMPORTED COAL**

	Imported Coal	Remark
FOB prices of Imported Coal#	As per Actual or benchmarked with HBA index or any other relevant indices	In case of change in pricing framework in Indonesia or change in source of coal to other country, relevant coal indices will be used.
Ocean Freight#	Actual as incurred by the Company on the basis of Contracts.	Capped to freight index or guidance suggested by CERC
Transaction L/c and Insurance Charges	Actual as incurred by the Company	This will include LC, Bank and financial charges and other transaction costs
Port handling Charges at Mundra	As per Port Service Agreement with APSEZ less agreed discount	The Discount of ₹ 20 per MT to be continued
Transit & Handling Losses	Actual or CERC norms, whichever is lower	

#Cost of imported coal (FOB and Ocean freight) should not increase beyond HBA benchmark + actual transportation cost from Indonesia



DOMESTIC COAL		
	Domestic Coal	Remark
MCL ex-mine coal cost	As notified by CIL from time to time (including applicable taxes and duties)	To be used on notional basis, if coal linkage optimization is undertaken by the Company.
Transportation from MCL to Mundra port	Contracted price being actually incurred by APL subject to ceiling of railway freight	Capped to railway freight from MCL to Mundra. To be used on notional basis, if coal linkage optimization is undertaken by the Company
Transaction L/c and Insurance Charges	Actual as incurred by the Company	This will include LC, Bank and financial charges and other transaction costs
Port handling Charges at Mundra	As per Port Service Agreement with APZES less agreed discount	The Discount of ₹ 20 per MT to be continued
Transit & Handling Losses	Actual or CERC norms, whichever is lower	

Based on above recommended mechanism, coal prices prevalent on 30<sup>th</sup> June 13 and various assumptions, an estimate of per unit CT for FY 13-14 has been computed and the said illustrative calculation of Compensatory Tariff is attached as Annexure IV.

The Power producer is incurring losses only on account of energy charges but also on account of capacity charges over quoted tariff. However the scope of Committee is limited to evaluating and evolving a mechanism to mitigate the hardship on account of energy charges. Therefore, with respect to hardship on account of capacity charges, the Committee suggests that this be mitigated by way of sharing of hardship with other stakeholders i.e. lenders by interest rate reduction, cost reduction due to optimization of coal linkage/coal swapping if allowed by Gol/CIL, sacrifice of ROE, sharing of profit beyond normative availability on merchant basis, etc.

With respect to hardship on account of energy charges, the Committee recommends that CERC may allow Compensatory Tariff to the extent of actual hardship till cut-off date. The CT beyond that period may be paid by way of Fuel Cost Adjustment Charges to the Company towards hardship on account of energy charges, as per the mechanism and methodology for Compensatory Tariff explained at chapter 7.5B of the report”.

28. Based on the mechanism suggested by the Committee and extracted in paras 25 and 26 above, the Committee has worked out an illustrative computation of the per unit compensatory tariff for the year 2013-14 based on coal prices prevailing as on 30<sup>th</sup> June, 2013 and key assumptions at Annexure IV of the report which is extracted below: (Page 94-96 of the report)

**Phase IV Haryana PPA:** Illustrative Compensatory tariff computation & Analysis for FY 13-14:

“Compensatory tariff computation for FY13-14 on illustrative basis is shown below. The gross compensation works out to ₹0.61/unit and net compensation after adjustment of Share of Merchant Sales above Normative Availability for Contracted Capacity for PPA works out to ₹0.43/unit.

**Domestic Coal:**

<b>MCL Notified Price</b>		
Basic Rate	INR/MT	660
Crushing Chg./ Sizing Chg.	INR/MT	61
SEC	INR/MT	10
STC	INR/MT	44
<b>Sub Total</b>	INR/MT	<b>775</b>
ED @6.18% on Sub Total	INR/MT	48
Royalty @14% on Basic	INR/MT	92
Clean Energy Cess	INR/MT	50
<b>Total Ex Mine</b>	INR/MT	<b>965</b>
Logistics Cost (From Mines upto Mundra)	INR/MT	1520
Port Handling Charges of Mundra	INR/MT	294
Handling Losses of Mundra Port @0.25%	INR/MT	7
<b>Landed Price of Domestic coal Ex TPS</b>	<b>INR/MT</b>	<b>2786</b>

**Imported Coal:**

HBA Index (GAR of 6322 kcal/kg)	USD/MT	78.76
Ocean Freight	USD/MT	12.00
Insurance, Finance & Transaction Charges @3%	USD/MT	2.72
CIF	USD/MT	93.48
Transit losses upto Mundra @ 0.8%	USD/MT	0.75
Total Coal Cost (CIF) incl Transit losses	USD/MT	94.23
Exchange Rate	INR/USD	59.70
<b>CIF</b>	<b>INR/MT</b>	<b>5626</b>
Custom Duty	INR/MT	0
Port Handling Charges of Mundra	INR/MT	294
Handling Losses of Mundra Port @0.25%	INR/MT	15
<b>Landed Price of Imported coal Ex TPS</b>	<b>INR/MT</b>	<b>5934</b>

**Assumptions & Basis**

**A. Operating Parameter**

	Unit	With
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		FGD
Station Heat Rate	kcal/unit	2354
Auxiliary Consumption	%	8.42%
Transmission Loss	Gujarat Injection losses	%
	Haryana Withdrawal losses	%
	Total Losses as per CERC norms	%
Transmission Charges	Gujarat Injection Charges	Rs/MW/Month
	Haryana Withdrawal Charges	Rs/MW/Month
	Total Charges as per CERC norms	Rs/MW/Month
Annual PLF (At the Delivery Point)	%	80%

@ The Transmission losses and Charges are as per latest CERC notification

## B. Coal Supplies

### Domestic coal

		With FGD
GCV (ARB)	kcal/kg	3300
Landed Cost Ex TPS	INR/MT	2786

### Imported Coal

GCV (ARB)	kcal/kg	6322
Landed Cost Ex TPS	INR/MT	5934

Blending Ratio	% Blending of Domestic : Imported Coal	%	58:42
Blended GCV		kcal/kg	4,566
Blended Price		INR/MT	4,105

<b>Fuel Cost per unit Sent Out (At Generator Bus Bar)</b>	<b>INR/kWh</b>	<b>2.31</b>
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Transmission Charges	Computed Based on CERC norms	INR/kWh	0.35
Transmission Losses	Computed Based on losses as per CERC norms	INR/kWh	0.10

<b>Energy Charges at the Delivery Point (including Transmission Charges &amp; Losses)</b>	<b>INR/kWh</b>	<b>2.75</b>
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Quoted Energy Charges as per PPA for FY 13-14	INR/kWh	2.145
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<b>Per Unit Compensatory Tariff</b>	INR/kWh	<b>0.61</b>
Impact of FGD included in above per unit Compensatory Tariff	INR/kWh	0.05
Less: Expected Share of Income from Merchant sale above Normative Availability	INR/kWh	0.19
Less: Expected share of Profit from Indonesian Coal mining (As per KPMG)	INR/kWh	0.00
<b>Likely Net per unit Compensatory Tariff</b>	INR/kWh	<b>0.43</b>

Note: The above calculation is only for the purpose of illustration. Actual figures may change based on change of variables considered in the calculations.

Normative Availability	%	80%
Max possible Merchant Sale*	%	20%
Expected Merchant Power Price*	INR/kWh	4.00
Expected Actual cost towards Energy Charges	INR/kWh	2.31
Per Unit Surplus	INR/kWh	1.69
Incentive to Generator	INR/kWh	0.19
Balance Surplus	INR/kWh	1.50
Share of Procurers @50% of balance surplus	INR/kWh	0.75
Expected Per Unit share to Procurers	INR/kWh	0.19

\*Based on the prevailing trend of the merchant sale on a medium term basis. The prices may vary depending on the market condition at the time of sale and type of sale contract i.e. short term or medium term”.

29. A copy of the Committee Report was posted on the website of the Commission for information of all concerned. The petition was heard on 13.9.2013. Learned Counsel for Haryana and Gujarat submitted that GUVNL has filed its affidavit indicating in-principle consent on behalf of Government of Gujarat with regard to the Committee report subject to certain suggested modifications and approval of Government of Gujarat in respect of compensatory tariff to be paid. Learned counsel further sought 4 weeks' time to file its response on the Committee Report. Learned counsel for the petitioner submitted that if the respondents are taking time to file their submissions on

the Committee Report, the Commission may grant interim relief to the petitioner as the situation has worsened since July 2012 when the petition was filed and the petitioner is suffering huge losses. Learned counsel submitted that if the interim relief is not granted, the petitioner will be forced to shut down its generating station. After hearing the learned counsels for the petitioner and respondents, the Commission directed the respondents to file their responses on affidavit, with an advance to the petitioner by 7.10.2013 and file rejoinders by 15.10.2013.

30. The Prayas Energy Group, a consumer group registered with this Commission sought to file its submission on the report which was allowed. One Shri Pushpendra Surana, Chartered Accountant by profession and a Public spirited person from Ghaziabad (hereinafter "the applicant"), Uttar Pradesh has filed IA No. 34/2013 sought impleadment in the matter in order to safeguard the consumers interest as the applicant is the consumer of electricity and will be impacted by any order that will be passed in the matter. Learned Senior counsel for the applicant and learned counsel for the petitioner advanced elaborate arguments in favour of and against the impleadment respectively. The Commission after hearing the learned counsel on 15.10.2013 reserved the order in the IA and permitted the applicant to participate in the proceedings of the Commission and directed the petitioner to supply copy of the petition within two days. The Commission directed that the applicant is at liberty to verify the records in accordance with Regulation 66 and 67 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and obtain copy of any other documents filed in the petition to make its submission in the case. The Commission further directed that the applicant would be given an opportunity of hearing if the applicant or its counsel is

present during the hearing after completion of arguments of the petitioner and the respondents. However, the said gesture of the Commission of hearing the learned senior counsel for the applicant at this belated stage may not be set down as precedent in other cases. The petitioner, the respondents, Prayas Energy Group and the applicant have filed their replies and the petitioner has filed its rejoinders. The hearing of the petition on merit took place on 15.10.2013, 30.10.2013 and 8.11.2013. After the hearing, all parties have filed their written submissions.

### **Submissions by GUVNL**

31. GUVNL vide its affidavit dated 13.9.2013 filed its reply to the report of the Committee subject to further submission in the light of the High Level Committee appointed by the Government of Gujarat. GUVNL in its affidavit dated 13.9.2013 has submitted that Government of Gujarat has given in principle consent to the committee's report subject to certain modifications suggested to the report and subject to the approval of the Government of Gujarat and Gujarat Urja Vikas Nigam Limited through the High Level Committee in respect of the compensatory tariff to be paid to the said generating company. GUVNL had submitted the copy of its letter dated 20.5.2013 addressed to the Chairman of the Committee expressing its views on the report and stated that the issues brought about were not accepted by the Committee. GUVNL also submitted its letter dated 29.7.2013 addressed to the Chairman of the Committee conveying observations on the draft report. GUVNL stated that the Committee Report was put up before the Board of Directors of GUVNL in the 56<sup>th</sup> Board Meeting held on 18.9.2013. The Board of Directors of GUVNL discussed and deliberated the matter and were of the view that GUVNL is bound by terms and conditions of PPA and entitled to

receive power supply on terms and conditions of PPA including tariff. Since the matter has significant financial implications on the State of Gujarat, its discoms and resultantly on end consumers, the Board of Directors of GUVNL have found it appropriate to seek directives from Govt. of Gujarat for further course of action in the matter. In the light of the decision taken by the High Level Committee in its meeting dated 5.10.2013, GUVNL has filed affidavit dated 14.10.2013 and has placed on record a copy of the letter dated 10.09.2013 of the Government of Gujarat and letter dated 14.10.2013 of Govt. of Gujarat addressed to Shri Raj Gopalan, IAS, MD, GUVNL. The submissions of GUVNL in brief are as under:

(a) GoG/ GUVNL consented in principle to the Committee Report.

(b) The views and suggestions given by GUVNL to the Committee through letters dated 20.5.2013 and 29.7.2013 are crucial and should be taken into consideration while passing the final order in the petition.

(c) Compensatory Tariff shall be applicable from the date of order of the Commission.

(d) Price of coal shall be considered as actual price of coal or price worked out based on the CERC indices, whichever is lower.

(e) Station Heat Rate (SHR) given to Gujarat Electricity Regulatory Commission by the petitioner was 2150/kcal whereas the technical consultant to the Committee has suggested 2210/kcal, based on the actual parameters. The Commission may decide appropriate applicable base heat rate at generator/terminal considering the technical parameters of the power stations. Thereafter, it may provide adjustment of 6.5% allowance towards actual site conditions. However, auxiliary consumption

considered at 6.5% which may be decided by the Commission subject to ceiling of 6.5%.

(f) Actual profit of Indonesian Mines should be shared as suggested in the Committee report.

(g) Sale of Power to third party above 80% may be allowed initially for a period of three years with sharing of profit at 50:50 (without any payment of incentive to generator). After three years, decision will be reviewed to take appropriate view at the relevant point of time considering demand and supply position in the State of Gujarat. In the light of the decision of the Government of Gujarat, sharing in excess of 80% availability of power has been suggested in the ratio of 60:40 between GUVNL and the petitioner.

(h) The Commission should recommend to the Government of India for reduction in duties, taxes etc. on imported coal and insist on Banks to reduce the rate of interest to bring reduction in the impact of Compensatory Tariff on buying State.

(i) In case after compensatory tariff, power becomes unviable, GUVNL should have the right to surrender the capacity for the time being without payment of fixed cost and the term of the agreement should be extended for such period.

(j) Generator should give commitment for ensuring availability of 80%.

(k) Compensatory tariff payment shall be subject to approval by GERC for passing on the same to the end consumers.

(l) The Commission should also examine and adjudicate upon the issues pertaining to station heat rate auxiliary consumption and determine a formula for working out upfront compensatory tariff so as to enable scheduling of power as per



merit/protocol and CERC should undertake early trueing up exercise taking into consideration ceiling rate prescribed for each month.

### **Submission by Haryana Utilities**

32. Haryana Power Purchase Centre on behalf of Uttar Haryana Bijli Vitran Nigam Limited and Dakshin Haryana Bijli Vitran Nigam Limited has stated in the reply filed vide affidavit dated 4.10.2013 that "in line with the approval of Government of Haryana, Haryana Utilities give in principle consent as regards the committee report" and has made the following submissions vide affidavit dated 3.10.2013:

(a) Similar submissions have been made as in case of Gujarat in respect of the points mentioned in sub-paras (c) to (f) of para 30 above with stipulation that sharing of profit from sale of power above 80% availability to the third party shall be in the ratio of 60:40 between Haryana Utilities and the petitioner.

(b) As per the PPA between M/s APL and the Haryana Utilities, the petitioner had to supply the power at Haryana State periphery through a dedicated transmission network and the cost of the network was included in the quoted tariff. APL had mentioned that the quoted variable annualized charge of ₹1.963 per unit which included transmission cost of ₹0.48 per unit. In the report of the Committee, the transmission charges have been taken as ₹0.45 for financial year 2013-2014 (based on formula given by the CERC for computation of point of connection charges including 35 paise for point of connection charges and 10 paise on account of losses. However, in the calculation of this 45 paise, apparently the POC charges have been taken for the entire contracted capacity of Haryana, that is, 1424 MW whereas the units supplied to Haryana Utilities have been

taken at 80% of the capacity. Therefore, in the revenue sharing mechanism the injection and drawal charges should be for 80% capacity only and therefore, there should be a reduction in the transmission charges by about 7 paise per unit. Therefore, the transmission charges should be excluded from the compensatory tariff and should be least of the (i) per unit transmission charge including losses as per the PoC formula taking into account only 80% capacity of injection and drawal charges; (ii) per unit transmission charge determined by the Commission on the petition filed by M/s APL; and (iii) the transmission charge built in at the time of bidding to be decided by the Commission based on its norms.

(c) In the report, the Committee has made coal a pass through. In such a scenario and in the event, cost of power from Mundra Power Project become prohibitive in the opinion of Haryana utilities on account of increase in price of Indonesian coal and/or devaluation of rupee and if the procurement of such power goes beyond top 50 percentile of merit order of cost of power for Haryana Utilities from all the sources, there should be an unconditional option for Haryana Utilities to decide the non-procurement and in such a case procurement of power from APL would not be binding on Haryana Utilities and no capacity charge or any compensatory tariff or deemed charges shall be payable for the period for which such option is exercised.

(d) The Committee report has considered the FOB price of imported coal as USD 78.76/MT and the landed price of coal as USD 99.41/MT. HPGCL had recently invited tender for imported coal and as per the tender, the landed cost of coal comes to 89.17/MT i.e.11 USD less than the rate taken in the report. The impact of 11 USD per

MT in the calculation of compensation tariff made by SBI Caps is about 14 paise per unit. Haryana Utilities have proposed that the lowest rate for procurement of similar quality of coal by the various Central Sector Generating Companies and the State Sector Generating companies should be considered in the calculations.

(e) As per the calculations, the petitioner would use 58% domestic coal which would be sourced from Coal India Limited (CIL). The coal from CIL would be billed for a Gross Calorific Value of 3600 whereas the GCV considered in the calculations is 3300 on the premise that the quality of coal is inferior to the quality of coal billed. Loss on account of inferior quality of coal cannot be passed on to the beneficiaries as the same has to be taken up by the generator with coal companies.

(f) The depreciation in the Indian rupee against USD cannot be passed on to the procurers as the Commission in its order has not intended to factor in the change in variation of foreign exchange in the compensatory tariff calculations.

(g) The Commission should decide by an order on the issues raised by Haryana and other states before the Committee.

(h) All the above submissions are subject to the rights of Government of Haryana/Haryana Utilities in the appeal (Appeal No. 100 of 2013) pending before the Hon'ble Appellate Tribunal for Electricity against the Commission's order dated 2.4.2013.

### **Submission by Prayas Energy Group**

33. Prayas Energy Group in its letter dated 30.10.2013 has submitted as under:

(a) The composition of the Committee has not included adequate representations to take care of the interest of the most affected stakeholder mainly the consumers and public at large. Presence of procurers who have opposed the said tariff increase, independent banker and financial analyst and the project developer cannot be considered as adequate representation.

(b) The decision of the Committee was not unanimous and one of the important requisites for the committee process was that the solution it proposes should be acceptable to both procurers and the project developers. As the procurers who were part of the committee have participated and given specific caveats and have not signed the final report, relying upon the Committee's recommendations by the Commission is questionable.

(c) The Commission should hold a public hearing in such a matter so peculiar and having long term implications for tariff as well as sector policy.

(d) The Commission should independently evaluate and clearly establish the need for compensation in order to arrive at a final decision. The Commission should clearly define the principles based on which any solution can be found having regard to factors such as it should not fundamentally alter risk allocation in the bidding process and PPA; it should protect the procurers' entitlement of normative generation at PPA agreed tariff; and it should impose equitable sharing of incremental burden on all stakeholders such as developer/equity holder, lenders and investors.

(e) Given the extraordinary nature of this case and considering the fact that any decision in the matter is going to impact competition, policy as well as tariff of all the electricity consumers in the two States, the Commission must ensure full transparency

and provide adequate opportunity to all stakeholders, most importantly the consumers of these discoms, to participate in the process. To ensure this, the Commission must issue a draft order based on which a public hearing should be held after giving adequate publicity and allowing all stakeholders sufficient time to comment on this matter.

(f) The combination of following options will more or less offset any impact on tariff due to Indonesian Regulations:

(i) Ploughing back the incremental revenue (net of taxes and royalty) from coal mines;

(ii) Sale of generation beyond normative availability and using the entire surplus revenue to offset impact on tariff;

(iii) Haircut for equity holder, lenders and investors;

(iv) Develop options for further reducing need for compensation by adopting suitable measures such as procuring lower GCV coal, using current lower transportation costs, etc.

(v) The increase in fuel cost as indicated in the Commission's order is a transient phenomena which will get self corrected whenever the prices of coal fall down. In view of the Commission's direction to look at the possibility of blending low cost coal with low GCV, the cost of transport would increase and there is no need for the Committee to double the freight rates.

### **Submission by Consumers**

34. Shri Pushpendra Surana, has submitted the following with regard to the petition in general and committee report in particular as under:-

(a) In relation to the PPA executed with the Haryana Utilities, the petitioner had submitted the bid on the assumption of availability of domestic coal instead of any assurance from Government regarding the availability. Similarly, in relation to PPA with Gujarat Utilities, the petitioner has made the bid on the assumption that it would get coal supplied from GMDC and it had tied up for supply of imported coal from various companies in Germany and Japan which did not materialize. There is lack of diligence on the part of the petitioner in obtaining assured coal linkages and therefore the petitioner cannot seek variance of tariff on account of non availability of coal linkage.

(b) SBI CAPS was appointed as the Independent Financial Analyst for the Compensatory Tariff Committee. However, SBI CAPS had earlier prepared the project information memorandum for Phase-IV of the project for supply of power to the Haryana Utilities. There is a clear case of conflict of interest as SBI CAPS had earlier prepared project information memorandum for Phase IV of the project (supplying power to Uttar Haryana Bijli Vitran Nigam Ltd and Dakshin Haryana Bijli Vitran Nigam Ltd under the PPA).

(c) The mandate of the Committee was limited to analysing the impact of Indonesian coal price (FOB basis) and suggests a compensatory tariff on account of change in Indonesian coal prices. However, the Committee has gone beyond the mandate and recommended compensatory tariff of 89 paise for Gujarat PPA and

61 paise for Haryana PPA based on the normative fuel cost which covers in addition to the impact of Indonesian coal price:

(i) exchange rate impact on the entire energy charge (coal and freight which are considered in US dollar for compensatory purpose versus the same quoted in rupees by the petitioner in its bid) has been considered for pass through. Petitioner has assumed exchange rate risk by quoting energy charges in Indian rupees and the Commission's mandate to the Committee does not entail addressing exchange rate impact.

(ii) Ocean transportation from Indonesia to India at actual for pass through whereas hardship arising out of coal price increase alone should be allowed.

(iii) port handling charges at actual which are not related to the coal price on account of Indonesian Regulation.

(d) The Committee has not made any attempt to confirm the rationality of the bid submitted by the petitioner for both Gujarat and Haryana PPAs, though the Committee has dealt with the same in case of Mundra UMPP. The Committee should have considered the lower of the (i) normative parameters as determined by the Consultant (ii) CERC notified parameters and (iii) the parameters determined from the rationality check of the bidder for the calculation of the compensatory tariff. Moreover, the petitioner should not be compensated for exchange rate impacts on coal prices and Ocean freight as the bidding documents provided option to the bidders to quote in USD for imported coal and

a freight cost which was not knowingly exercised by the petitioner.

- (e) The technical parameters for determination of tariff have been finalized on the basis of report provided by the technical consultant and accordingly the heat rate and auxiliary consumptions have been set at 2354 kcal/kwh and 7.5% respectively. These factors are independent of change in Indonesian Regulations.
- (f) The Committee has recommended that third party sale of power beyond the target availability of 80% may be permitted and profit from such sale may be shared equally between the procurers and the petitioner. Since the procurers have right over 100% of profit earned from sale of power to third parties beyond normative availability, the total profit should be available to the procurers and the same should be used for reduction of compensatory tariff instead of 50% of the profit sharing as suggested by the Committee.
- (g) A number of Adani Group entities are involved in supply chain activities for supply of coal to the project and operation and maintenance activities of power station, ocean transportation to group owned ships, port operation, ownerships of Indonesian coal mine and its operation and therefore are earning profits for such power station operation. Such profits include profit from the Indonesian Mine, profit from Ocean transportation use in group owned vessels and profits from port operation entity (pro rata for coal handling for power stations). These profits should be considered for reduction in the compensation tariff.



- (h) Under the garb of this petition, the petitioner has gone ahead and passed on several other risks/costs to the consumers which should have been borne by the petitioner such as foreign exchange risk, risk of volatile currency for the sea transportation, factoring the cost of the dedicated transmission line as part of energy charge instead of capacity charge, cost on account of Flue Gas Desulphurization(GFD) installation etc.
- (i) The Committee has rejected the suggestion regarding discovering competitive tariff afresh with full transparency through a method akin to Swiss Challenge methodology on the ground that it would be a long drawn process. If all the recommendations are accepted by the Commission, the tariff may exceed the market determined tariff. The Commission ought to adopt the Swiss Challenge methodology or any similar process so as to enable market forces to determine a competitive tariff.
- (j) The Committee has exceeded its mandate by recommending that the Commission should pass suitable orders in relation to events affecting costs of capacity charges. Before any compensation is given, a guarantee should be obtained from the petitioner that it would not seek revision of tariff on account of under-recovery of capacity charges except for Change in Law and Force Majeure provisions of the PPA and it would inject necessary cash into the SPV to make timely Debt Service Payments from the cash available/raised at the Group Holding level on priority basis.

(k) The Committee has prejudged the issue of the extent of entitlement of the Petitioner to Compensatory Tariff by recommending that the same should be from SCOD by citing the admission of the petition by the Commission. The compensatory tariff prior to the date of filing of the petition would be contrary to law.

(l) Tariff to the petitioner on account of transmission charge and losses shall not exceed beyond lower of the two:

(a) ₹0.48/kWh which was envisaged by the petitioner at the time of the bid  
and

(b) As per CERC norms considering capital cost of transmission line for 1424 MW only and not for entire capital cost.

35. Consumer Education and Research Society (CERS), a registered society based at Ahmadabad in its letter dated 23.12.2013 has submitted that it strongly objects to increase in tariff for Adanis as recommended by the Committee as that would set a bad precedent and all Independent Power Producers will demand compensatory tariff. CERS has sought a direction to the petitioner and IPPs for use of indigenous coal or blending of Indian and imported coal to reduce the cost of generation.

#### **Rejoinder by the Petitioner**

36. The petitioner in its affidavits dated 7.10.2013 and 8.10.2013 has filed replies to the affidavits of GUVNL and Haryana Utilities. The petitioner has also filed its response to the submissions of Prayas Energy Group and Shri Pushpendra Surana. In brief, the

petitioner has submitted as under:

(a) The petitioner has made a specific prayer in the petition to allow revise tariff from the schedule commercial operation date which the Commission has taken note of in the order dated 2.4.2013 to be decided in the light of the recommendation of the Committee. As per the Committee recommendation, full recovery of compensatory tariff of Rs 496 crore towards hardship suffered from SCOD may be allowed with carrying cost at the rate of interest as may be decided by the Commission.

(b) Since the coal is procured from Indonesia, the HBA Index is the appropriate Index which may be taken into account. As per the recommendation of the Committee, the landed price of the coal based on HBA or actual, whichever is lower, may be considered for the payment of compensatory tariff.

(c) Though the petitioner has submitted SHR of 2150.28 KCal/Kg based on the coal with GCV of 5200 KCal/kg, the petitioner is using the coal with GCV of 4500 KCal/Kg within the OEM specifications and boiler design parameters in order to reduce the fuel cost. The design heat rate of the plant (5 x660 MW) is 2210 KCal/kw which has been verified by the technical consultant and with 6.5% allowance for site operating condition as per the CERC norms, SHR works out to 2354 KCal/KWh which is realistic and comparable with SHR approved by the regulatory Commission for other coal based power projects of NTPC as well as State Gencos having similar design and specifications. The Committee has further recommended that in case actual SHR is lower, the same will be used for determining the compensatory tariff.

(d) The Committee has dealt with the difficulty in implementation of the suggestion of

the GUVNL for sharing of profit from Indonesian mines. The petitioner agrees with the recommendations of the Committee that actual profit from the mine should be shared.

(e) The petitioner has agreed with the respondents for sharing of profit from sale of power above 80% of target availability between the procurers and the petitioner in the ratio of 60:40 and to provide incentive upto 10 paise to the respondents in case the share of respondent is less than 10 paise.

(f) The petitioner has agreed with the affidavit of Haryana utilities that transmission charges by PoC mechanism should be adopted by the Commission taking 100% of LTA quantum with the Haryana utilities. If any benefit is gained by reduction of transmission charges, then the benefit of the same will be passed to the Haryana discom by applying the fuel cost adjustment mechanism as per the Committee report.

37. In response to the submission of Shri Surana ('the applicant'), the petitioner has submitted as under:

(a) The applicant is neither a necessary party nor a proper party and cannot be impleaded in the present petition. The applicant is neither a consumer of Gujarat nor of Haryana and is therefore, not a consumer under section 2(15) of the Act.

(b) The order dated 2.4.2013 is not an interim order as contended by the applicant. The order is conclusive with regard to the issues adjudicated therein and in the nature of preliminary decree passed on partition and other compensatory suits where preliminary decree is passed and then, shares of the parties or quantum of compensation decided. It is a settled principle of law that preliminary decree is final can only be challenged in

appeal. In the order dated 2.4.2013, the Commission has crystallize the right of the petitioner for the compensatory tariff and the present petition is only confined to quantification of the compensatory tariff. Therefore the issues which have already been decided by order 2.4.2013 cannot be re-agitated again.

(c) With regard to the submission of the applicant that the entire profit from third party sale should be pass on to the utilities, the petitioner has submitted that this is contrary to the stand taken by the parties and contrary to the order dated 2.4.2013 which envisages sharing of profit from sale of power to third parties to mitigate the hardship.

(d) As regards the applicant's contention that the excess amount paid to Adani's mining company due to sale at benchmark price minus higher tax and royalty because of Indonesian regulation should be adjusted for granting compensatory tariff, the petitioner has submitted that the order dated 2.4.2013 is conclusive in this respect and the same cannot be raised at this stage.

(e) As regards the contention of the applicant that compensatory tariff cannot be granted in absence of the agreement between parties, the petitioner has submitted that the parties to the present petition has given in principle consent to the Committee report.

(f) As regards the issue of public notice, the petitioner has submitted that neither the competitive bidding guidelines nor PPAs provides for public notice in the adjudication of the dispute between the parties in accordance with PPA.

(g) As regards the applicant's suggestion for sourcing coal from alternate sources the

petitioner has submitted that the Commission in order dated 2.4.2013 has recognized that the sourcing of coal from alternative source does not appear to be a viable option. The example of Lanco is misplaced as Lanco has not been able to procure coal from its coal mine from Australia till date.

### **Submissions during the hearing**

38. The petition was heard on 13.9.2013, 15.10.2013, 30.10.2013 and 8.11.2013 and Records of Proceedings for those dates of hearing have been issued which are not repeated here for the sake of brevity. The petitioner, respondents and leaned senior counsel for applicant have filed written submissions. The submissions of the parties have been discussed under each issue in the later part of this order.

### **Analysis and Decision**

39. After perusal of the pleadings of the parties including the Prayas Energy Group and the applicant, the following issues arise for our consideration:

- (A) Preliminary issues;
- (B) Scope of the order of the Commission;
- (C) Date from which the Compensatory tariff should be granted;
- (D) Impact of Indonesian Regulation on imported coal
- (E) Pricing of imported coal including foreign exchange rate variation;
- (F) Station Heat Rate and Auxiliary Consumption;
- (G) Sharing of the profits of the mines in Indonesia;
- (H) Sale of power to third party above target availability and sharing of surplus from merchant sale;

- (I) Unconditional option of non-procurement of power
- (J) GCV of Domestic coal in case of Haryana;
- (K) Ceiling of Gross Compensatory tariff
- (L) Adjustment of Transmission Charges and losses in case of Haryana;
- (M) Change in Law events considered by the Committee in case of Haryana.

40. These issues have been discussed in the succeeding paragraphs along with our decision thereon.

**(A) Preliminary issues**

41. Learned senior counsel for applicant submitted that the order dated 2.4.2013 does not say that irrespective of the fact that the tariff has been determined through a bidding process and irrespective of the fact that tariff has to be adopted under section 63 of the Act, yet the Commission has the power to re-determine the tariff. Learned Senior Counsel submitted that since the committee has given a report and there is no agreement between the parties on the report and therefore, no further directions with regard to the compensatory tariff can be issued by the Commission. Learned senior counsel submitted that despite the submission already made, if the Commission holds that the order dated 2.4.2013 permits the Commission to award the compensatory tariff, in that case the alternative submission is that the order dated 2.4.2013 is an interim order and every such order which is an interim order not disposing of the petition can be re-looked at the stage of final disposal of the petition. Learned senior counsel submitted that order dated 2.4.2013 is an incorrect order and should be rectified at the stage of final order as otherwise, it would ruin the whole bidding process. In this connection,

learned senior counsel relied on the judgment of the Appellate Tribunal for Electricity dated 16.12.2011 in Appeal No.82 of 2011 (Essar Power Limited V UPERC & Another). Learned senior counsel submitted that allowing anything over and above the tariff agreed in the PPA which has been adopted under section 63 of the Act would amount to re-determination of tariff which is not permissible under the provisions of the Act. If the Commission proceeds to award the compensatory tariff, it has to be done through a public process by making a publication and inviting comments from the public. Learned senior counsel submitted that the compensatory tariff is nothing but re-determination of tariff and any order directing the procurers to pay higher tariff over and above the tariff approved in the tariff order cannot be issued at the back of the public without following the procedure.

42. Learned counsel for the petitioner submitted that final view has already been taken by the Commission in the order dated 2.4.2013 and the matter is at implementation stage now and the issues raised by the learned senior counsel for the applicant cannot be raised at this stage. The Commission in the said order has taken a final view on the prayers of the petitioner and has decided that the petitioner needs to be compensated for the intervening period with a compensation package over and above the tariff discovered through the competitive bidding. He further submitted that no review has been filed by the applicant against the said order. The order dated 2.4.2013 is in the nature of preliminary decree and not an interim order. He also submitted that the principle of *res-judicata* applied in the present case as the issues decided in an earlier stage cannot be allowed to be re-agitated at a subsequent stage (implementation stage) in the same proceedings. He also submitted that the report has been signed by



two of the members of the Committee, namely the Chairman and Independent financial analyst, which is evident from page 2 of the Report. The petitioner and the respondents have given their in-principle consent to the Report by their respective affidavits. The Committee was constituted by the Commission only to assist and aid the Commission to evolve the compensatory package for implementation of its order dated 2.4.2013. By constitution of the Committee, the Commission did not delegate or abdicate its statutory adjudicatory function. Section 63 provides for determination of tariff which is not applicable in case of adoption of tariff. There is no requirement for a public notice or a public hearing in the present case.

43. Learned counsel for the petitioner also submitted that the order dated 2.4.2013 was passed by the Commission after due participation of the individual consumers. First, Shri Amarsinh Chavda intervened in the present petition. However, on receiving all the relevant papers from the petitioner, was satisfied with the whole process and withdrew his application. One, Shri Pahlada Rao also participated in the present petition by filing his affidavit. Therefore, the statement of the learned senior counsel for the applicant that there was no consumer representation before passing of the order dated 2.4.2013 is not correct.

44. Learned counsel for the petitioner referred to para 40 of the Judgment of Hon'ble Supreme Court passed in West Bengal Electricity Regulatory Commission Vs. CESC Ltd. [(2002) 8 SCC 715] and submitted that rights of hearing/representation of the consumers is neither indiscriminate nor unregulated and is regulated by the Regulations. Referring to Judgment of Hon'ble Supreme Court passed in Grid

Corporation of Orissa Ltd. Vs. Gajendra Haldea [(2008) 13 SCC 414], learned counsel for the petitioner submitted that the Applicant being a resident of Ghaziabad, (U.P.) does not fall within the definition of consumer as per Section 2 (15) of the Electricity Act, 2003 and does not have any *locus standi* to widen the scope of the proceedings. He clarified that he is not making these submissions on the issue of as to what extent the Applicant can make submissions at this stage of fact end of the matter, even if he is impleaded.

45. We have considered the submission of the learned Senior Counsel for Shri Pushpendra Surana (the applicant) and learned counsel for the petitioner. The IA filed by the applicant has been disposed of through a separate order. We are not in agreement that the grant of compensatory tariff over and above the tariff agreed in the PPA amounts to redetermination of tariff. In the present case, tariff has been discovered through the competitive bidding and the tariff so discovered has been adopted by the respective State Commissions. The Commission has made it amply clear in the order dated 2.4.2013 that the sanctity of the bids and PPAs shall be maintained and there is no question of reopening the tariff. The Commission consciously decided to grant compensatory tariff for the hardship suffered by the petitioner arising out of the absence of domestic coal linkage and the need to import coal at benchmark price on account of operation of Indonesian Regulations. Further, the Commission had categorically clarified that such compensatory tariff would be variable in nature, and commensurate with the hardship and would be admissible over and above the tariff agreed in the PPA. The moment the hardship is removed, the compensatory tariff will no more remain operative. Therefore, the process of grant of compensatory tariff does not result in

determination of tariff under section 62 of the Act. We are also not in agreement that the grant of compensatory tariff should be granted after issuing a public notice and holding a public hearing. The petitioner had approached the Commission for relief under the provisions of the PPA for which no provision exists for public notice and public hearing. The Commission's Conduct of Business Regulations permits any consumer to participate in the proceedings before the Commission. In fact one Shri Chavda, Shri Puspendra Surana and Prayas Energy Group have participated in the proceedings. In our view, adequate opportunity was available to the interested parties to participate in the proceeding and in fact, some consumers including the applicant have participated in the proceeding and filed their submissions. As regards the submission of the learned senior counsel of the Applicant that the order dated 2.4.2013 is an interim order, we are of the view that the order has attained finality in so far as the issues which have been finally adjudicated in the said order. The Commission has recorded conclusive findings regarding the impact of the Indonesian Regulation on project viability of Mundra power plant , non-admissibility of reliefs under the "Force Majeure" and "Change in Law" and the necessity to compensate the petitioner for the hardship suffered on account of the Indonesian Regulations in the form of compensatory tariff. Therefore, the conclusive findings on these issues will operate as "res judicata" at the subsequent stage of the proceeding. It is pertinent to mention that Haryana Utilities have filed an Appeal before the Appellate Tribunal for Electricity against the order dated 2.4.2013 which has been kept pending by the Hon'ble Tribunal at the request of the Appellant therein to enable it to participate in the deliberation in the committee and subsequently in the proceedings before this Commission. Therefore, this Commission has become functus officio in

respect of the issues which have been finally adjudicated. Moreover, consideration of the said issues at a subsequent stage of the proceedings is hit by the principles of “res judicata” and issue estoppel. The Supreme Court in the case of Hope Plantations Ltd Vs. Taluk Land Board Peermade & Anr {(1999) 5 SCC 590} has laid down the principle that “res judicata” operates in any subsequent proceedings in the same suit in which the issue has been determined. The relevant portion of the judgment is extracted as under:

"It is settled law that principles of estoppels and res judicata are based on public policy and justice. Doctrine of res judicata is often treated as a branch of the law of estoppels though these two doctrines differ in some essential particulars, rule of res judicata prevents the parties to a judicial determination from litigating the same question over again even though the determination may even be demonstrably wrong. When the proceedings have attained finality, parties are bound by the judgment and are stopped from questioning it. They cannot litigate again on the same cause of action nor can they litigate any issue which was necessary for decision in the earlier litigation. These two aspects are 'cause of action estoppel' and 'issue estoppel'. These two terms are of common law origin. Again once an issue has been finally determined, parties cannot subsequently in the same suit advance arguments or adduce further evidence directed to showing that issue was wrongly determined. Their only remedy is to approach the higher forum if available. The determination of the issue between the parties gives rise to as noted above, an issue estoppel. It operates in any subsequent proceedings in the same suit in which the issue had been determined. It also operated in subsequent suits between the same parties in which the same issue arises. Section 11 of the Code of Civil Procedure contains provisions of res judicata but these are not exhaustive of the general doctrine of res judicata. Legal principles of estoppels and res judicata are equally applicable in proceedings before administrative authorities as they are based on public policy and justice."

46. The present proceedings have been taken up for consideration of the compensatory tariff consequent to the submission of the report by the Committee appointed by the Commission. Therefore, the scope of the proceedings in the petition at this stage are limited to the quantification of the compensatory tariff in accordance with our order dated 2.4.2013 after considering the recommendations of the Committee, the suggestions/objections of the petitioner and procurers and the interest of consumers. In our view, the conclusive findings in our order dated 2.4.2013 on various issues cannot be re-agitated before the Commission at this stage of the proceedings.

Therefore, we reject the submission of the Applicant that the order dated 2.4.2013 is in the nature of an interim order and also reject the prayer to revisit the findings in the said order.

47. Prayas Energy Group, which is one of the consumer groups appointed by this Commission in terms of Regulations 18(1) Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 has submitted that the Commission should independently evaluate and establish the need for compensation and clearly define the principles to be adopted for arriving at any solution. Prayas has further submitted that the Commission should ensure full transparency and provide adequate opportunity to all stakeholders. Prayas has further submitted that the petitioner should return the generation assets at the end the economically useful life of the generating station.

48. We have considered the submissions of Prayas Energy Group. The Commission has heard the petitioner and the respondents at the first stage of the proceedings as the claims were confined to the reliefs claimed under the PPA. The Commission after considering the materials on record and the pleadings of the parties and the prevailing price of the imported coal and other related aspects had taken a view to grant compensatory tariff to the petitioner to mitigate the hardship arising out of Indonesian Regulations and directed for constitution of a committee to recommend compensatory tariff after examining all actual data. A committee was constituted with the representatives of the petitioner and respondents and two independent members and other experts with the agreement of the parties. The report of the committee was posted on the website of the Commission. Afterwards hearings have been held where

the petitioner, respondents, Prayas and a consumer (the applicant) have participated. The Commission has considered all aspects of the matter with due diligence while deciding the compensatory tariff awarded through this order. In our view, the apprehension of Prayas has been taken care of. As regards the suggestion of Prayas for return of the generation assets at the end of the useful life, we are of the view that this aspect will be governed as per the terms and conditions of the PPA and is beyond the scope of the present proceedings which is confined to compensating the petitioner for the hardship suffered by it on account of Indonesian Regulations.

49. GUVNL has raised an issue that the compensation tariff should be subject to the approval by GERC. In our view, no such directions can be issued by this Commission.

#### **(B) Scope of the order of the Commission**

50. Scope of the order of the Commission can be gathered from paras 54, 57, 72, 87,88, 89 and 90 of the order which are extracted as under:

"54. From the above analysis, we have come to the conclusion that ***the promulgation of Indonesian Regulations which required the sale price of coal in Indonesia to be aligned with the international benchmark price has, prima facie, altered the premise on which the energy charges were quoted by the petitioner in the bids submitted to GUVNL and Haryana Utilities.....***"

'57. Considered against the prevailing scenario of availability of domestic coal, ***promulgation of the Indonesian Regulations requiring the existing agreements to align with the International benchmark price has created problems regarding project viability of the generating stations to supply power at the rates agreed to between the parties in the PPAs.*** Therefore, there is an imminent need to find out a practical and acceptable solution to the problem for ensuring supply of power to the consumers at competitive price while seeking to ensure sustainability of the electricity sector.'

"72. .... it cannot be denied that ***the petitioner who is dependent to a large extent on the imported coal for running the Mundra Power Project can be said to be immune from the impact of the Indonesian Regulations which made it compulsory for the sellers of coal from Indonesia to align the sale prices with the international benchmark price.*** It has been brought to our notice that there is a perceptible difference

between the prices which *were prevalent prior to the Indonesian Regulations and those prevalent* subsequent to the Indonesian Regulations.....

"87..... In our view, the parties should confer to find out and agree for a ***compensation package to deal with the impact of subsequent event resulting from the operation of Indonesian Regulations which has adversely affected performance under the PPAs while maintaining the sanctity of the PPAs and the tariff agreed therein.*** In other words, the compensation package agreed should be over and above the tariff agreed in the PPAs and should be admissible for a limited period till the event which occasioned such compensation continues to exist and should also be subject to periodic review by the parties to the PPAs."

" 88. In the present case, the escalation in price of imported coal on account of Indonesian Regulation and non-availability of adequate fuel linkage from Coal India Limited for the project of the petitioner is a temporary phenomenon and is likely to be stabilized after some time. Therefore, the petitioner needs to be compensated for the intervening period with a compensation package over and above the tariff discovered through the competitive bidding. The compensation package to be called 'compensatory tariff' could be variable in nature commensurate with the hardship that the petitioner is suffering on account of the **unforeseen events leading to non-availability of coal linkage or increase in international coal price affecting the import of coal** which has affected its performance under the PPAs. As and when the hardship is removed or lessened, the compensatory tariff should be revised or withdrawn....."

"89. .... In our view, under the peculiarity of the facts of the case and keeping in view the interest of both project developer and consumers, there is a need to direct the parties to set down to a consultative process to find out an acceptable solution in the form of compensatory tariff over and above the tariff decided under the PPAs to **mitigate the hardship arising out of absence of full domestic coal linkage and the need to import coal at benchmark price on account of Indonesian Regulations.....**"

51. It would clearly emerge from these paras of the order dated 2.4.2013 as quoted above that the non-availability of domestic coal for Phase III of the project for supply of power to GUVNL and limited coal linkage for Phase IV for supply of power to Haryana Utilities led the petitioner to import coal from Indonesia. On account of promulgation of Indonesian Regulations which aligned the price of coal with international benchmark price and wiped out the discounts enjoyed by the petitioner in its concluded FSAs, the petitioner faced hardship to supply power to the respondents at the price agreed in the PPAs. Therefore, dependence of the petitioner on the imported coal on account of absence or partial availability of domestic coal and subsequent change in the price of

imported coal as a result of Indonesian Regulations, coupled with unprecedented devaluation of INR are the primary reasons for the petitioner to approach the Commission for relief under the PPAs and for devising a mechanism to address the situation arising out of Indonesian Regulations. In other words, the hardship resulting in under recovery of fuel charges on account of Indonesian Regulations is the main scope of the order dated 2.4.2013 for which compensatory tariff was contemplated. Since the scope of the compensatory tariff was limited to the impact of the Indonesian Regulations, the Commission decided to grant the same over and above the tariff agreed in the PPAs and limited to the period of hardship arising out of Indonesian Regulations. The Commission strongly emphasized that the sanctity of the PPAs should be maintained and disapproved renegotiation of tariff as discovered through the competitive bidding. In other words, the terms of reference for the Committee were to make its recommendations regarding compensatory tariff after assessing the impact of the Indonesian Regulations without disturbing the bid parameters and terms and conditions of the PPAs. The Commission also directed the Committee to suggest further measures which would be practicable and commercially sensible to address the situation arising out of Indonesian Regulations. Therefore, it is crystal clear that the mandate given to the committee through the order dated 2.4.2013 is to mitigate the hardship arising out of absence of domestic coal linkage and the need to import coal at benchmark price on account of Indonesian Regulations.

**(C) Date from which the compensatory tariff should be granted:**

52. The Committee has recommended lump sum compensatory tariff from the date of SCOD till 31.3.2013 and a formula for compensatory tariff from 1.4.2013 onwards.



The petitioner has submitted that the compensatory tariff as recommended by the committee should be granted. The petitioner has submitted that it had specifically prayed for relief from the date of SCOD and the prayer was admitted by the Commission. Moreover, since the hardship has occurred from the date of SCOD, the compensatory tariff should be granted from SCOD. GUVNL and Haryana Utilities have submitted that the compensatory tariff should be granted from the date of the final order of the Commission. The consumer in its reply has submitted that grant of compensatory tariff before the date of filing of the petition would be contrary to law. Learned counsel for the petitioner submitted that it is settled position of law that the compensation is to be paid from the date of cause of action and relied upon the following judgments:

- (i) N. Narasimhaiah & Ors Vs State of Karnataka &Ors [(1996)3SCC 88],
- (ii) Assistant Collector of Customs Vs. Associated Forest Products Ltd. [(2000) 9 SCC 258];
- (iii) Shriram Fertilizers and Chemicals Vs Union of India [IV (2005) BC 287] ;
- (iv) DCM Shriram Consolidated Ltd. Vs Union of India [II (2005) ACC 371].

53. We have considered the submission of the petitioner and respondents and the consumer group and consumer. The learned counsel for the petitioner has rightly pointed out that the compensatory tariff should be granted from the date of cause of action. Therefore, the question for consideration is when did the cause of action for compensatory tariff arise? The sequence of events reveals that the Indonesian Regulations were promulgated on 24.9.2010 and was to come into effect from 24.9.2011. The petitioner approached GUVNL on 25.7.2011 about the existence of “*force majeure*” and sought urgent adjustment of tariff. The SCOD of Phase III of the

generating station was 2.2.2012 i.e. subsequent to the date of approaching GUVNL. Similarly, the petitioner took up the matter with Haryana Utilities on 25.5.2012 whereas the SCOD of Phase IV took place on 6.8.2012. Therefore, the petitioner has put the procurers on notice about the hardship arising out of the impact of Indonesian Regulations. Since the parties could not find an amicable solution, the petitioner approached the Commission by filing the present petition on 5.7.2012.

54. In our view, the respondents were put on notice and were aware of the hardship faced by the petitioner on account of the impact of Indonesian Regulations before the SCOD of the generating station. This has been corroborated on the basis of the audited accounts prepared by KPMG and scrutinized by the Committee. In para 91 of the order, the Commission had observed that " as regards the prayer at Para (c), the same will be decided in the light of the recommendations of the Committee". The committee in its report has concluded that the compensation should be given from the date of SCOD and it has stated as under:

"Also, in response to APL's explicit prayer to CERC to allow compensation for power supply w.e.f. SCOD, CERC vide para 91 of its order dated 2<sup>nd</sup> April 2013 have sought for Committee's recommendation for the same. In the light of the mandate given to the Committee, the same has been quantified".

In our view, the cause of action arose when the petitioner was affected by the impact of Indonesian Regulation which was also in the knowledge of the procurers. Moreover, since the procurers have been benefited through supply of power generated by the petitioner by using the imported coal from Indonesia at the benchmark price on account of the Indonesian Regulation which we have held as hardship in our order dated 2.4.2013, we are of the view that the petitioner should be allowed compensation from the date of SCOD. However, the Committee has computed the lumpsum compensation

from the SCOD under respective PPAs till 31.3.2013. The Commission agrees to grant the compensatory tariff from the SCOD of respective unit subject to such modification as has been decided in the later part of this order.

**(D) Impact of Indonesian regulations on imported coal**

55. The Committee has suggested the fuel cost adjustment mechanism for determination of Compensatory Tariff for the period beyond 31.3.2013 to work out the compensatory tariff, based on the difference between actual energy cost and quoted energy cost as below:

Compensatory Tariff/Fuel Cost Adjustment Charge for a particular year (₹Cr.)	=	Energy Costs at PPA defined delivery point (₹ Cr.) for that particular year corresponding to units supplied during the year	-	Energy charges revenue @ Quoted Energy Charges under the PPA for that particular year(₹ Cr.) corresponding to units supplied during the year
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The actual energy cost has been proposed to be arrived at by taking into account various components like station heat rate, auxiliary consumption, transmission losses, GCV of coal, blending ratio of low grade coal, FOB price of imported coal, ocean freight, transaction and Letter of credit charges, insurance charges which include cost in regard to Letter of credit, Bank and Finance charges, insurance and other transaction costs, actual port handling charges, transit and handling losses and actual exchange rate ( Ref para 21, 22 of this order in respect of Gujarat PPA and para 27, 28of this order in respect of Haryana PPA).

56. The respondents and the applicant have submitted that the variation in FOB price of imported coal is only to be considered and change in ocean freight, handling charges,

exchange rate variations are not admissible. The issue here is whether the impact of price on import of coal from Indonesia is to be considered to (i) the extent of FOB price or (ii) by including impact of other parameters like shipping cost up to domestic port i.e. CIF price or (iii) by including handling and transportation cost up to power plant i.e. landed fuel cost. The Commission however as discussed above, has noted that the hardship is primarily due to change in fuel source from domestic to imported; and increase in prices of fuel assumed at the time of bid due to the Indonesian Regulation. The Committee having analysed that calculation of compensatory tariff on FOB price results in to higher amount of compensation, has suggested the above methodology for determination of compensatory tariff in its report which is based on the difference between the energy costs at PPA defined delivery point for a particular year and energy charges @ quoted energy charges under the PPA for the corresponding year.

57. Government of Gujarat in the letter dated 10.9.2013 addressed to GUVNL have clarified that the price of coal should be worked out on actual price of coal or price worked out based on the indices of CERC whichever is lower. GUVNL has submitted that the scope and directions of the Commission in its order dated 2.4.2013 are abundantly clear that there existed a price for the imported coal prior to the promulgation of the Indonesian Regulations which is based on what the petitioner had submitted in its bid and by virtue of the Indonesian Regulations, the basis on which the bid was submitted got affected. Therefore, the price prevalent prior to the Indonesian Regulations, more particularly the price of coal based on which the petitioner had submitted the bid should be compared with the benchmark price prevalent from time to time on account of the Indonesian Regulations and the difference between the two

should alone be the scope of consideration for compensatory tariff. The petitioner has quoted non-escalable energy charges of ₹1.345/kWh throughout the entire period of the PPA dated 2.2.2007. GUVNL has worked out the quoted non-escalable charges backward by considering the station heat rate (2150.27 kcal/kWh), Auxiliary Consumption (6.50%), GCV(5200/kcal/kg) of coal and has submitted that the quoted energy charge of ₹1.345/kWh works out to USD 67.6/MT as landed cost of coal including loading and unloading. GUVNL has further submitted that after adjustment of USD 12/MT, the quoted non-escalable variable charge of ₹1.345/kWh supports the export price of coal from Indonesia of the relevant category of more than USD 50/MT. GUVNL has submitted that if the benchmark price is USD 55/MT for export, then the zone of consideration for compensatory tariff can only be USD 5/MT which is subject to adjustment of benefit which the associated company of the petitioner derives from the coal business on account of selling coal at the benchmark price to the Mundra Power Project of the petitioner.

58. Haryana Utilities have submitted that the report has considered the FOB price of imported coal as USD 78.66/MT and the landed price as USD 99.41/MT. The lowest rate of procurement of similar quality of coal by the Central Sector and State Sector Generating Companies, further limited by CERC indices should be considered in the calculations. They have given the example of the recent tender invited by HPGCL where the price of coal was quoted as USD 89.17/MT which is less than the rate taken in the report.

59. In response, the petitioner has submitted that it has been acknowledged by the Commission as well as the Committee that coal from Indonesia can be sourced at price not less than the benchmark or HBA price. The Commission's formula for imported coal escalation rate does not take into account the HBA price index. As regards Haryana's submission, the petitioner has submitted that FOB price of USD 78.76/MT as on 30.6.2013 has been arrived by the committee in its report based on HBA index with GCV of 6322 kcal/kg ARB whereas the Haryana Utilities are comparing it with prices of Haryana tender for coal with GCV of 6300 kcal/kg on air dried basis. The petitioner has submitted that each contract has different conditions and hence price may not be comparable.

60. We have considered the submissions of the petitioner, respondents and the consumers. The Committee has worked out the energy charges on actual basis by considering the cost of imported coal at the plant bus bar which includes (a) FOB prices of imported coal, (b) ocean freight charges, (c) Transaction L/C and Insurance charges, (d) Port Handling Charges at Mundra, (e) Transit and Handling losses. In case of Haryana, the Committee has considered the cost of domestic coal linkage (a) MCL examine coal cost as notified by CIL from time to time, (b) transportation from MCL to Mundra port, (c) Transaction L/C and Insurance Charges, (d) Port Handling Charges at Mundra, and (e) Transit and Handling Losses. The respondents have submitted that price of coal shall be considered as the actual price of coal or price worked out based on the indices of the Commission whichever is lower. The petitioner had quoted the energy charges as non-escalable element of tariff while submitting the bids to GUVNL and Haryana Utilities. Therefore, the escalation indices of CERC are not applicable for

deciding the levelized tariff charged by the petitioner. In our view, it will not be appropriate to apply the CERC indices for deciding the price of imported coal as contended by GUVNL. As regards the suggestion of Haryana Utilities to consider the lowest rate for the procurement of Central Sector and State Sector generating companies, further limited by CERC indices, we are of the view that such an approach will not give certainty to the process of calculation of the price of coal as prices will vary from bid to bid and whether the tender is invited for coal on as received basis (ARB) or on air dried basis (ADB). If the imported coal of Indonesian origin is fired for generation, the HBA index (coal price reference of Indonesia) should be considered for the determination of cost of generation instead of the indices of the Commission.

61. The petitioner had quoted the tariff in INR denomination for supply to GUVNL predominately based on the coal linkage from Morga Mines of GMDC. Since, the domestic coal linkage did not materialize, the petitioner went for Indonesian coal for operation of the power project. Similarly, domestic coal linkage was available to supply to Haryana for 70 percent of the contracted capacity. Accordingly the petitioner has submitted the bid based on assumption for 70 % of the domestic coal and 30 % of the imported coal. Due to non availability of domestic coal for 70 % of the contracted capacity, the petitioner had to import additional 28% in order to ensure supply of power to Haryana Utilities.

62. The petitioner has submitted the bid assumptions vide its affidavit dated 1.2.2013 which are extracted as under:

Haryana PPA

Particulars	Levelized Tariff Bid	Basis for Bid Tariff
Energy Charges	<p>₹ 1.963 per kWh (including Transmission Charges, Losses and SFO)</p> <p>₹1.38/kWh (excluding Transmission Charges, Losses and SFO)</p>	<ul style="list-style-type: none"> <li>• Blending Ratio of Domestic : Imported = 70:30</li> <li>• SHR - @ 2230 kcal/kg for coal</li> <li>• Heat Rate Degradation - @ 0.25% post 3 years approx</li> <li>• Auxiliary Consumption - @ 6.5%</li> </ul> <p><b>Linkage Coal from MCL</b></p> <p><b>Domestic Coal cost</b></p> <ul style="list-style-type: none"> <li>• Basic Coal Price - @ ₹400/Ton (MCL linkage F grade)</li> <li>• Sizing - ₹41/Ton</li> <li>• Surface Transportation - ₹50/ Ton</li> <li>• Stowing Excise Duty - ₹10/Ton</li> <li>• Royalty - ₹55 plus 5% of Basic Price</li> </ul> <p><b>Transportation of Domestic Coal</b></p> <ul style="list-style-type: none"> <li>• Rail sea Rail Assumed from MCL to Talcher to Mundra</li> <li>• Ocean Freight – US\$ 9 Per Ton</li> <li>• Rail Freight - @ ₹ 223.65 / Ton</li> <li>• GCV – 4194.5 kcal/kg (Average of F Grade)</li> <li>• Port handling Charges - ₹490 / Ton (Paradeep and Mundra)</li> <li>• Coal price escalation - @ 5.48% (CERC escalation rate)</li> <li>• Rail Freight escalation : @ 1.50%</li> <li>• Ocean Freight escalation : @ 2.74 (Long Term average of shipping index).</li> <li>• Port Handling Escalation - @ 3.11% (60% of 5.18%, being CERC notified escalation rate for Port Handling Charges)</li> <li>• 1 US Dollar = INR 39.7</li> </ul> <p><b>Imported Coal Component</b></p> <ul style="list-style-type: none"> <li>• FOB price – US\$ 26 per MT</li> <li>• Ocean Freight - US\$ 10 per MT</li> <li>• GCV - @ 5200 kcal/kg</li> <li>• Coal Price Escalation @ 10% after every five years</li> <li>• Ocean Freight escalation @ 10% after every five years</li> </ul>



		<p>Rupee Dollar Exchange Rate - @ 1.07% (CERC notified escalation)</p> <ul style="list-style-type: none"> <li>• Port Handling Charges - @ ₹245/Ton (Mundra)</li> <li>• Port Handling Escalation – 3.11% (60% of 5.18%, being CERC notified escalation rate for Port Handling Charges)</li> <li>• 1 US Dollar = INR 39.7</li> </ul> <p><b>Levellized Energy Charges calculated at 11.1% discount rate = ₹1.38/kwh (excluding transmission charges, losses and secondary fuel oil)</b></p>
Transmission Charges; Losses and SFO	₹ 0.573 per Kwh	Estimated for transmission corridor and Secondary Fuel

### Gujarat PPA

Particulars	Levelized Tariff Bid	Basis for Bid Tariff (Morga Coal Transported to Mundra TPS)	Basis for bid Tariff (imported coal as fall-back as per techno-commercial feasibility)
Energy Charges	₹1.3495/kwh	<ul style="list-style-type: none"> <li>• Price : ₹350 / Ton (Morga-II Coal block from GMDC)</li> <li>• Stowing Excise Duty : ₹10/Ton</li> <li>• Royalty : ₹85/Ton</li> <li>• Rail Freight : ₹1446.1/Ton (Distance 1804.45 km)</li> <li>• GCV : 4700 kcal/kg (Average of D &amp; E grade)</li> <li>• SHR : 2230 kcal/kWh for primary fuel (for first three years approx.)</li> <li>• Heat Rate Degradation @ 0.25% post 3 years approx</li> <li>• Auxiliary Consumption @ 6.5%</li> <li>• Coal price escalation @ 3.97% (versus</li> </ul>	<ul style="list-style-type: none"> <li>• FOB price of imported coal @ US\$ 24.76/ton (Long term average of Newcastle index with discount)</li> <li>• Ocean Freight – US\$ 9/ton</li> <li>• Port handling charges - ₹245 per Ton</li> <li>• Dollar Rupee Exchange Rate – 44.29 ₹/\$ (as on Bid date 2.1.2007)</li> <li>• Rupee Devaluation rate – 1.07%</li> <li>• GCV – 5200 Kcal/kg</li> <li>• SHR – 2230 Kcal/kwh for primary fuel</li> <li>• Heat Rate Degradation @ 0.25% after first 3 years approx</li> <li>• Auxiliary Consumption @ 6.5%</li> <li>• Imported Coal price</li> </ul>

		<p>CERC notified escalation rate at bid time was 6.61%. Due to controllability of coal costs it was assumed 60% of 6.61%)</p> <ul style="list-style-type: none"> <li>• Rail Freight Escalation @ 1.5% (No escalation published by CERC at the time of bid)</li> <li>• SFO @ 2 ml/kWh (CERC Tariff Regulations 2004)</li> <li>• SFO Price : ₹30000/KI</li> </ul> <p><b>Levellized Energy Charges calculated at 10.6% discount rate = ₹1.34/kwh</b></p>	<p>Escalation @ 3.46%</p> <ul style="list-style-type: none"> <li>• Port Handling Charges @ 3.22% (60% of 5.37% being CERC notified escalation rate for Port Handling Charges)</li> <li>• Ocean Freight escalation @ 2.27% (25% of 9.08%, being CERC notified escalation rate for ocean freight)</li> </ul> <p><b>Levellized Energy Charges calculated at 10.6% discount rate = ₹1.53/kwh</b></p>
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63. It is noticed that in case of Haryana, the petitioner has quoted the energy charges at the levelized rate of 1.963 Rs /KWh (including transmission charges and cost of secondary fuel oil) with a blending ratio of 70:30 between domestic and imported coal. The petitioner has assumed USD 26 per MT for GCV of coal of 5200 KCal/Kg with rupee dollar exchange rate escalation of 1.07% and coal price escalation @ 10% after every five years. In case of GUVNL, the petitioner has quoted levelized energy charges of ₹1.35 per Kwh (inclusive of cost of secondary fuel oil) based on GMDC domestic coal and imported coal as fall-back option as the basis for bid. In case of imported coal, the petitioner has shown FOB price of imported coal @ USD 24.76 per MT for GCV of 5200 KCal/Kg with rupee devaluation rate of 1.07% and imported coal price escalation @ 3.46%. Based on this information, the difference in FOB price of Coal on the SCOD of Phase III and IV of APL Mundra has been worked out as under:

### Gujarat

	As on SCOD <sup>1</sup> i.e. Feb,2013	As on June 2013	Quantity/ Unit
Escalated price (5200) (assumed)	29.51 \$/MT	31.14\$/MT	0.428
FOB coal price (4556) (actual)	77.56 \$/MT <sup>2</sup>	48.59 \$/MT	0.516
Difference	48.05 \$/MT	17.45\$/MT	0.088
Exchange Rate	44.29 ₹/\$	59.70 ₹/\$	
Difference in INR/MT	2128.13₹/MT	1041.76₹/MT	

<sup>1</sup> SCOD price is considered for the month of Feb,2012. Committee has considered blended GCV of 4556 Kcal/KG. <sup>2</sup> HBA price is considered for GCV of 5200 Kcal/Kg.

### Haryana

	As on SCOD*	As on June 2013	Quantity /Unit
Escalated price (5200)	26.00 \$/MT	26.52 \$/MT	0.428
FOB coal price (5200**)	64.05 \$/MT	64.78 \$/MT	0.428
Difference	38.05 \$/MT	38.26\$/MT	0.000
Exchange Rate	42.05₹/\$	59.70 ₹/\$	
Difference in INR/MT	1600₹/MT	2284 ₹/MT	

\* SCOD is considered in the month of Aug, 2012. \*\*Committee has considered imported coal of 6322 Kcal/Kg for blending. This may further widen the gap.

64. The Committee has worked out the difference in energy charges between the assumption at the time of the bid and the actual energy charges which includes ocean freight charges, port handling charges, insurance, inland transportation charges etc. as under:

### Gujarat

Particulars	Unit	As per Committee Report (A)	As assumed in Bid (B)	Difference (A-B)
Calorific value	Kcal/Kg	4556	5200	(644)
Landed Price of Imported	INR/MT	4060	2274	1786
Energy charges	Rs/KWh	2.24	1.35 <sup>1</sup>	0.89

(<sup>1</sup> Energy charges quoted by bidder rounded to two decimal)

### Haryana

Particulars	Unit	As per	As	Difference
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		<b>Committee Report(A)</b>	<b>assumed in Bid (B)</b>	<b>(A-B)</b>
Landed Price of Imported coal <sup>1</sup>	INR/MT	5934	1905	4029
Energy charges (quoted) A)	Rs/KWh	2.75	2.15	0.61

(<sup>1</sup> Landed price of imported coal has been worked out as per basis of quoted energy charges submitted by the petitioner)

65. In view of the above, it is observed that the main reason for difference in energy charges is that the Committee has considered the actual ocean freight charges, port handling charges, finance charges and exchange rate variation for the entire FOB coal price. Since the scope and spirit of the order dated 2.4.2013 pertains to the compensatory tariff on account of the impact of Indonesian Regulation, we are inclined to accept the coal price calculated on the basis of FOB price only. For the incremental quantum of coal which will be required on account of difference in GCV quoted in the bid and the actual GCV of the coal used, the expenditure of coal at the landed cost at the generating station for the incremental quantum should be reimbursed. In case of Haryana, there is blending between domestic coal and imported coal and beyond 30% of imported coal, the blending percentage varies depending on the availability of domestic coal. Therefore, the petitioner should be reimbursed the actual cost of imported coal corresponding landed fuel cost for the 28% which the petitioner has to import to meet the shortfall in domestic coal supply which was not envisaged at the time of bid submission. In respect of 30% of imported coal which was envisaged at the time of bid, compensation would be allowed only on the FOB price along with the foreign exchange rate variation as on date of import. In respect of 42% of domestic coal used, the Petitioner shall continue to get the quoted tariff without any adjustments in the price increase, transport cost and other parameters as assumed at the time of bid.

## **E. Foreign Exchange Rate Variation**

66. A related question pertaining to the price of imported coal is the treatment of foreign exchange rate variation. Haryana Discoms have submitted that the order of the Central Commission does not intend to factor in any change in the variation of foreign exchange in the compensatory tariff calculations. Respondents have submitted that the scope of compensatory tariff is limited to insufficient domestic coal availability and change in imported coal prices due to Indonesian Regulations; and as such the depreciation in the Indian rupee against US dollar cannot be passed on to the procurers.

67. Learned counsel for the petitioner submitted that the committee in its Report has observed that Foreign Exchange component being an integral part of fuel, has to be factored in to evaluate the actual hardship faced by the petitioner which is also in line with the mandate given to the Committee by this Commission to derive a variable compensation package which should commensurate with the hardship that the petitioner is suffering on account of the unforeseen events. Learned counsel for the petitioner further submitted that both the bids were predominately premised on domestic coal (GMDC Morga–domestic coal for Gujarat and 70% linkage coal for Haryana) and even bid conditions did not allow to quote in both i.e. USD and INR and the tariff was quoted and accepted in INR. There was no opportunity for the petitioner to quote in escalable USD. Learned counsel submitted that without addressing the foreign exchange fluctuation effect which is an integral part of energy charges, the compensatory tariff will not reflect the true hardship being faced since the petitioner never submitted its bid on the basis of the imported coal and foreign exchange risk was

never envisaged. Due to change in circumstances post bidding, initially the petitioner was forced to shift from domestic to imported coal and later the escalation in price of imported coal coupled with depreciation of rupee has worsened the situation. Learned counsel for the petitioner submitted that the Quoted Energy Charge in both the cases do not have any break up (unlike case-2 bids based on imported coal) of element wise tariff component for FOB, Ocean Freight, Port Handling Charges, foreign exchange rate variation, transmission charges (applicable in case of Haryana) etc. In this connection, learned counsel for the petitioner relied upon the salient features of the bid invited by the procurers which is extracted as under:

### **Bid Parameters**

Generation unit	Phase III	Phase IV
Bid particulars	Gujarat Bid 02	Haryana bid
Type of bid	Case I	Case I
Fuel to be specified	Unspecified; however, it can only be from Domestic sources ( <i>Note: for imported coal, offer was to be made against Bid 03</i> )	Unspecified; may include imported coal also
<b>Tariff Quotes</b>		
Denomination	INR No provision for USD	Either fully in INR or in USD No provision to have a mix
Energy tariff	Escalable tariff allowed <sup>#</sup>	Bidders were required to quote in both formats – escalable and non-escalable*
Capacity charge	Escalable tariff allowed	Bidders were required to quote in both formats – escalable and non-escalable*

<sup>#</sup> Since bid was based on captive coal mine, bidder decided not to offer escalable tariff quote. \*Even after getting quotes in both the formats, Haryana decided to sign PPA based on non-escalable tariff with all the bidders.

68. The Committee has noted in Page 46 of report that foreign exchange rate variation have been volatile for the last 6 years and accordingly has suggested that the compensation package would also take into account favorable/adverse Forex movements in the formulation of Compensatory Tariff and once exchange rate is reduced, the benefit of the same would be passed on to the procurers. The committee in the formula for computing normative fuel cost specified as to how each element of fuel cost is to be considered and also has benchmarked each element so that inefficiency in fuel procurement or operation of power plant is not passed on to the procurers. While recommending this, the committee has disallowed reimbursement of secondary fuel oil consumption as part of energy charges. The respondents have commented that rather than working compensatory tariff based on the normative fuel cost (determined using landed fuel cost), it should be computed using incremental FOB cost of imported coal as it may ensure that variation in other cost parameters are not taken into account. The committee has clearly come to the conclusion that there has been an unprecedented and uncontrollable factor such as depreciation of INR which has made the company to face substantial under recovery of capacity related costs beyond the quoted charges under the PPA. Therefore, the committee has recommended the actual fuel cost including transmission losses and charges giving therein full pass-through on account of Foreign Exchange Rate Variation. The Committee, after consideration of the suggestion of Haryana Utility that Forex variation should not be considered for determination of compensatory tariff, has stated that cushion available to absorb foreign exchange rate fluctuation has been consumed by change in coal prices and change in source of coal to the extent of short fall in domestic

coal. Apart from this, the committee has also recognized that the RfP had no provision for bidding in both US Dollar and rupee simultaneously which is desirable in such cases of blending of domestic coal and imported coal.

69. We have considered the submission of the parties and also the view of the committee on the matter. The committee in Chapter 7 of its report has extensively considered the developments relating to the impact of tariff on the concluded PPAs due to non-availability of domestic coal. The advice of the Commission dated 20<sup>th</sup> May 2013 has been specifically brought out based upon which the Cabinet Committee on Economic Affairs (CCEA) has taken a decision that to meet the balance FSA obligations, CIL may import coal and supply the same to the willing Thermal Power Plants on cost plus basis and the higher cost of imported coal to be considered for pass through as per modalities suggested by this Commission. Based upon the decision, the Ministry of Power has issued notification vide FU-12/2011-IPC (Vol. III) dated 31<sup>st</sup> July 2013 wherein a conscious decision has been taken to allow higher cost of imported coal to be considered for a pass through. The Ministry has advised the Electricity Regulatory Commissions to consider the request of individual power producers in this regard as per due process on a case to case basis in public interest and has requested the appropriate Commission to take immediate steps for implementation of the above decision of the Government. Therefore, this Commission would consider the request of the petitioner in alleviating the hardship on account of increase in cost of imported coal due to Indonesian Regulation and also due to the uncontrollable factor of rupee depreciation. We have recognized the factor of rupee depreciation as a trigger point to



renegotiate the contract in our order dated 2.4.2013 vide paragraph 86 which is extracted as under:

*“86. Some of the relevant and important findings of John Stern and J. Louis Guasch quoted by the learned counsel for the petitioner are recalled for taking a progressive decision by this Commission in introducing renegotiation:*

- ✓ To revise the terms of contract, the parties must both agree to renegotiate its terms. If the renegotiation is unsuccessful, the contract collapses;*
- ✓ All long-term contracts are incomplete and it is not always possible to imagine all possible contingencies;*
- ✓ On the basis of experience in developing countries and in some continental European countries, it has been found that Governments often establish semi independent or independent monitoring and enforcement agencies who have the power to review and in particular to modify these contracts following a review instituted either by the buyer or by the seller;*
- ✓ In the long-term contracts spreading over twenty one years and above, prices may need to be varied sharply in unpredictable ways because of major commodity price shocks and/or exchange rate crisis;*
- ✓ In many cases, the need for major renegotiations and the high rates of cancellation for concession contracts involving investment commitments represent major regulatory failures. There are no provisions for negotiation and absence of genuine independence to regulators to revisit the tariff;*
- ✓ External regulator could help align trust perceptions, for example, through dispute resolution methods, periodic and emergency reviews and so on;*
- ✓ Allowing some room for renegotiation and regulatory adoption may seem appropriate and socially desirable in the fact of new problems, changed circumstances and additional information and experience;*
- ✓ Opportunistic renegotiation should be discouraged in both existing and future concessions. The key issue is how to design better concession contracts and how to induce both parties to comply with the agreed upon terms of the concession to secure long term sector efficiency and vigorous network expansion;*
- ✓ Restoration of financial equilibrium should clearly specify the capital base on which the firm is allowed to earn a fair return;*
- ✓ Another element that needs to be very clearly stated in the financial equilibrium clause of the contract is the period of application. The*

*period of application refers to the period of time over which the financial equilibrium is evaluated and in principle it could range from one year to life of the concession. Both these extreme points are inappropriate; A three to five year period seems more appropriate. The financial equilibrium should not bail the operator out for adverse realisations of normal commercial risk;*

- ✓ *When facing petitions for renegotiation, the sanctity of the bid contract must be upheld. The operator should be held accountable for its submitted bid. The financial equation set by the winning bid should always be the reference point and the financial equilibrium behind the bid should be restored in the event of renegotiation or adjustment;*

*Renegotiation should not be used to correct for mistakes in bidding or for overtly risky or aggressive bids.”*

This view has been supported by the Government's action in revising the bidding documents for the case 1 and case 2 biddings wherein the entire cost of imported coal has been considered as a pass through in future. Thus, the Commission is of the view that the full cost of imported coal should be a pass through on FOB rates at the prevailing exchange rates subject to the HBA price indices when source from Indonesia and if source from other than Indonesia with a view to procure coal at cheaper rates subject to the price indices of that country whichever is lower. The ocean transport charges which are incurred in US \$ will also be reimbursed at the prevailing exchange rate.

#### **F. Station Heat Rate and Auxiliary Consumption:**

70. The committee had considered the operating parameters like station heat rate of 2354 kcal/unit, auxiliary consumption of 6.5% and annual PLF of 80% at delivery point in case of Gujarat PPA. In case of Haryana PPA the Committee had considered the station heat rate of 2354 kcal/unit, auxiliary consumption of 8.42%, transmission losses

of 3.60% and transmission charges of ₹2,03,700 /MW/month and annual PLF of 80% at the delivery point. Both Gujarat and Haryana have submitted that the station heat rate given by the generator to GERC was 2150 kcal/unit whereas the Committee has considered 2210 kcal/unit as station heat rate based on actual parameters. Both respondents have requested the Commission to decide the appropriate applicable heat rate at generator terminal considering the technical parameter of the power plant with adjustment of 6.5% allowance towards site conditions. The respondents have also requested to consider the auxiliary consumption of 6.5%. The petitioner has submitted that the Commission may decide the base on actual station heat rate as per the guaranteed parameters with ceiling norms as prescribed by the Commission.

71. Learned counsel for the petitioner explained during the hearing that the Committee has verified that the design SHR of the petitioner's plant as 2210 kcal/kWh. The Committee considered the design SHR of 2210 kcal/kWh and 6.5% allowance for site operating conditions ( as per CERC norms) according to which the SHR works out to 2354 kcal/kWh. Learned counsel also submitted that the Committee considered that with the proposed GCV of 4500 kcal/kWh, SHR of 2354 kcal/kWh is realistic and will arrive at the optimum fuel cost. The petitioner in its affidavit dated 1.2.2013 has submitted SHR of 2230 kcal/kWh for first three years and heat rate degradation at 0.25% per annum for balance period of PPA. Accordingly, levelised SHR works out to 2257 kcal/kWh. The petitioner considered above mentioned SHR of 2257 kcal/kWh while quoting tariff considering domestic coal linkage as source of coal. Learned counsel submitted that the moisture content in domestic coal is around 10%-12% and the coal being used i.e. Indonesian coal has 33-35% moisture. He further submitted that

use of coal with high Moisture deteriorates SHR as every percentage increase in moisture leads to increase of SHR to around 8 kcal/kWh. He submitted that duly corrected SHR, after considering deterioration due to higher moisture in Indonesian Coal would be around 2390 kcal/kWh. However, the committee in consultation with Technical Consultant has only agreed to consider SHR of 2354 kcal/kWh. Learned counsel for the petitioner submitted that in the proceedings initiated by GUVNL before the GERC in Petition No. 1210 of 2012 the petitioner had submitted SHR of 2150.28 Kcal/kWh based on Coal with GCV of 5200 Kcal/kg. However, within the OEM specifications/boiler design parameters, the petitioner is using coal with GCV of 4500 Kcal/kg in order to reduce the fuel cost. He also submitted that para 26.3(c) of the Statement of Objects and Reasons of Central Electricity Regulatory Commission (Terms and Condition for Tariff) Regulations, 2009 allows 6.5% loss towards variation for actual site condition for Thermal Generating Station achieving COD on or after 01.04 2009. He submitted that considering the design SHR of 2210 kcal/kWh and 6.5% allowance for site operating conditions (as per CERC norms), SHR works out to 2354 kcal/kWh which has also been verified by technical consultant. Learned counsel for the petitioner submitted that the methodology adopted by the Committee being based on actual, lower SHR will be used for determining compensatory tariff if actual SHR achieved by the petitioner is lower than 2354 kcal/kWh.

72. Since the plant will not operate continuously at rated capacity and site operating conditions will differ from design operating conditions, considering the design SHR of 2210 kcal/kWh and 6.5% allowance for site operating conditions (as per CERC norms), SHR works out to 2354 kcal/kWh which has been verified by technical consultant in the

Committee Report. The findings of the consultant are recorded by the Committee as under:

“As per technical consultant’s report, weighted average GCV of coal to be used for both the phases on the basis of design parameters has to be near the boiler design 4500 Kcal/Kg. In case of Phase III, lower GCV coal may be sourced from Bunyu/low GCV coal and in case of Phase IV lower GCV coal from domestic coal may be used for appropriate blending in line with the parameters suggested by technical consultant. According to the studies conducted by technical consultant, following results were noted:

Blended GCV coal	Station Heat Rate(Kcal/K Wh)	Auxiliary Loss	Generation (in MW)	Blending Ratio (Melawan:Bunyu) by weight
GCV (4500 Kcal/Kg)	2354	6.50%	660	70:30
Case I:4275 Kcal/Kg	2382	7.05%	640	60:40
Case II:4200 Kcal/Kg	2400	7.15%	620	55:45

The blending as suggested by technical consultant even after change in station heat rate is efficient from commercial angle which is in line with intent of the Commission’s direction to reduce the burden on the consumers. Having considered the facts and submissions made by the parties, the Commission is of the view that a station heat rate of 2354 kcal/kWh with blending of coal at 4556 Kcal/kg as recommended by the Committee should be taken for calculation of compensatory tariff. This is subject to the condition that SHR equivalent to design SHR plus maximum site conditions allowance at the rate of 6.5% or as per CERC norms applicable or actual, whichever is lower will be used.

**G. Sharing of the Profits of the mines Indonesia.**

73. The Commission had directed in its order dated 2.4.2013 that the Committee should keep in view the consideration that "the net profit less Government taxes and cess etc. earned by the petitioner's company from the coal mines in Indonesia on account of the bench mark price due to Indonesian Regulation corresponding to the

quantity of the coal being supplied to the Mundra Power Project should be factored to pass on the same in full to the beneficiaries in the compensatory tariff". The Committee in its report has submitted that the analysis was carried out by KPMG, since, there was no supply from PT Mitra Mines upto 31.3.2013, there are no profit or losses to be considered for working out the compensatory tariff. KPMG has also found that there was a share of profit after tax for Phase III and IV at Indonesia amounting to 6000 US\$ for the period 23.9.2011 to 31.3.2012 and 336,000 US\$ for the period 1.4.2012 to 31.3.2013 in respect of PT Lamindo Mines. The Committee has stated that the above profits/losses have been prorated for the supply made to Phase III and Phase IV PPAs. On the basis of the report of KPMG, the net profit earned by Indonesian Companies has been factored while arriving at the compensatory tariff. GUVNL had submitted before the Committee that for the purpose of the adjustment of net profit from Indonesian Mines, only the difference between coal price notified by Indonesian Government from time to time and the coal price at the bid date is to be considered after adjustment of applicable taxes. The Committee in its report has stated that the suggestion is difficult to implement as it is not possible to separate the incremental profit/loss from the overall profit/loss in a realistic way where, in totality, the Indonesian mines have incurred losses. The Committee has further observed that it appears from the Coal Supply Agreement submitted by the petitioner that the coal was proposed to be sourced from third party mining companies where Adani Group had no equity stake. The Committee has concluded that suggestion of GUVNL is not practicable in Adani's case.

74. The Respondents have submitted that in the event, there are losses in the mining operation on account of other reasons, the incremental profit due to Indonesian

Regulation cannot be adjusted against the losses and it is not open to the petitioner to share the net profit alone. The respondents have submitted that for the purpose of adjustment, only the difference between coal price notified by the Indonesian Government from time to time and the coal price considered at the time of the bid needs to be considered after adjustment of the applicable taxes.

75. The petitioner has submitted that the coal excavated from the Adani Indonesian mines was of inferior quality because of which the petitioner's holding company namely Adani Enterprise Limited entered into an agreement with third party for supply of coal. As per petitioner's Fuel Supply Agreement with Adani Enterprise Limited, the latter was obligated to source coal from a third party and supply the same at the contracted price of USD 36/MT before the promulgation of Indonesian Regulation. The petitioner had submitted that order dated 2.4.2013 provides for setting of the compensatory tariff by deducting the net profit earned by the petitioner's mining company and the same is one way process. In case the petitioner's mining company is incurring losses, the same will not be added in the compensatory tariff.

76. We have considered the submission of the parties. As per our directions, the net profit earned by the coal mines owned by the holding company of the petitioner on account of the differences in prices of coal after operation of the Indonesian Regulations should be considered for adjustment against the compensatory tariff. Even though the Committee has not considered the profit from mines on the premise of production of low GCV coal as per books of accounts of the petitioner, the Commission after considering the submissions of GUVNL and Prayas is of the view that the methodology of

incremental revenue on account of benchmark price of Indonesian Regulation should be followed for sharing of mining profit. Since the petitioner has envisaged to supply of full quantity of coal of 5200 GCV in case of Gujarat at discounted price and 30% quantity of coal in case of Haryana, the equivalent quantity corresponding to GCV of 3000 Kcal/kg at proportionate discounted price has been considered to work out incremental profit as under :

Sr. No	Unit	Particulars	Gujarat	Haryana
1)	Kcal/KWh	Station Heat Rate	2354	2354
2)	KCal/Kg	Gross Calorific Value	3000	3000
3)	In %	Station Auxilliary Cons.	6.50%	6.50%
4)	MW	Contracted capacity	1000	1425
5)	In %	Plant Load Factor	80%	80%
6)	HRs	No.of hrs in a year	8760	8760
7)	MUs	Total units generated	7008	9986.4
8)	MMT	Equivalent Quantity of coal	3.12	2.51*
*30% quantity considered			<b>(53%)</b>	<b>(30%)</b>

Accordingly, the profit on incremental revenue to mining companies owned by the petitioner has been worked out as under:

Incremental Profit			Gujarat	Haryana
1		Gross Calorific Value	3000.00	3000.00
2	\$/MT	FOB Price as on June,2013	22.00	22.00
3	\$/MT	FOB price as on June,2013	16.56	15.30
4	\$/MT	Less :Incremental Mining Cost	(#)	(#)
5	\$/MT	Differential	5.44	6.70
6	\$/MT	Royalty @13.5%	0.73	0.90
7	\$/MT	Revenue net of royalty	4.71	5.80
8	\$/MT	Taxes and duties in Indonesia	2.12	2.61
9	\$/MT	Incremental Profit	2.59	3.19
10	MMT	Equivalent Quantum	3.12	2.51
11	mil \$	Product of Sr No 9 &10	8.08	8.01
12	\$/kwh	Per unit profit	0.00922	0.00064
13	INR/\$	Exchange rate	59.70	59.70
14	INR/kwh	per unit profit	0.0550	0.0383



Note: For Computation, Indonesian Coal Index 3 of Argus (5000 GAR) has been considered# To be reduced based on audited accounts of mining company.

Discount assumed in 5200 Kcal/Kg

	Gujarat	Haryana	Unit	Source
Assumed FOB Price	24.76	26.00	\$/Ton	Assumed in bid
FOB Price as on Dec,2006	31.17	31.17	\$/Ton	As per Argus Index
Discount .....(A)	21%	17%		

Assumed price in bid corresponding to 3000 Kcal/kg for Gujarat

	Gujarat	Haryana	Unit	GCV	Source
	29.97	29.97	\$/Ton	5000	As per Argus Index
FOB Price (Dec,2006)	17.98	17.98	\$/Ton	3000	Proportionate
Discounted Price	14.28	15.00	\$/Ton	3000	Product of A & B
Escalation Rate	2.91%	2.00%	(%)		As per assumption
FOB Price(June 2013)	16.56	15.30			

**H. Sale of Power to third party above target availability and sharing of surplus from merchant sale**

77. The Committee in its report has stated that under the PPA the company has to sell all its available contracted capacity to the procurers; however, this provision can be modified so that the right to avail contracted capacity above normative availability is relinquished by the procurers and allowed to be sold to third parties with equal sharing of excess realization above energy charges. The Committee has recommended that 50% of excess realization over energy charge (including compensatory tariff) recovered from the sale to third party shall be provided to the company. Such share of excess realization from sale would be utilized towards reducing the hardship facing by the company on capacity cost front. The Committee has left it to the Commission to take an appropriate view on this aspect The Committee has illustrated the sharing of excess

realization of energy charge as under:-

Sr. No.	Particulars	Units		Remarks
1.	Normative Availability	%	80%	As per PPA
2.	Merchant Sale	%	20%	If allowed sale to third party
3.	Merchant Price	INR/kWh	4.00	
4.	Energy Charges	INR/kWh	2.24	As calculated as per Annexure IV for Phase III
5.	Per Unit Surplus	INR/kWh	1.76	(4) – (3)
6.	Incentive to Generator	INR/kWh	0.19	25p/unit beyond 85% availability
7.	Balance Surplus	INR/kWh	1.57	(5) – (6)
8.	Share of Procurers @50% of balance surplus	INR/kWh	0.78	50% share
9.	Per unit share to Procurers	INR/kWh	0.19	Share of Procurers apportioned on 80%

The Committee has recommended that the payment of incentive is considered only if the availability is declared in excess of 85%. Further, the proceeds for sale to third party in excess of energy charges has also to be taken in share equal to the procurers. The sale of power beyond normative availability depends on market condition. The certainty of price and quantum cannot be achieved. Hence, per unit adjustment of 0.19 INR/KWh will vary over a month to month basis.

78. The respondents have submitted that merchant sale above 80% would be shared between the procurer and the generator @ 60:40 (without any payment of incentive to Generator) subject to a minimum incentive of 10 paise per unit to the procurers. However, for a period after three years, the respective State utilities may review the decision and take appropriate view at the relevant point of time considering the demand and supply position in the State. In response, the petitioner has submitted that although the committee has suggested sharing of profit between the petitioner and the procurers in the ratio of 50:50, the petitioner agrees to share profit at the ratio of 60:40, as

suggested by the procurers.

79. Learned counsel for the petitioner submitted that as sought by the Discoms, the petitioner also in-principle agrees to provide incentive up to 10 paisa on first charge basis to the respondents, in case the share of respondents from merchant sale is less than 10 paisa and incentive beyond 80% availability should be calculated as per the illustrative calculation given in the committee's report. To achieve optimum level of availability and for sale of power beyond 80%, the petitioner will have to put additional resources into the process. The PPAs executed with Respondents and standard bidding documents contemplated/envisage grant of incentive beyond normative availability. It was also submitted that the petitioner should be given incentives for production beyond normative availability as per PPA conditions.

80. The petitioner and the respondents have agreed to allow the petitioner to sell power above 80% availability and share the profits between the procurers and generator in the ratio of 60:40 with a minimum ceiling of 10 Paise /kWh towards the share of procurers. As regards the sale to third party, the PPA requires prior written consent of both the parties. We are of the view that there is no requirement to amend the PPA and only with the prior consent of the procurers, the petitioner can sell to third parties and in that event only, the profit from sale beyond availability of 80% will be shared between the procurers and the generator in the ratio of 60:40. Accordingly, in case of sale of power with mutual agreement, the recommendation of committee in respect of computation of per unit price corresponding to surplus energy sold beyond target availability will be worked out as below:

Sr. No.	Particulars	Units		Remarks
1.	Normative Availability	%	80%	As per PPA
2.	Merchant Sale	%	20%	If allowed sale to third party
3.	Merchant Price	INR/kWh	4.00	
4.	Energy Charges	INR/kWh	2.24	As calculated as per Annexure IV for Phase III
5.	Per Unit Surplus	INR/kWh	1.76	(4) – (3)
6.	Incentive to Generator	INR/kWh	0.19	25p/unit beyond 85% availability
7.	Balance Surplus	INR/kWh	1.57	(5) – (6)
8.	Share of Procurers @50% of balance surplus	INR/kWh	0.942	60% share
9.	Per unit share to Procurers	INR/kWh	0.236	Share of Procurers apportioned on 80%

(The above illustration is to be used for working out reduction in compensatory tariff on month to month basis)

**(l) Unconditional option of non-procurement of power**

81. With regard to the issue raised by both Gujarat and Haryana regarding unconditional option of no procurement of power, learned counsel for the petitioner submitted that the same was never raised by the Respondents Utilities before the Committee. He submitted that the said concern of the petitioner will be addressed through merit order dispatch operation. Learned counsel submitted that since power procurement of Haryana Utilities shall be guided by Merit Order principle, the procurers may not procure power in terms of the PPA if they deem appropriate.

82. The Commission is of the view that the respondents have the right of not scheduling the power if it does not fall in merit order. However, the procurers have the contractual commitment under the PPA to pay the capacity charges even though the

power is not scheduled by them. The procurers' liability for payment of fixed charges cannot be waived and shall be governed by the provisions of the PPAs. Moreover, any such dispensation will also render the compensatory tariff unworkable.

**(J) GCV of domestic coal in case of Haryana**

83. Haryana Utilities in its written submission dated 18.11.2013 has submitted that as per the calculations, the petitioner would use domestic coal for 42% of contracted capacity which would be sourced from Coal India Limited (CIL). The coal from CIL would be billed for a Gross Calorific Value (GCV) of 3600 or more whereas the GCV considered in the calculations is 3300 on the premise that the quality of coal received from CIL is inferior to the quality of coal billed. However, the loss on account of inferior quality coal cannot be passed on to the procurers as the same has to be taken up by the generator with the coal companies and appropriate level in the Government of India.

84. The petitioner has submitted that the committee has deliberated on the said issue at length and observed that actual rate of coal and GCV of coal on fired basis will be considered after due analysis by the third party sampling agency. The petitioner has further submitted that the Regulatory Commissions (HERC and CERC) have recognized that GCV of domestic coal for HPGCL and NTPC power plants are deteriorating every year. He also submitted that difference between billed GCV and actual GCV of coal received adds to hardship as it increases the quantity of imported coal being used in the plant to fulfill the PPA obligations.

85. The supply of the coal by MCL to the petitioner for the Phase-IV of the project is governed by the provisions of the fuel supply agreement which provides for supply of

annual contracted quantity at particular GCV. If the GCV of coal supplied falls below the specified GCV in the FSA, the petitioner has liberty to seek compensation from MCL for the same and also to take appropriate action under Law. In our view, the procurers should not be made to suffer on account of the non performance of contractual obligation by the coal supplier. It is however noted that supply of poor quality coal by CIL has direct impact on the quantity and GCV value of coal to be imported and coal cost. Therefore, the Commission accepts recommendation of the Committee to consider actual heat value of coal as per quality determination by independent third party at unloading end to arrive at the quantity of imported as well as domestic coal to be used in the plant. The Commission directs that any improvement in quality and consequential reduction in tariff will be passed on to the Procurer as per the provisions of the Committee's formula.

**(K) Ceiling of Gross compensatory tariff:**

86. The Committee in para 5.2 of the report has made variable cost comparison in order to ascertain the competitiveness of the power produced by Phase III and IV of the Mundra Power Project in terms of merit order dispatch or ranking. The Committee has reasoned that higher order dispatch of power and price advantage makes it more likely that the respective state electricity boards would not be in a position to purchase power at this price from other sources. While preparing the merit order table for both Gujarat and Haryana, the Committee has compared the variable cost of generation of Mundra Power Project with those for the Central and State generating stations and other Independent Power Producers and the possibility of upward revision of energy charges on account of escalation in fuel charges, O&M expenses etc. in these stations. The

Committee has come to the conclusion that in such a scenario, Phase III and IV of Mundra Power Project may enjoy higher ranking in the merit order dispatch. The Committee has also assessed the outcome of the procurement processes initiated by distribution companies under Case I long term and medium term competitive bidding process and has concluded that power from Mundra Phase III and IV are most competitive.

87. GUVNL in its letter dated 29.7.2013 to the Committee in response to similar observations in the draft report has submitted that it is very difficult to put a ceiling on the competitiveness of power as it differs for each procurement and the dynamics change with the addition of new generation into the system of respective procurers. GUVNL has further submitted that it is difficult to link it with historical coal price trend as it may lead to increase in imported coal price. Linking it to tariff based on quotes received in recent bids is also not correct as the terms and conditions of those bids would be different and may not reflect the proper market conditions because of hyped-up issue of non-availability of domestic coal. This is because these projects are scheduled to be commissioned in 5 to 6 years. GUVNL has suggested that the limit should be limited to a certain percentage of the compensatory tariff. The Committee in para 5 of its report at page 89 has mentioned that as per the discussion in the committee meeting on 30.7.2013, such ceiling on compensatory tariff will be addressed through merit order dispatch operations as it will incorporate the prevailing market conditions.

88. In our view, no such ceiling can be prescribed for scheduling of the power at the

rate arrived at after grant of compensatory tariff. Merit order is governed by different principles and varies from time to time. The procurers are at liberty not to schedule the power in accordance with provision of PPA if they find cost of power does not come with merit order.

**(L)- Adjustment of Transmission Charges and losses in case of Haryana**

89. The Committee has recommended factoring of transmission charges in the determination of actual energy charges (a) on actual cost plus basis for use of HVDC system till the transmission licence is granted and once the transmission licence is granted, it shall be paid as per CERC norms. Learned counsel for Haryana submitted that as per the PPA, the petitioner had to supply the power at Haryana State periphery through a dedicated transmission network and the cost of transmission over the network was included in the quoted tariff; hence, the transmission charges should be from any of the following:

- a) The per unit transmission charge (including losses) as per the POC formula. (taking into account only 80% capacity of injection and drawl charges).
- b) The per unit transmission charge determined by this Commission on the petition filed by Petitioner.
- c) The transmission charges built in at the time of bidding may be decided by an order of the Commission based on its norms so that the normative transmission charges built in to the levelised bid cost could be estimated.

90. Learned Counsel for the petitioner submitted that the petitioner concurs with the option suggested by Haryana Utilities that transmission charges be calculated as per



PoC mechanism. He submitted that PoC mechanism is an established and undisputed mechanism which may be adopted by CERC taking 100% LTA quantum under PPAs with Haryana Utilities. He further submitted that the dispensation has to be appreciated in the spirit of mitigation of enhanced cost implication due to exceptional hike in imported coal prices by the surplus generated from sale of power on merchant basis. He also submitted that as per FCA mechanism of the committee, benefit on account of reduction in PoC charges, if any, will be passed on to Haryana Discoms.

91. In our view, PoC charges method, which is in vogue with effect from the date of effect given as per Inter-State Transmission license provided to the petitioner would be appropriate and just option, as, in case any benefit is gained by the reduction in POC charges, the benefit of the same will be passed on to Haryana Discoms by applying the Fuel Cost Adjustment mechanism as per the Committee Report and as modified by the Commission. Accordingly, applicable PoC Charges and losses be added to determine actual energy charges at Delivery Point (i.e. Haryana STU) from the date of license of APL HVDC system. The transmission charges prior to grant of license since have been included in the quoted tariff @ 0.48 Rs/Kwh, the same may be considered for the period 1<sup>st</sup> April 13 till date of grant of transmission license.

**(M)- Change in Law events considered by the Committee in case of Haryana**

92. The committee has considered the following change in law events while deriving the compensatory tariff under Haryana PPA.

- Royalty rate change from ₹ 55 + 5% of Basic Price to 14% of Basic Price
- Clean Energy Cess of ₹ 50/ton levied on domestic coal

- Central Excise duty @ 6.18% levied on domestic coal prices including Basic, royalty, crushing and sizing charges, surface transportation and stowing excise duty.
- Switch from UHV based Pricing to GCV based pricing system.
- Class Change from 140 to 150 for Coal Group for Trainload movement
- Increase in Busy Season surcharge from 5% to 12%.
- Increase in Development Surcharge from 2% to 5% on railway freight and busy season surcharge.
- Levy of Service Tax on Railway Freight with 70% abatement on basic railway freight, busy season surcharge and development surcharge
- Increase in Auxiliary Consumption due to installation of FGD

93. The committee has further recommended that the energy charges could be restored on account of 'change in law' and has included the same in the recommended compensatory tariff. The "Change in Law" events affecting only energy charges on account of installation of FGD under Haryana PPAs has already been factored by the Committee while deriving the Compensatory Tariff. Further, the Committee has recommended that no separate reimbursement to the Petitioner on account of the same. For, second category i.e. "Change in Law" events affecting both capacity and energy charges, Committee has identified that the condition for installation of FGD which was imposed post execution of PPA as a mandatory condition in Environment Clearance (EC) attracted a huge additional capital cost and also leads to increased auxiliary consumption having impact on quoted tariff. The committee has suggested the Commission to examine these aspects and pass suitable order. With respect to

impact on quoted Capacity Charges, the Committee has worked out increase in the quoted Capacity Charge to be ₹ 0.1429 per kWh for FY 13-14 due to increase in capital expenditure of ₹ 614.70 Cr for installation of FGD. (Page 72 of the report)

94. The Committee has in the report has factored in the increase in energy cost due to FGD for deriving Compensatory Tariff and Committee and has recommended no separate reimbursement to the Petitioner on account of the same. The Committee has identified the Additional Opex of ₹48 Cr. and calculated Per unit impact of Additional Opex of ₹0.0378 per kWh ( $48 \times 10 / 12707.49$ ) in the quoted tariff and has analysed the total impact due to installation of FGD on quoted tariff around 0.1785 ₹/kWh. With respect to “Change in Law” not included in either Capacity Charges or Energy Charges i.e. imposition of custom duty on Electricity exported out of SEZ to DTA and Green Energy Cess, the Committee has observed that the same has not been concluded till date which has resulted in increase in hardship on energy charges. The committee has stated in para 8.3 of its report as under:

“The Company has represented that there have been subsequent events post Bid deadline which has resulted in costs to the Company over and above quoted tariff due to change in law. The eligibility of these events to qualify as Change in Law under the PPA and other relevant documents has not been ascertained by the Committee and would require assessment by competent authority. This has resulted in increase in hardship related to energy charges as well as capacity charges for the Company. The calculations/assumptions in this section are as per Company’s representation.

Under Article 13 of the PPA, Developers are entitled to be restored to the original position, as if the change in law event never occurred, in case of occurrence of any of these events as mentioned in PPA viz. enactment, bringing into effect adoption/promulgation/amendment/ interpretation of any law, change in any consents, approvals/licenses, available or obtained for the projects, etc. Accordingly, the Company is entitled for restitution/ restoration to the original economic position as if the change in law event never occurred.”

Thus, the Committee has calculated the effect of ‘change in law’ on energy charges on

the basis of submission by the petitioner and appropriate assessment has to be made by the competent authority as per provisions of PPA. The committee has left it open to the Commission to ascertain the said events as change in law event or not. Haryana discoms have not objected either to the quantification of impact on tariff due to change in law or the suggestion of the Committee to allow recovery of impact of change in law on tariff.

95. Even though the Committee has recommended the expenditure mentioned in para 91 above on account of change in law to be included in the compensatory tariff, we are of the view that the scope of compensatory tariff cannot be enlarged and should be confined to the impact of Indonesian Regulation. The petitioner may approach the utilities under the provisions of PPA for compensation on account of change in law and may approach this Commission if the matter is not amicably settled. However, the commission agrees that the incremental energy charges on account of installation of the FGD in compliance with the statutory requirement needs to be included in the compensatory tariff as the FGD has impact on the auxiliary consumption of the power plant.

#### **(N) Curtailment of ROE by the Petitioner**

96. One of suggestions of the GUVNL pertained to sacrifice of some portion of ROE by the petitioner which the Committee has considered in para 8.2 of the report. The Committee has made an analysis of the fixed charges of APL for the year 2013-14 in respect of GUVNL that total fixed cost (without hedging ) is ₹ 1.32 per unit ( without ROE of 29 P/unit) as against the capacity charges of Rs 1 per unit under the PPA.

Similarly, for Haryana, the Committee has stated that total fixed cost is around 1.67 per unit (without ROE of 28 P/unit) as against the capacity charges of ₹ 1.119 per unit for the year 2013-14 under the PPA. The Committee has stated that based on the calculation, there is no room for reduction of return of APL as currently there is no return being earned in the project.

97. As regards the issue of sacrifice of ROE, we are of the view that the under-recovery of the capacity charges can be attributed to the bid structure of the petitioner where the petitioner has quoted the 100% of the capacity charges under non escalable component. This has got nothing to do with under recovery of fuel energy charges due to Indonesian Regulations which the procurers would be required to compensate in terms of our order. In our view, equity and fairness demand that the petitioner is made to bear a part of the shortfall in fuel energy cost. Accordingly we direct that the petitioner shall contribute 1% of the RoE invested by it in the project as on SCOD in case of Gujarat and 0.25% in case of Haryana which will go towards reduction of compensatory tariff.

**(O) Process of recovery of compensatory tariff**

98. The Committee has recommended an elaborate process for recovery of compensatory tariff in para 7.5 (A)(d) of the report. We have considered the same. We direct that the following procedures shall be followed for recovery of compensatory tariff:-

- (a) Provisional Compensatory tariff to be charged in the monthly bill and quarterly reconciliation: Provisional energy charges for a particular year shall be calculated

on the basis of the principles given in this order for calculating the compensatory tariff. The provisional tariff may be calculated using the coal prices at the beginning of each financial year and used for monthly billing. The petitioner shall submit quarterly statements of actual costs of coal within 30 days and reconcile the cost of coal each quarter, compensatory tariff vis-à-vis the billing already done with Provisional Energy charges and get settled the same as per payment mechanism agreed for monthly bills.

(b) Calculation of Actual Compensatory Tariff at the end of the Particular Year:

There may be certain differences in Actual energy charges and Provisional energy charges. Within 2 months from the end of a particular financial year, APL shall file a report with the respective Discoms providing detailed calculation of actual energy charges on the basis of principles given in this order. The report to be submitted must contain figures duly audited and authenticated by auditors of repute supported by the copies of the invoices for import of coal.

(c) Adjustments for Profits accruing to the Promoters from the Indonesian mines: Within 2 months from the end of a particular financial year, APL shall file a report with the respective Discoms providing detailed calculation of net profit earned by the holding company of APL from the Indonesian mines corresponding to the quantity of coal supplied to Mundra Power Project on the basis of principles laid down in this order. The report to be submitted must contain figures duly audited and authenticated by auditors of repute.

(d) Truing up/ Reconciliation exercise: On the actual energy charges and adjustments of profits from the Indonesian mines being approved by the respective off takers, the Compensatory tariff shall be trued up. The trued up Compensatory tariff, once approved, shall be payable by the respective party to others.

(e) In case of dispute, the aggrieved party is at liberty to approach the Commission for appropriate relief in accordance

**(P) Computation of compensatory tariff - alternatives**

98. In order to examine the package for compensatory tariff, it is necessary to understand the impact of fuel component in the bid based on the prudent mapping of different expenditure involved in the calculation of energy charges quoted in the bid. It is, however, clarified that such bid mapping is not intended to re-open the bid and the competitive bidding. The exercise is limited to only find out the assumptions of fuel cost in the bid for the purpose of the computing the compensatory tariff. The Commission, vide ROP dated 8.11.2013 directed the petitioner to submit the following information regarding quoted energy charges in the bids in case of Gujarat and Haryana PPA:

“15. The Commission directed the petitioner to furnish the information regarding the coal price, ocean freight, port handling charges, inland transportation cost, FERV etc and operational parameters along with the assumptions considered by the petitioner at the time of bid and considered by the Committee for computing fuel energy charge in the report on compensatory tariff, on or before 29.11.2013.”

The petitioner has submitted the required information vide affidavit dated 21.11.2013.

99. The petitioner has submitted the basis of energy charges quoted for Gujarat PPA

and Haryana PPAs which the petitioner has also submitted vide affidavit dated 1.2.2013. The basis of the bids submitted vide affidavit dated 1.2.2013 has been quoted in para 62 of this order. The petitioner has submitted that in the case of Gujarat, the levelized energy charges based on Morga coal II block calculated @ 10.60% discount rate works out to ₹ 1.34 per KWh and the levelized energy charges of imported coal calculated @10.60% discount rate works out as ₹1.53 /KWh. In case of Haryana, the petitioner has given the levelized energy charges for domestic and imported coal at the ratio of 70: 30 calculated @ 11.1% discount rate works out to ₹ 1.38 per KWh which excludes the transmission charges, transmission losses and secondary fuel oil consumption. The petitioner has shown ₹ 0.573 per KWh as estimated cost of transmission charges, transmission losses and secondary fuel oil consumption. Based on the information furnished by the petitioner, bid mapping has been carried out for both the bids. In case of Gujarat, the levelized tariff worked out on the basis of the assumptions is higher than the quoted tariff. In order to bring the levelized tariff to the tune of quoted tariff, the escalation rates for coal price, ocean freight, exchange rate and port handling charges assumed by the bidder have been revised proportionately and the revised escalation rates have been considered to work out the compensatory tariff.

100. The compensatory tariff for the fuel charges has been worked out by looking in to the following parameters:

- I. Operational Parameters
- II. Indonesian Regulation for FOB prices and other parameters as per Bid Mapping
- III. Transmission charges and Losses ( applicable to contract capacity with Haryana



Discom)

### **Operational Parameters**

101. In case of Gujarat Bid, the consortium of petitioner and Vishal exports Ltd quoted energy charges of ₹1.35 per unit. The premise of quoting energy charges is from Morga-II coal block on the basis of commitment of domestic coal by GMDC with fall back arrangement of imported coal. Bidding has been done by the petitioner based on domestic and/or imported coal. However, the phase III of the project has been executed on the basis of imported coal since domestic coal from GMDC was not available. Gujarat Electricity Regulatory Commission and the Appellate Tribunal for Electricity (ATE) have held that the condition subsequent as specified in Article 3.1.2 (ii) of the PPA dealing with Fuel Supply Agreement was duly satisfied with firming-up of coal supply from Adani Enterprises/ Indonesian mines. Though the matter is sub-judice before the Supreme Court, there is no stay on the order of ATE. Thus, the source of coal for Phase III of project is the imported coal from Indonesia. That being the case, the assumptions of the petitioner regarding the basis for bid tariff for imported coal as fall back option has been considered as the basis for computation of compensatory tariff. Accordingly, the operational parameters for Phase III of the project have been considered on the basis of the bid for imported coal.

102. In case of Haryana, the petitioner has quoted energy charges of ₹1.96 per unit in the bid. The premise of quoting energy charges was 70% domestic coal and 30% imported coal as per the affidavit submitted by petitioner. Due to shortage of domestic fuel, the quantity of imported coal has increased in terms of contracted capacity which

has been worked out as under:

Particulars	Unit	Domestic coal	Imported coal	Additional Imported coal	Total
Contracted Capacity	(in MW)	598.50	427.50	399.00	1425
<b>% by capacity</b>		<b>42%</b>	<b>30%</b>	<b>28%</b>	100%
GCV (kcal/kg)	A	3300	6322	6322	4569
<b>% by weight</b>	<b>B</b>	<b>58%</b>	<b>22%</b>	<b>20%</b>	100%
Contribution of energy (Kcal)/kg}	C=A*B	1914	1391	1264	4569
% by energy terms	D=C/4569	42%	30%	28%	100%

Based on the submission of the petitioner, it was observed in our order dated 2.4.2013 that the petitioner is meeting the fuel requirement for 58% of its contracted capacity through imported coal. However, the Committee has considered the blending ratio of domestic and imported coal as 58%:42% based on GCV of 3300 KCal/Kg and 6322 KCal/kg respectively. After taking into account, the blending ratio of domestic and imported coal as mentioned above, the blended GCV of coal is 4569 KCal/Kg. The technical consultant has certified that as per the boiler design, the optimum calorific value of 4569 Kcal/Kg is near to 4500 Kcal/Kg. Accordingly, the calorific value of blended coal as 4569 Kcal/Kg has been considered based on the blending ratio of 58:42 for domestic coal of 3300 KCal/kg and imported coal of 6322 KCal/Kg. This ratio will keep on changing if the calorific value of the imported coal changes. The actual GCV would vary depending upon the domestic coal supply and correspondingly, the blending ratio of domestic and imported coal may undergo change.

103. In case of Gujarat PPA, the technical consultant has certified that boiler design is such that it would accommodate the blending of 4556 GCV based on the blending ratio of 53:47 between the Indonesian High Grade coal of 6322 KCal/Kg and Bunyu coal of

3000 KCal/Kg. The consultant has further certified that with the said blending ratio, station heat rate (SHR) of the plant will increase to 2354 KCal/Kg. The Committee based on the certification of the technical consultant has suggested that the blending ratio of 53:47 and the SHR of 2354 KCal/Kg is beneficial from commercial point of view as it results reduction in the amount of compensation. The Commission agrees with the recommendation of the Committee and accordingly, the station heat rate of 2354 Kcal/KG corresponding to blended GCV of 4556 Kcal/Kg has been considered to work out the compensatory tariff in case Gujarat PPA.

104. The committee has recommended that the auxiliary consumption as 7.05% as assessed by the technical consultant or CERC norms (6.50%), whichever is lower, should be considered for Phase III of the project. The auxiliary consumption of 6.50% is in line with bid assumptions submitted by the petitioner. Further, GUVNL has not disputed the auxiliary consumption of 6.50%. Accordingly, the auxiliary consumption of 6.50% has been considered for the computation of compensatory tariff.

105. In case of Haryana, the Committee has considered auxiliary consumption of 8.42% with FGD as no CERC norms exist with regard to FGD at present. The Committee has suggested 8.42% as auxiliary consumption due to FGD. The suggestion of the Committee is in deviation of the 6.50% as assumed in the bid. Since the FGD has already been installed, it has resulted in auxiliary consumptions of the plant which has led to increase in consumption of the coal. Therefore, the auxiliary consumption of 8.42% has been considered for Phase IV of the project to arrive at the accurate working of compensation on account of change in Indonesian Regulations. Since the petitioner

has assumed the secondary fuel oil consumption as part of the energy charges in the bid, the Commission is of the view that the secondary fuel oil consumption shall be considered as 0.5 ml/KWh on non sharing basis.

106. The remaining parameters, other than station heat rate and auxiliary consumption have been considered as per the bid assumption verified through bid mapping as under:

#### Gujarat PPA

Particulars	Unit	As per bid Assumption FY 13-14	As per Committee Report	As considered by the Commission
Calorific Value (Imported)(47%)	Kcal/Kg	5200	6322	6322
Calorific Value (Imported)(53%)	Kcal/Kg	-	3000	3000
Blending Ratio (High CV:Low CV)	(%)	-	47:53	47:53
Blended GCV	Kcal/Kg	5200	4556	4556
Allowable Station Heat Rate	Kcal/KWh	2230*	2354	2354
Aux consumption	%	6.50%	6.50%	6.50%
Transit Loss of Coal	%	0.00	0.80%	0.00
Secondary fuel oil consumption	ml/Kwh	2.00	0.00	0.50

\*Heat rate degradation is applicable post 3 years

#### Haryana PPA

Particulars	Unit	As per bid assumption FY 13-14	As per committee Report	As considered by the Commission
Calorific Value (Imported)(42%)	Kcal/Kg	5200	6322	6322
Calorific Value (Domestic)(58%)	Kcal/Kg	4194.5	3300	3300
Blending Ratio (Dom:Imp)	(%)	70:30	58:42	58:42
Blending GCV	Kcal/Kg	4496.15	4569.25	4556
Allowable Station Heat Rate	Kcal/KWh	2230	2354	2354
Aux consumption	%	6.50%	8.42%	8.42%
Transit Loss of Coal	%	0%	0.80%	0%
Secondary fuel oil consumption	ml/Kwh	2.0	0.00	0.50

#### **Computation of impact of Indonesian Regulation**

107. The Indonesian Regulation has affected coal price imported from Indonesia and the fuel component of the energy charges. The hardship due to Indonesian Regulation

has been quantified, in different alternatives, in accordance with following principles:

- a) Where the tariff is premised on imported coal, the impact of the Indonesian Regulation has been limited to FOB coal price only. The other cost components like ocean freight, port handling charges have not been considered, except the impact of FERV on these components, if any, as they are not impacted by Indonesian Regulation.
- b) Where the GCV has been adjusted on account of boiler design and blending of coal in deviation of the GCV of coal assumed at the time of the bid, the cost of incremental quantity of imported coal has been considered at the actual landed price.
- c) In the event of short supply of domestic coal, the petitioner is required to import additional quantity of coal. Since the energy charges for such additional quantity of coal have not been factored in the tariff, the cost of such imported coal has been considered at the actual landed price of coal.
- d) The FOB price of imported coal has been considered on the basis of HBA Index for the month of July, 2013 after adjustment on account of the variation in coal characteristics/ ash content or actual price, whichever is lower.
- e) The impact of rupee depreciation has been allowed in full in respect of all cost elements in USD (i.e. FOB price of coal and Ocean Freight).

108. The impact of Indonesian Regulation on fuel component of energy charges has been worked out separately for Gujarat PPA and Haryana PPA for the purpose of analysis and comparison to find out the best possible alternative to award compensatory tariff. In case of Gujarat PPA, two different alternatives have been considered namely (i) Impact on energy charges on account of difference between actual FOB price and FOB price assumed at the time of bid giving full foreign exchange variation, without considering the logistic costs and (ii) Impact on Energy Charges due to HBA benchmark price with full foreign exchange variation, wherein the logistic costs at the assumed rates with the foreign exchange rates at the date of import. In case of Haryana, the first alternative is not considered as the exact impact cannot be captured where the coal is being imported to meet the additional coal requirement to meet the short supply of domestic coal. Accordingly, alternative (ii) as above have been considered.

109. The alternatives have been worked out as under:

**Gujarat PPA: Alternative (I)**

**Assumptions:**

- As the Indonesian Regulation affects only FOB price of coal in USD, the impact has been assessed on the basis of FOB Price of coal corresponding to imported coal capacity envisaged in bid. Petitioner has assumed the coal of 5200 Kcal/Kg at the time of bid which has been changed to 4556 Kcal/Kg in accordance with the directions of the Commission to explore the blending with low GCV coal to reduce the compensatory tariff in the interest of procurer. In order to work out the

compensation by considering FOB price, we have considered the proportionate FOB price corresponding to 4556 Kcal/kg at the time of bid and for the assumed quantity.

- Station Heat Rate and blended GCV of imported coal has been considered as suggested by the Committee as it is in line with directions of the Commission. and is commercially beneficial to procurers. Accordingly, Operational parameters and blending ratio has been considered as suggested by the Committee as it is beneficial and reducing the compensatory tariff.
- The impact has been worked out on the basis of difference of FOB price during month as per HBA Index and FOB price assumed in bid along with taxes & duties along with actual exchange rate variation. The logistic cost including ocean freight, port handling charges etc. has been not considered in this alternative.
- In view of change of blending of coal to 6322 Kcal/Kg and 3000 Kcal/Kg ( at blended GCV of 4556 Kcal/Kg) against assumed GCV of 5200 Kcal/Kg, the additional coal import has been computed to take care of additional transportation charges and port handling charges including FERV.
- The coal cost for additional coal quantity has been added on impact of coal price to work out the impact of Indonesian Regulation corresponding to the increased quantity due to blending..

The impact on per unit energy charges rate (ECR) has been worked out as under:

-	-	Unit	As per assumption	As considered by Commission
Calorific Value assumed in bid	A1	Kcal/Kg	5200.00	4556.00
FOB Price of coal as on bid	P1	USD/Ton	24.76	21.69
Escalation assumed in bid	E1	( in %)	2.91%	2.91%
Escalated Price as on FY 13-14	P2	USD/Ton	30.04	26.32

### **Actual Coal Price during June,13**

Gross Calorific Value (High)	G1	Kcal/Kg	5200.00	6322.00
HBA Coal Price	H1	USD/Ton	64.78	78.76
Gross Calorific Value (Low)	G2	Kcal/Kg	0.00	3000.00
HBA Coal Price	H2	USD/Ton	0.00	22.00
Blending Ratio (High:Low)	BR	(%)	100:00	46.85:53.15
Blended GCV	G	Kcal/Kg	5200.00	4556.00
FOB Price of blended coal	P3	USD/Ton	64.78	48.59

### **Impact of Indonesian Regulations on Coal Price**

Impact on FOB Price of coal	I 1(P3-P2)	USD/Ton	34.74	22.27
LC + Insurance charges	I2(=I1x3%)	USD/Ton	1.04	0.67
Total impact on FOB Price	I3( I1+ Ix3% )	USD/Ton	35.79	22.94

### **Impact of Indonesian Regulations**

Contracted quantity	C1	MW	1000	1000
Station Heat Rate(SHR)	SHR	Kcal/KWh	2230.00	2354.00
Auxillary consumption	AUX	( in %)	6.50%	6.50%
Specific Coal Consumption	SCC	Kg/KWh	0.43	0.52
Total hours in a year	HR	hour	8760.00	8760.00
Plant Load Factor	%	( in %)	80%	80%
Total units generated	U	Mus/Year	7008.00	7008.00
Quantity of coal required	Q	MilTone	3.21	3.21*
Exchange Rate during June,13	ER	Rs/USD	59.70	59.70
Additional Cost of Coal on bid quantity	(=QxERxI3)	Rs Million	6866.89	4402.60
Cost of Additional quantity of coal	(=X1)	Rs Million	0.00	2672.73
Total impact		Rs Million	6866.89	7075.33



Per Unit Impact on ECR		Rs/KWh	<b>0.9799</b>	<b>1.009</b>
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\*Annual quantity of coal required corresponding to 4556 Kcal/kg is 3.87 MT which has been restricted to assumed quantity of 3.21 MT.

<b>Cost of Additional quantity of coal due to blending of low GCV</b>	<b>June, 2013</b>
Additional quantity (Mil MT)	<b>0.66</b>
FOB Cost	48.59
Ocean freight as on June, 2013 (\$/MT)	12.00
LC + Insurance charges (3%)	1.82
Transit Loss (0.8%)	0.50
Total Cost	62.91
Exchange Rate (\$/USD)	59.70
Total CIF cost (Rs/MT)	3755.67
Port handling charges (Rs/MT)	294.00
Port handling losses (0.25%)	10.12
Total cost per (Rs/MT)	4059.79
Total Additional logistic cost (Rs in Million) (X1)	2672.73

Per Unit Compensation	Rs/KWh	1.009
Less : Profit from Indonesian Mines (Para 76)	Rs/KWh	0.0550
Less : Sale beyond Normative Availability	Rs/KWh	0.236
Less : Reduction due to haircut in RoE	Rs/KWh	#
<b>Compensatory Tariff</b>	<b>Rs/KWh</b>	<b>0.718</b>

\*#To be worked out mutually.

110. Based on the assumption as above, we have analyzed the compensatory tariff per corresponding to the differential cost of coal for assumed quantity and additional cost coal at actual price. The impact on both count has been worked out as under:

GCV of coal	Kcal/Kg	5200	4556
Cost of Additional quantity of coal	Rs Million	0.00	2672.73
Total impact	Rs Million	6866.89	7075.33
Per Unit Impact on ECR	Rs/KWh	<b>0.9799</b>	<b>1.009</b>

As can be observed in the table above, it is noted that per unit impact on energy charge rate worked out on the basis of differential FOB price has been worked out to ₹ 1.009 per KWh which is higher than the compensatory tariff recommended by the Committee. Hence, the differential FOB price approach, although appears to be logical and simple, is not found to be commercially beneficial to consumer.

### **Gujarat PPA: Alternative (II)**

#### Assumptions:

- The change of FOB Price of coal has been considered, keeping other cost components same as assumed in bid. The impact of Indonesian regulation has been worked out as difference of FOB coal price. The actual exchange rate variation has been considered to work out the landed price of coal.
- Station Heat Rate and blended GCV of imported coal has been considered as suggested by the Committee as it is in line with directions of the Commission and is beneficial from angle of consumer interest. Accordingly, operational parameters and blending ratio has been considered as suggested by the Committee as it is beneficial and reducing the compensatory tariff.
- The Petitioner had factored cost of secondary fuel oil consumption of 2 ml/KWh in the energy charges quoted. The Committee has not considered the same as it is part of capacity charges under the CERC Tariff Regulations, 2009. Since the petitioner has assumed the secondary fuel oil consumption as part of the energy

charges in the bid, the Commission is of the view that the secondary fuel oil consumption shall be considered as 0.5 ml/KWh on non sharing basis.

- The cost of ocean freight and port handling charges have been considered in this alternative and same has been worked out by considering escalation assumed by the bidder along with exchange rate variation.
- In view of change of blending of coal to 6322 Kcal/Kg and 3000 Kcal/Kg ( at blended GCV of 4556 Kcal/Kg) against assumed GCV of 5200 Kcal/kg, the additional coal import is calculated to take care of additional coal cost, transportation charges and port handling charges. This additional coal has been considered at actual cost as considered by the Committee in its report.
- The escalation rate for different cost components, as assumed in bid, have been proportionately modified to match with quoted levelized tariff, based on bid mapping, for adoption in the illustrative calculations.

The indicative impact on per unit energy charge rate has been worked out as under:

Particulars	Units	As per assumption	As per Committee Report	As considered for compensation
Gross Calorific Value	Kcal/Kg	5200.00	4556.00	4556.00
FOB Coal Price (as per HBA Index)	\$/MT	64.78	48.59	48.59
(Insurance+ LC+ Transaction)	\$/MT	1.94	1.46	1.46
( ER - FOB price)	₹/\$	47.59	59.70	59.70
Sub-Total	₹/MT	3175.09	2987.85	2987.85
Ocean Freight	\$/MT	10.27	12.00	10.27
(Insurance+ LC+ Transaction)		0.31	0.36	0.31
( ER - for freight )	₹/\$	47.59	59.70	59.70
Sub-Total	₹/MT	503.31	737.89	631.63
Transit Losses (0.80%)	₹/MT	0.00	29.81	0.00
CIF Coal Price	\$/MT	3,678.40	3,755.55	3,619.29

Port Charges	₹/MT	293.93	294.00	293.93
Port Handling Losses	₹/MT	0.00	10.12	0.00
<b>Landed Cost of Coal</b>	<b>₹/MT</b>	<b>3972.33</b>	<b>4059.67</b>	<b>3913.22</b>
Station Heat Rate	Kcal/Kwh	2230.00	2354.00	2354.00
Auxiliary Consumption	%	6.50%	6.50%	6.50%
Specific Coal Consumption	Kg/Kwh	0.43	0.52	0.52
Contracted Capacity	MW	1000	1000	1000
Plant Load Factor	%	80%	80%	80%
No. of hrs in a year	Hours	8760	8760	8760
Total Units Generated	MUs	7008	7008	7008
<b>Quantity of coal</b>	<b>MTons</b>	<b>3.21</b>	<b>3.87</b>	<b>3.87</b>
Cost of Imported Coal	₹ in Million	12768.19	15721.57	15154.43
Additional Logistic cost	₹ in Million	0.00	0.00	160.07
<b>Cost of Coal</b>	<b>₹ in Million</b>	<b>12768.19</b>	<b>15721.57</b>	<b>15314.50</b>
Energy Charges per Unit	₹/KWh	1.8219	2.2434	2.1853
Secondary fuel charges*	₹/KWh	0.0600	0.0000	0.0150
Quoted ECR	₹/KWh	1.3495	1.3495	1.3495
Per Unit Impact	₹/KWh	0.5324	0.8939	0.8508

<b>Additional logistic cost due to blending</b>	As per bid assumption	Actual as per Committee
Additional quantity (Mil MT)	<b>0.00</b>	<b>0.66</b>
Ocean freight as on June, 2013 (\$/MT)	10.27	12.00
LC+ Insurance charges (3%)	0.31	0.36
Transit Loss (0.8%)	0.00	0.10
Exchange Rate (\$/USD)	47.59	59.70
Ocean freight (Rs/MT)	503.31	743.80
Port handling charges (Rs/MT)	293.93	294.00
Port handling losses (0.25%)	0.00	2.59
Logistic cost per (Rs/MT)	797.24	1040.39
<b>Difference in Logistic Cost</b>		<b>160.07</b>

#### **Compensatory Energy Charges during the Month**

Per Unit Compensation	₹/KWh	<b>0.8508</b>
Less : Profit from Indonesian Mines	₹/KWh	0.0550
Less : Sale beyond Normative Availability	₹/KWh	0.2421
Less : Reduction due to sacrifice in RoE	₹/KWh	(#)
<b>Compensatory Tariff</b>	<b>₹/KWh</b>	<b>0.5537</b>

# To be worked mutually by procurer and petitioner

109. The Commission has considered the alternatives illustrated above and decided to approve the alternative no (II) wherein fuel cost of imported coal with foreign

exchange rate variation is allowed and at the same time, the risk premium and part cost of secondary fuel has been adjusted to reduce the compensatory tariff. The compensatory tariff calculated based upon the coal price and bid parameters during the month of June, 2013 has been worked out as Rs 0.8506 per unit without adjustments of other receipts. The blended GCV of 4556 Kcal/Kg has been fixed for the compensatory tariff as it is beneficial to procurers and no additional operational and maintenance expenses as well as additional capitalization on this count will be allowed. The above calculations are for illustrative purpose only, actual calculations of Compensatory tariff will be worked out as per the formulation suggested at para 116 below.

### **Haryana PPA : Alternative**

#### **Assumption:**

- As the Indonesian Regulation affects only FOB price of coal in USD, the impact has been assessed on the basis of FOB Price of imported coal corresponding to 30% as envisaged in bid as well as 28% on account of additional shortage of supply by CIL along with exchange rate variation. The logistic cost and other cost components have been considered as per assumptions at the time of bid for the 30% along with exchange rate variation and actual cost allowed in case of additional 28%.
- The Committee has considered the variation in domestic coal due to various post bid events of change in law nature and recommended to take a view by the Commission. As discussed earlier in this order, the variation in domestic coal

was not the subject matter of this petition, hence the same has not been considered in computation of compensatory tariff.

- The transmission charges and losses have been considered as per the Committee report for computation purpose which will be replaced by actual PoC charges for the concerned month.
- Operational parameters have been considered as suggested by the Committee as it provides optimization in efficiency with the blending of coal to the extent of 4569 Kcal/Kg near to the designed parameters.
- The petitioner had factored cost of secondary fuel oil consumption of 2 ml/KWh in the energy charges quoted. The Committee has not considered the same. Since the change in Indonesian Regulation is restricted to FOB price of coal keeping other components unchanged as assumed in the bid, the Commission felt that the secondary fuel oil consumption, same may be included in line with the CERC norms i.e. 1.0 ml on sharing basis. CERC norm has been further rationalized to 0.5 ml/KWh on non sharing basis.

**Impact of Indonesian Regulations on Energy Charges  
for the Month of July,2013**

<u>Particulars</u>	<u>Unit</u>	<u>As per bid assumption</u>		<u>As per Committee</u>		<u>As considered</u>	
<b><u>Blending Ratio</u></b>							
Imported coal (Stream 1)	Kcal/Kg	5200.00	30.0%	6322	22.0%	6322	22.00%
Imported Coal (Stream 2)	Kcal/Kg	-	-	6322	20.0%	6322	20.00%
Domestic Coal	Kcal/Kg	4194.50	70.0%	3300	58.0%	3300	58.00%
Station Heat Rate(SHR)	Kcal/KWh	2230.00		2354.00		2354.00	
Calorific Value (%)	Kcal/Kg	4496.15		4569.24		4569.24	
Aux consumption	%	6.50%		8.42%		8.42%	
<b><u>Impact of FOB Coal Price of Imported Coal (22%)</u></b>							
Calorific value	Kcal/Kg	5200.00		6322.00		6322.00	

FOB Price	\$/Ton	26.52	78.76	78.76
Insurance+LC+Trans.(3%)	\$/Ton			2.3628
Exchange Rate	Rs/\$			59.70
FOB Price	Rs/Ton			4843.03
Ocean freight	\$/Ton	10.28	12.00	10.28
Insurance+LC+Trans.(3%)	\$/Ton	0.31	2.72	0.31
Exchange Rate	Rs/USD	42.42	59.70	59.70
Port handling charges	Rs/Ton	296.57	294.00	294.00
Port handling losses		0.00	14.80	0.00
Landed Fuel Price		<b>1871.05</b>	<b>5934.37</b>	<b>5769.40</b>
<b>Impact of FOB Coal Price of Imported Coal (20%)</b>				
Calorific Value (%)	Kcal/Kg		6322.00	6322.00
FOB Price	\$/Ton		78.76	78.76
Ocean freight	\$/Ton		12.00	12.00
Insurance +LC+Trans. (%)	%		2.72	2.72
Transit Loss of Coal	%		0.75	0.75
Coal Price... at CIF	\$/Ton		94.23	94.23
Exchange Rate	INR/USD		59.70	59.70
Port handling charges	₹/Ton		294.00	294.00
Port handling losses	%		14.80	14.80
Landed Fuel Price	₹/Ton		5934.37	5934.37
<b>Price of Domestic Coal</b>				
Calorific Value (%)	Kcal/Kg	4194.50	3300.00	3300.00
Basic Coal Price	₹/Ton	557.92	660.00	557.92
Sizing	%	41.00	61.00	41.00
Stowing Excise Duty	\$/Ton	10.00	10.00	10.00
Surface Transportation	₹/Ton	50.00	44.00	50.00
Excise Duty (6.18%)		0.00	47.90	0.00
Royalty (14%)	₹/Ton	82.90	92.40	82.90
Clean Energy Cess		0.00	50.00	0.00
Rail freight	₹/Ton	245.41	1520.00	245.41
Domestic ocean freight	\$/Ton	10.65	-	10.65
Exchange Rate (for freight)	INR/USD	42.42	59.70	42.42
Port Handling Charges	₹/Ton	593.13	294.00	593.13
Port handling and Transit losses @0.8%	₹/Ton	0.00	6.95	0.00
<b>Price of domestic coal</b>	<b>Kg/Kwh</b>	<b>2032.30</b>	<b>2786.24</b>	<b>2032.30</b>
<b>Landed Fuel Cost</b>				
Imported Coal (Stream 1)	\$/Ton	1871.05	5934.37	5769.40
Imported Coal (Stream 2)	₹/Ton	0.00	5934.37	5934.37
Domestic Coal	₹/Ton	2032.30	2786.24	2032.30
<b>Weighted Avg Landed Price</b>	<b>₹/Ton</b>	<b>1983.93</b>	<b>4108.46</b>	<b>3634.88</b>

#### **Impact of Indonesian Regulations on Energy Charges**

Landed Fuel Price	₹/Ton	<b>3634.88</b>
Contracted capacity	MW	1425

Plant Load Factor	%	80%
No.of hrs in a year	Hours	8760
Total units generated	Mus	9986.4
Quantity of coal imported	MUs	5.62
Secondary fuel oil consumption	2 ml/kwh	0.00
<b>Energy Charges at Bus bar</b>	<b>₹/KWh</b>	<b>2.0448</b>
Transmission charges	₹/KWh	0.3490
Transmission Losses	₹/KWh	0.1000
Secondary fuel charges *	₹/KWh	0.0150
<b>Energy Charges at delivery point</b>	<b>₹/KWh</b>	<b>2.5088</b>
Quoted Energy Charges	₹/KWh	<b>2.1450</b>
Impact on Energy charges	₹/KWh	<b>0.3638</b>

#### **Compensatory Tariff during the month**

Per Unit Compensation	₹/KWh	0.3638
Less : Profit from Indonesian Mines	₹/KWh	0.0383
Less : Sale beyond Normative Availability	₹/KWh	0.2360
Less : Credit from return on equity	₹/KWh	(#)
<b>Compensatory Tariff</b>	<b>₹/KWh</b>	<b>0.0895</b>

*# To be worked out mutually by procurer and petitioner.*

110. The Commission, after having considered the above has decided to allow full fuel cost of imported coal with foreign exchange rate variation without any incremental addition due to logistics cost. As regards the components pertaining to domestic coal, incremental cost on account of price/logistic cost etc. is not allowed, except FERV on ocean Freight. The increase in energy charges due to 'change in law' as recommended by the committee has not been considered by the Commission as it is beyond the mandate of the order dated 2.4.2013. As already directed, the petitioner may approach the utilities as per the provisions of PPA. In view of the above, the compensatory tariff for Haryana PPA works out to ₹ 0.0895 per unit which may undergo change on the basis of actual sales beyond target availability on month to month basis. The above calculations are for illustrative purpose only, actual calculations of Compensatory tariff will be worked out as per the formulation suggested at para 116 below.



### **Compensation for past losses from SCOD upto 31<sup>st</sup> March 13:**

111. In case of GUVNL, the Committee has calculated the total fuel cost as ₹1122 crore from 2.2.2012 till 31.3.2013 and under-recovery of energy cost as ₹487 crore during that period. The Committee has further observed that this loss would have been ₹451 crore had the plant operated at the normative plant operating parameters vide page 47 of the Committee's Report. In case of Haryana, the Committee has calculated the hardship faced by the petitioner in supplying power under the PPAs from 7.8.2012 till 31.3.2013 at ₹ 511 cr. The Committee, however, has noted that the loss would have been ₹496 cr (₹1.83/Unit) if plant had operated at the normative plant operating parameters. The under recovery figures include DTA duty and cess.

112. The Committee has further noted that the aforesaid under-recovery figure of energy charges have been computed on the basis of audited figures of annual accounts of PPA sale as per the actual invoices raised by the company and fuel cost incurred by the company. Invoices relating to the fuel cost and revenue have also been checked by KPMG on a sample check basis.

113. The Commission after examination of the recommendation of the Committee above has decided to adjust the components of energy charges which has gone into the total fuel cost as per balance sheet ascertained by the Committee. Those components are - the logistic cost, both domestic and imported coal, domestic fuel component increase in cost and effect of "change in law" (in the case of Haryana) and the transmission cost with reference to the quoted parameters.

114. The working of past losses from SCOD to 31.3.2012 in case of Gujarat PPA is as under:

<b>Sr. No</b>	<b>Particulars</b>	<b>Amount ( ₹ in crore)</b>
(1)	Aggregate under recovery on the basis of balance sheet (actual cost) due to impact of Indonesian Regulation worked out by the Committee	487.00
(2)	Normative under recovery at normative operational parameter worked out by the Committee	451.00
(3)	Less : Difference between actual logistic cost and assumed logistic cost	<b>30.76</b>
(4)	Net compensation from SCOD to 31.3.2013	<b>420.24</b>

115. In case of Haryana PPA, the past losses have been worked out are as under:

<b>Sr. No</b>	<b>Particulars</b>	<b>Amount ( ₹ in crore)</b>
(1)	Aggregate under recovery on the basis of balance sheet (actual cost) due to impact of Indonesian Regulation worked out by the Committee	<b>511.00</b>
(2)	Normative under recovery at normative operational parameter worked out by the Committee.	<b>496.00*</b>
(3)	Less : Amount corresponding to difference between actual logistic cost and assumed logistic cost	<b>4.07</b>
(4)	Less : Amount corresponding to difference between actual (0.661 Rs/kWh as per page 55 of the Committee report) and as assumed (0.48 Rs/KWh) transmission cost	<b>48.82</b>
(5)	Less : Difference between actual ( inclusive of change in law components) and assumed domestic coal price	<b>33.60</b>
(6)	Net Compensation from SCOD to 31.3.2013	<b>409.51</b>

116. Above past losses (inclusive of transmission charges and losses) are worked out on the basis of HBA indices. Amount realized has been worked out on the basis of quoted tariff. It is not clear from the details available as to whether the fuel cost includes cost of carpet coal. It may be mutually settled between the petitioner and

procurers and in case the cost of carpet coal is included in the above amounts the same shall be adjusted.

117. Compensatory Tariff formulation of the Committee is amended hereunder as per the above decisions. The Ocean Freight and Port Charges for respective contract years as per bid quote will be considered for computation of compensatory tariff. Change in Law not being part of the present petition, the cost of domestic coal will be computed for the purpose of compensatory tariff at taxes and duties applicable at the Bid time; the reimbursement of change in law will have to be claimed separately as per committee recommendations.

**Gujarat:**

The following formula has been adopted for computation of compensatory tariff payable beyond 31.3.2013:

Compensatory Cost Adjustment Charge for a particular year (₹ Cr.)	=	Energy Costs of PPA at defined delivery point (₹ Cr.) for that particular year corresponding to units supplied during the year	-	Energy charges revenue@ Quoted Energy Charges under the PPA for that particular year (₹ Cr.) corresponding to units supplied during the year
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**Principles for Cost determination:**

The following principles may be followed while determining the energy charges:

	Particular	Gujarat PPA
A	Cost of Coal (₹ Cr. for the year) corresponding to the Energy Supplied under the PPA	To be computed at Plant Bus bar using the cost of imported coal and other operating parameters as discussed below
B	Transmission Charges (₹ Cr. for the year)	Not Applicable, since delivery point is plant bus bar
C	Total Revised Energy Charges	Sum of the above i.e. (A) + (B)

	(₹Cr. for the year)	
D	Less: Profit from Indonesian coal mining operations ( as per Para 76 of this order)	Incremental Profit from coal mining operation in Indonesia in proportion to the coal used for energy supplied under PPA in Phase III to total revenues, duly adjusted with applicable tax structure upto Indonesia and applicable tax structure upto India as discussed in this order(₹ Cr.);
E	Less: Profit from sale of power beyond Normative Availability on merchant basis (if any)	The actual excess realization from sale on merchant basis, net of all related expenses, over total generation cost to be shared in a ratio of 60.:40 between procurer and generator
F	Net actual Cost towards energy charges	(C)-(D)-(E)

**Cost components of Actual Energy Charges may be determined as under:**

Particular	Gujarat PPA
Station Heat Rate	2354 kcal/kWh (as assessed by Tech Consultant i.e. Design SHR plus maximum site conditions allowance @ 6,5%) or applicable CERC norms or actual, whichever is lowest.
Auxiliary Consumption	Design of 7.05% or applicable CERC norms or as per bid assumptions 6.5% , whichever is lower
GCV of Coal	As certified by Third Party Sampling Agency of Repute based on sampling at Plant. Procedure for sampling to be decided mutually by procurers and petitioner considering practical aspects.
Blending Ratio of Low Grade Coal	Bunyu or any other low grade coal will be used in such a proportion that GCV (ARB) of blended coal is within the range of $\pm 5\%$ of design CV of 4500 kcal/kg. Low Grade coal will be used maximum, to the extent available, keeping the GCV of Blended coal not less than 4500 kcal/kg.
Secondary Fuel Oil Consumption	To be reimbursed @ 0.5 ml/kwh or as per CERC norms on non sharing basis, whichever is lower.
<b>Imported Coal</b>	
FOB Prices of Imported Coal\$	As per actual or benchmarked with HBA index or any other relevant indices whichever is lower at actual exchange rate. In case of change in pricing framework in Indonesia or change in source of coal to other country, relevant coal indices will be used.
Ocean Freight\$	As per bid assumption for respective year (i.e. 10.53 USD/MT for FY 13-14 and thereafter with escalation of 1.97% per annum) at the prevailing exchange rate
Transaction L/C and Insurance Charges \$	As per Bid assumption @ 3% This will include LC, insurance, bank & financial charges and other transaction costs.
Port handling charges at Mundra	As per bid assumption for respective year,( i.e.Rs. 305 per MTfor FY 2013-14 and thereafter with escalation @ 2.74% per annum)less agreed discount @ Rs 20/MT
Transit	0.8% or CERC norms whichever is lower on additional quantum due to

&Handling Losses	blending.
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\$ Monthly simple average of INR/USD exchange rate published by RBI will be considered for computing Energy Charges in Rs/Kwh

## Haryana PPA

The following formula has been adopted for computation of compensatory tariff payable beyond 31.3.2013:

Compensatory Cost Adjustment Charge for a particular year (₹ Cr.)	= Energy Costs of PPA defined delivery point (₹ Cr.) for a particular year corresponding to units supplied during the year *	- Energy charges revenue @ Quoted Energy Charges under the PPA for that particular year (₹ Cr.) corresponding to units supplied during the year
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\*Including transmission charges & transmission losses. In case of shortfall in domestic coal, imported coal will be used.

## Principles for Actual Cost determination:

The following principles may be followed while determining the actual energy charges:

	Particular	Haryana PPA
A	Cost of Coal (₹ Cr. for the year) corresponding to the Energy Supplied under the PPA	To be computed at Plant Bus bar using the cost of imported coal and domestic coal and other operating parameters as discussed below.
B	Transmission Charges (₹ Cr. for the year)	<ul style="list-style-type: none"> <li>▪ As quoted in Bid of ₹ 0.48 per Kwh, till transmission license is granted</li> <li>▪ Once transmission license is granted, paid as per CERC norms</li> </ul>
C	Total Revised Energy Charges (₹ Cr. for the year)	Sum of the above i.e. (A) + (B)
D	Less: Profit from Indonesian coal mining operations ( as per para 76 of this order)	Incremental Profit from coal mining operation in Indonesia in proportion to the coal used for energy supplied under PPA in Phase IV to total revenues, duly adjusted with applicable tax structure up to Indonesia and applicable tax structure up to India as discussed in this order (₹ Cr.);
E	Less: Profit from sale of power beyond Normative Availability on merchant basis (if any)	The actual excess realization from sale on merchant basis, net of all related expenses, over total generation cost to be shared in the ratio of 60:40 between procurer and generator.

F	Net actual Cost towards energy charges	(C)-(D)-(E)
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Note: In case optimization of coal linkage/swapping, is allowed by Gol/CIL, APL will continue to claim energy charges on notional usage of domestic coal at Mundra for the actual quantum supplied against linkage i.e. the mechanism to determine Actual cost toward Energy Charges will be continued without any change, taking into account landed cost of domestic coal for Mundra Project as if domestic coal is being used at Mundra. Any financial advantage on account of Optimization of coal linkage/swapping will be allowed to be retained with APL to adjust against under recovery of Capacity Charge.

**Cost components of Actual Energy Charges may be determined as under:**

Particular	Haryana PPA
Station Heat Rate	2354 kcal/kWh or applicable CERC norm or actual, whichever is lowest.
Auxiliary Consumption	Design of 8.97% (Plant Aux of 7.05% and FGD Aux of 1.92% as assessed by Tech Consultant) or applicable CERC norms or actual, whichever is lowest
Transmission charges and Losses	Actual as per POC calculation.
GCV of Coal	As Certified by Third Party Sampling Agency of Repute based on sampling at Plant. Procedure for sampling to be decided mutually by procurers and petitioner considering practical aspects.
Blending Ratio of Low Grade Coal	Domestic coal or any other low grade coal will be used in such a proportion that GCV (ARB) of blended coal is in the range of $\pm 5\%$ design CV of 4500 kcal/kg. Low Grade coal will be used maximum, to the extent available, keeping the GCV of Blended coal not less than 4500 kcal/kg.
Secondary Fuel Oil Consumption	To be reimbursed @ 0.5 ml/kWh or as per CERC norms, on non sharing basis whichever is lower.
	Imported Coal
FOB Prices of Imported Coal#	As per actual or benchmarked with HBA index or any other relevant indices at actual exchange price whichever is lower. In case of change in pricing framework in Indonesia or change in source of coal to other country, relevant coal indices will be used subject to ceiling of HBA index
Ocean Freight#	As per Bid quote for respective year (i.e. 11.26 USD/MT for FY 13-14 and thereafter with escalation of 1.97% per annum) at the prevailing exchange rate
Transaction L/C and Insurance Charges #	As per Bid assumption @ 3% This will include LC, insurance, bank & financial charges and other transaction costs.
Port handling charges at Mundra	As per bid assumptions for respective year (i.e. ₹ 294.42 per MT for FY 13-14 and thereafter with escalation @ 2.74% per annum). The Discount of ₹ 20 per MT to be continued over bid assumed prices.
Transit & Handling Losses	0.8% or CERC norms whichever is lower on additional quantum due to shortage

#Monthly simple average of INR/USD exchange rate published by RBI will be considered for computing Energy Charges in Rs/Kwh

	<b>Domestic Coal</b>	<b>Remark</b>
MCL ex-mine coal cost	As per bid assumptions for respective year (i.e. Basis Price of ₹ 550.91 per Kwh for FY 13-14 and thereafter with escalation @ 5.48% per annum).  Other applicable taxes, duties and charges such as surface transportation, sizing charges, etc. are to be added to such Basic Price of respective year to determine MCL ex-main coal cost	To be used on notional basis, if coal linkage optimization is undertaken by the Company.  Cost of coal will be considered at rates of taxes and duties prevalent at the time of bid; and the reimbursement towards Change in Law will have to be claimed separately as per committee recommendations.
Transportation from MCL to Mundra port	As per bid assumptions <ul style="list-style-type: none"> <li>• Railway Freight: ₹ 245 per MT, as quoted for FY 13-14, thereafter with escalation @1.5% per annum; and</li> <li>• Ocean Freight: USD 10.58 per MT as quoted for FY 13-14, thereafter with escalation @ 2.74% per annum;# and</li> <li>• Port Handling Charges of ₹589 per MT as quoted for FY 13-14, thereafter with escalation @ 3.11% per annum.</li> </ul>	As per bid assumption.  To be used on notional basis, if coal linkage optimization is undertaken by the Company.  Logistic Cost will be considered at rates of taxes and duties prevalent at the time of bid; and the reimbursement of change in law will have to be claimed separately as per committee recommendations.
Transaction L/c and Insurance Charges	3% on landed cost as per bid assumptions	As per Bid assumption. This will include LC, Bank and financial charges, and other transaction costs
Transit & Handling Losses	0.8% or CERC norms or as assumed in bid whichever is lower	

# Monthly simple average of INR/USD exchange rate published by RBI will be considered for computing Energy Charges in Rs/Kwh

118. The Committee has recommended ( vide para 8.3 of page 72 of the report) that the Commission may pass suitable order with regard to capital expenditure on account of FGD which has been installed in compliance with the statutory requirement. The Committee has further noted that the petitioner has taken up the matter with Haryana utilities regarding increase custom duty and energy cess which have not been resolved,

but the expenditure on their account is having impact on hardship experienced by the petitioner. The Committee has suggested to pass suitable order in this regard. Similarly, in respect of 'change in law' affecting the energy charges, we have given our decision in para 95 directing the petitioner to approach the Haryana Utilities under the provisions of PPA. As the petitioner is already in financial constraint, we direct the Haryana utilities to consider and settle the claims of the petitioner in accordance with the provisions of the PPA within a period of two months from the date of this order.

119. The commission realizes that Power sector is facing multi pronged challenges on various fronts primary being the fuel availability. The commission also realizes that banking sector is also linked heavily by way of loan disbursements with the sector. Thus, it needs to be ensured that the sector remains operational. The Commission is also aware that the procurers will be subjected to a situation of going in for fresh bids in the event of complete bankruptcy of the generator primarily due to the reasons of increased imported coal cost.

### **Summary of our decisions**

120. The summary of our decisions with regard to compensatory tariff is as under:

- (a) The petitioner shall be entitled for a provisional lump sum compensation in respect of Gujarat PPA for an amount of ₹420.24Cr and in respect of Haryana PPA for an amount of ₹409.51Cr for the period from SCOD till 31.3.2013. The petitioner is further directed to submit claims to procurer with actual cost on month to month basis for final settlement. It is not clear from the details available as to whether the final cost includes cost of carpet coal. It may be



mutually settled and in case the cost of carpet coal is included in the above amount shall be adjusted.

- (b) The Procurers shall pay the amount as determined above in equal monthly installments over a period not more than 36 months from the date of this order, with carrying cost for delay in payment beyond due date at the surcharge applicable as per the PPA.
- (c) The technical parameters frozen by the technical committee after study of the machines and verification of blending of imported coal of different GCVs in the case of Gujarat PPA and blending of imported coal and domestic coal with parameters standardized by the technical committee in case of Haryana PPA have been accepted by the Commission as the same is in the consumer interest. These parameters shall be used for calculation of compensatory tariff on monthly basis, with effect from 1.4.2013 till the hardship on account of Indonesian Regulation persists.
- (d) The compensatory tariff for the period from 1.4.2013 shall be as per the formula in this order provided above on monthly basis. The arrears in this respect from 01.04.2013 till 28.02.14, in accordance with this order, shall be recovered from the procurers in equal monthly installments over a period of not less than 12 months from the date of this order.

- (e) True up of provisional compensatory tariff arrived at shall be done at the end of each financial year based on audited financial statements after adjustments of other receipts as depicted above in this order.
- (f) The actual excess realization towards third party sale of power above the target Availability of 80% (after adjusting Energy Charges including Compensatory Tariff and Incentive) shall be shared in the ratio 60:40 between the procurers and the petitioner as mutually agreed between the parties. The sale of power to third party shall only be with mutual consent.
- (g) In regard to sharing of actual profit from coal mining operations in Indonesia, the same shall be calculated based on the total incremental revenue after payment of taxes and royalty as per Indonesian Regulation and incremental mining cost in proportion to the coal used for the generation of contracted power under PPA with GUVNL and Haryana as per decision in this order.
- (h) As per the recommendations of the Committee at (E) – vide page 73 of the report, the Commission agrees for usage of low GCV imported coal to be blended with high GCV imported coal with the view to reduce cost subject to the condition that the plant parameters like station heat rate, auxiliary consumption, etc. are as specified in this order or actual whichever is lower.
- (i) The petitioner shall provide along with the monthly bills, a certificate from the auditor regarding the actual quantum and price of imported coal used during the

previous month for supply of electricity to the procurers. Procurers are free to verify copies of such invoices.

- (j) As recommended by the Committee at (F) - vide page 73 of the report, the petitioner and procurers shall jointly continue to pursue all possible options with the concerned authorities for reduction in duties and taxes on fuel. Whatever the gains made by the generator on account of any possible reductions shall be passed on to the consumers in reducing the tariff through change in law provision in PPA.
- (k) As recommended by the Committee at (G) - vide page 73 of the report, the procurers and the generators shall jointly continue to pursue all possible options in approaching lenders to obtain reduction in interest rates, extending moratorium on principle repayment for a period of 2 to 3 years and possible extension of loan repayment tenor to reduce hardship on capacity charges.
- (l) As recommended by the Committee at (H) - vide page 73 of the report, the generator and procurers may jointly approach RBI, Ministry of Finance and Ministry of Power for possible assistance to the power producers in getting relief on account of interest rates and restructuring of loan. The Commission suggests RBI to favorably consider the request of the parties to make the project viable if such an application is made.
- (m) The petitioner and procurers may approach the Ministry of Coal and Coal India Limited for allotment of coal linkage to meet the full coal requirement of the

project. If such an application is made, Ministry of Coal is requested to favorably consider the proposal considering the consumer interest. In the event, coal linkage is provided, the compensatory tariff shall be withdrawn fully or partially depending upon the quantum of coal linkage granted and its landed cost.

(n) Since the petitioner has approached the Commission for mitigation of the financial hardship on account of escalation of the coal prices in the Indonesian market, the Commission has decided to award compensatory tariff within the mandate already decided in our order dated 2.4.2013. We are of the view that the petitioner should share the burden of hardship to some extent. Accordingly, the adjustment in the Tariff towards sacrifice of ROE shall be made equivalent to 1% and 0.25% of ROE for Gujarat and Haryana respectively, based on equity investment of respective contracted capacity, as on the SCOD. The amount would be adjusted from the compensatory tariff payable to the generator by the procurers. Since the Commission has not examined the books of accounts of the petitioner, the procurers and the generator may mutually settle the amount deductible from the compensatory tariff in this regard. The position will be reviewed after 3 years from the date of this order.

(o) The compensatory tariff received shall be maintained as a separate account and shall be reflected in the monthly bill under separate head clearly segregating the installment of arrears and the compensatory tariff for the concerned month.

(p) The accounts so maintained shall be available for scrutiny/inspection at the discretion of the procurers.

(q) The Commission shall review the compensatory tariff after a period of three years unless the compensatory tariff is withdrawn earlier in terms of our order.

120. Before parting with this case, the Commission would like to place on record its deep appreciation to the Chairman and members of the Committee for assisting the Commission through their report with detailed analysis.

121. Petition No.155/MP/2012 is disposed of in terms of the above.

**Sd/**  
**(A. K. Singhal)**  
**Member**

**sd/**  
**(M. Deena Dayalan)**  
**Member**

**sd/**  
**(V. S. Verma)**  
**Member**

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