

# Committee Report for CERC

For determination of compensatory tariff-in the matter of  
Adani Power Limited

August 2013

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**Committee Report on Compensatory Tariff for Mundra power plant of  
Adani Power Limited**

Pursuant to the Order of Hon'ble Commission dated 2<sup>nd</sup> April 2013 in Petition No. 155/MP/2012 to work out and recommend a package for Compensatory Tariff, we hereby submit the report as per the Order.

We wish to place on record our sincere appreciation for the co-operation extended by all members. The Hon'ble Commission may be pleased to pass appropriate order(s) in this regard.



(Deepak Parekh)  
Chairman of the Committee &  
Chairman  
HDFC



(Arundhati Bhattacharya)  
Member (Independent Financial Analyst) &  
Managing Director  
SBI Capital Markets Ltd.

**LIST OF ABBREVIATIONS**

|        |  |
|--------|--|
| ACT    | Actual Compensatory Tariff                         |
| ADB    | Air Dry Basis                                      |
| AEL    | Adani Enterprises Limited                          |
| APL    | Adani Power Limited                                |
| ARB    | As Received Basis                                  |
| BU     | Billion Units                                      |
| CCEA   | Cabinet Committee of Economic Affairs              |
| CEA    | Central Electricity Authority                      |
| CERC   | Central Electricity Regulatory Commission          |
| CIF    | Cost Insurance Freight                             |
| CSA    | Coal Supply Agreement                              |
| CT     | Compensatory Tariff                                |
| DE     | Debt Equity  |
| DGMC   | Director General of Minerals and Coal of Indonesia |
| DHBVNL | Dakshin Haryana Bijli Vidyut Nigam Ltd             |
| DTA    | Domestic Tariff Area                               |
| EA     | Electricity Act                                    |
| EIA    | Environmental Impact Assessment                    |
| EPC    | Engineering Procurement Construction               |
| EPS    | Electric Power Survey                              |
| FOB    | Free On Board                                      |
| FSA    | Fuel Supply Agreement                              |
| GCV    | Gross Calorific Value                              |
| GEB    | Gujarat Electricity Board                          |
| GoG    | Government of Gujarat                              |
| Gol    | Government of India                                |
| GMDC   | Gujarat Mineral Development Corporation            |
| GUVNL  | Gujarat Urja Vikas Nigam Limited                   |
| HBA    | Harga Batubara Acuan                               |
| HPGCL  | Haryana Power Generation Company Ltd               |
| IDC    | Interest During Construction                       |
| kcal   | Kilo Calories                                      |
| kWh    | Kilo Watt Hour                                     |
| LC     | Letter of Credit                                   |
| Lol    | Letter of Intent                                   |
| MEMR   | Ministry of Energy and Mineral Resources           |
| MoC    | Ministry of Coal                                   |
| MoP    | Ministry of Power                                  |
| MoU    | Memorandum of Understanding                        |
| MT     | Million Tonne                                      |
| MTPA   | Million Tonnes Per Annum                           |
| MU     | Million Units                                      |

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|        |   |
|--------|---|
| MW     | Mega Watt   |
| O&M    | Operations & Maintenance                          |
| PCT    | Provisional Compensatory Tariff                   |
| PLF    | Plant Load Factor                                 |
| PPA    | Power Purchase Agreement                          |
| RfP    | Request for Proposal                              |
| RfQ    | Request for Qualification                         |
| SBD    | Standard Bidding Document                         |
| SCOD   | Scheduled Commercial Operation date (as per PPA ) |
| SEB    | State Electricity Board                           |
| SERC   | State Electricity Regulatory Commission           |
| SEZ    | Special Economic Zone                             |
| SLC    | Standing Linkage Committee                        |
| SG     | Steam Generator                                   |
| SPV    | Special Purpose Vehicle                           |
| T&D    | Transmission & Distribution                       |
| TPD    | Tonnes Per Day                                    |
| UHV    | Useful Heat Value                                 |
| USD    | United States Dollar                              |
| UHBVNL | Uttar Haryana Bijli Vidyut Nigam Ltd              |
| UPPCL  | Uttar Pradesh Power Corporation Limited           |

**LIST OF ANNEXURES**

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## EXECUTIVE SUMMARY

Adani Power Limited (APL) has commenced commercial operation of entire power generation capacity of 4620 MW at Mundra, Gujarat. It has executed PPAs with Gujarat and Haryana utilities and the contracted capacity is currently being supplied to the utilities under these PPAs. The details of PPA are as under:-

- ✚ Phase I & II (4X330 MW): 1000 MW PPA dated 6<sup>th</sup> Feb 2007 with GUVNL
- ✚ Phase III (2X660 MW): 1000 MW PPA dated 2<sup>nd</sup> Feb 2007 with GUVNL
- ✚ Phase IV (3X660 MW): 1424 MW PPAs dated 7<sup>th</sup> Aug 2008 with Haryana Discoms.

APL (on standalone basis) has incurred significant losses on account of increase in fuel cost and project cost, resulting in erosion of networth and deterioration in credit rating as detailed below:-

| Particulars |         | FY 11-12 | FY 12-13 |           | Credit Rating |
|-------------|---------|----------|----------|-----------|---------------|
| Net Sales   | Rs. Cr. | 4240     | 6868     | June 2010 | BBB Stable    |
| EBIDTA      | Rs. Cr. | 1532     | 1332     | June 2011 | A- Stable     |
| Net Losses  | Rs. Cr. | 294      | 1952     | July 2012 | BBB Negative  |

Source: Audited Annual Report, Rating rationale from CRISIL

The Company approached CERC and filed petition no. 155/MP/2012 for redressal of the hardship faced by it for the sale of power through PPA dated 2<sup>nd</sup> February 2007 to GUVNL and sale of power through PPA dated 7<sup>th</sup> August 2008 to the Haryana Utilities.

As per the CERC order dated 2<sup>nd</sup> April 2013 in respect of the above petition, constitution of a committee was recommended to suggest a package for "Compensatory Tariff". As per the CERC Order, the Committee needs to engage in a consultative process to find out an acceptable solution in the form of Compensatory Tariff (CT) over and above the tariff decided under the PPAs to mitigate the hardship arising on account of non-availability of adequate coal linkage from CIL and increase in international coal prices. The Committee is chaired by Mr. Deepak Parekh and other members of the Committee comprise of representatives of Procurers and APL, SBI Capital Markets Limited (SBICAP) and Dr. Devi Singh, Director- IIM (Lucknow). It was also decided to appoint M/s KPMG for accounting due diligence of the Indonesian coal mines of Adani Group, Mr. A. G. Karkhanis as the 'Legal Consultant' and Mr. Chandra Pratap Singh as the 'Technical consultant' to assist the Committee by providing their expert advice on various accounting and financial, legal, technical, related matters and also to authenticate/comment on the inputs to find out an acceptable solution in form of Compensatory Tariff.

The first meeting of the Committee was held on 11<sup>th</sup> May 2013 for determining the methodology to be used to compute the "Compensatory Tariff". The second meeting of the Committee was convened on 26<sup>th</sup> June 2013 to discuss the progress made and way forward. Further, the third meeting of the Committee was convened on 11<sup>th</sup> July 2013 wherein broad contours of compensatory package were agreed upon. It was also decided to call a joint meeting of major domestic lenders to the APL project. In this respect, major domestic lenders for the projects were invited for a meeting on 17<sup>th</sup> July 2013, to discuss and present their views on reduction of rate of interest and other measures that could mitigate the hardships in capacity charges faced by the Company. In the fourth meeting, on 30<sup>th</sup> July 2013, issues raised by Discoms on the draft report were discussed and a time frame was agreed to finalise the report.

In order to mitigate the hardship faced by APL, the Committee analysed and discussed various options to arrive at a compensatory tariff. From the various options evaluated, the Committee has finalised the option of "Fuel Cost Adjustment in Energy Charges (FCA)" after due consideration of the following:

- ↓ The FCA satisfies the twin principles of simplicity and long term sustainability;
- ↓ Fuel cost is highly unpredictable and volatile and is a risk that cannot be borne by the Developer for a long term of 25 years;
- ↓ Being dynamic in nature, the proposed compensatory package seeks to provide relief to developers on one hand and the procurers will benefit on reduction of coal prices, on the other hand;
- ↓ 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 an equitable level of compensation to the Developers as well as Procurers;
- ↓ The compensation determined is lowest of the methods evaluated, thereby reducing the prospective financial burden on the Discoms;
- ↓ This FCA alternative addresses all currently known issues affecting coal supply / coal price movement, thereby providing a credible solution sustainable in the long term. In fact the Ministry of Power, GoI, recognizing that a number of dynamic local and global factors which affect fuel cost are not predictable during the tenure of the PPA, has suggested inviting bids on SHR basis under the revised draft SBD. The FCA alternative suggested is consistent with this philosophy.

The Company commenced supply under the Gujarat PPA (1000 MW on Net basis from Phase III) from SCOD, i.e., start date for commencement of supply as per the PPA, of 2<sup>nd</sup> February 2012. The Company has suffered a loss of about Rs. 966 Cr. for supply under PPA, out of which Rs. 487 Cr. is on account of under recovery of energy costs till cut-off date of 31<sup>st</sup> March 2013. The Company started supply under Haryana PPA (1424 MW on Net basis from Phase IV) on 7<sup>th</sup> August 2012. The Company has suffered a loss of about Rs. 604 Cr. for supply under the PPA, out of which Rs. 511 Cr. is on account of under recovery of energy costs till cut-off date.

Considering the normative plant parameters, the under recovery of energy costs under respective SCOD dates till cut-off date is Rs. 451 Cr. and Rs. 496 Cr. for Gujarat and Haryana PPA respectively. The actual hardship of the Company has been detailed in chapter 7 of this report.

After evaluating 3 options/ alternatives, the Committee has recommended the FCA alternative as the mechanism to determine Compensatory Tariff. Losses suffered by the Company from SCOD of PPAs till cut-off date of 31<sup>st</sup> March 2013 have been calculated based on the audited accounts of the Company with due diligence carried out by KPMG on specific aspects of profits in Indonesia, coal costs and power sale revenues.

The mechanism recommended by the Committee to determine the Compensatory Tariff is as follows:

**For Gujarat PPA & Haryana PPA**

|   |   |  |   |  |
|---|---|--|---|--|
| Compensatory Tariff / Fuel Cost Adjustment Charge for a particular year (Rs. Cr.) | = | Actual Energy Costs at PPA defined delivery point* ( Rs. Cr.) for that particular year corresponding to units supplied during the year | - | Energy charges revenue at Quoted Energy Charges under the PPA for that particular year (Rs. Cr.) corresponding to units supplied during the year |
|---|---|--|---|--|

\*including transmission charges for Phase IV as recommended in this report.

The Committee also recommends the principles for determining the future Energy Costs. The future Energy Costs will be derived from various other benchmarks/benchmark costs and will be capped at actual energy cost for the Company. While recommending the principles for determining the future Energy Cost, the Committee has considered the views/recommendation of the members, technical consultant and other

consultants. The Committee also recommends the methodology for recovery and payment of Compensatory Tariff determined by the above mechanism, which is further explained in the chapter 7 of this report.

Based on above recommended mechanism, coal prices prevalent on 30<sup>th</sup> June 2013 and various assumptions, illustrative CT per unit for FY 13-14 has been computed. For the Gujarat PPA, the gross compensation approximates to Rs. 0.89/unit and net compensation after adjustment of Share of Merchant Sales above Normative Availability for Contracted Capacity for PPA approximates to Rs. 0.71/unit. Similarly for the Haryana PPA, the gross compensation approximates to Rs. 0.61/unit and net compensation after adjustment of Share of Merchant Sales above Normative Availability for Contracted Capacity approximates to Rs. 0.43/unit. The above Compensatory Tariff calculations are carried out only for the purpose of illustration and are predicated on the assumptions set out in the following pages. Actual figures may change based on change in values of variables considered in the calculations.

With respect to hardship on account of capacity charges, the Committee suggests that the same may be mitigated by way of sharing of hardship by other means or with other stakeholders, i.e., interest rate reduction on loans, 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.

As discussed in the Lender's meeting held on 17<sup>th</sup> July 2013 and Committee meeting held on 30<sup>th</sup> July 2013, the hardship is also suggested to be mitigated by extension of tenor of loans and providing moratorium, which is also recommended by the Committee as a part of this report. This issue will have to be taken up by the lenders with RBI separately for special dispensation in terms of asset classification.

**Committee Recommendation:**

- ✚ The Power producer is incurring losses not only on energy charges but also on account of capacity charges as per quoted tariff. However the scope of Committee is limited to evaluate and evolve mechanism to mitigate the hardship on account of energy charges.
- ✚ With respect to hardship on account of capacity charges, the Committee suggests that the same may be mitigated by way of sharing of hardship by other means or with other stakeholders, i.e., interest rate reduction on loans, 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.
- ✚ As regards hardship on account of energy charges, the Committee recommends CERC to allow Compensatory Tariff towards actual hardship suffered commencing from SCOD date till the cut-off date of 31<sup>st</sup> March 2013. The Compensatory tariff beyond cut-off date may be paid by way of Fuel Cost Adjustment Charges to the Company towards hardship on account of energy cost, as per the mechanism and methodology for Compensatory Tariff explained in chapter 7 of the report. As regards Energy cost under-recovery from SCOD date till cut-off date of 31<sup>st</sup> March 2013 of Rs. 451 Cr. and Rs. 496 Cr. for Gujarat and Haryana PPA respectively, predicated on normative plant parameters in conformity with CERC (Terms and Conditions of Tariff) Regulations (2009-2014) shall be reimbursed to the Company.
- ✚ The Committee has also noted the events due to change in regulations/ policy post bid deadline date and that they have caused increase in cost for the generator as discussed in Chapter 8. These events appear to be in the nature of change in law and the Committee suggests CERC may examine these aspects and pass suitable orders in this regard.

## 1. BRIEF OVER-VIEW OF CERC ORDER

### Case facts:

Petition No: 155/MP/2012

Date of last hearing: 12<sup>th</sup> February 2013

Date of Order: 2<sup>nd</sup> April 2013

Petitioner:

- Adani Power Ltd. (APL), the Petitioner

Respondents:

- Uttar Haryana Bijli Vitaran Nigam Ltd.
- Dakshin Haryana Bijli Vitaran Nigam Ltd. through Haryana Power Purchase Centre, Panchkula
- Gujarat Urja Vikas Nigam Ltd., Vadodara

### Case background:

The Petitioner, a subsidiary of Adani Enterprises Ltd (AEL), has set up a generating station, Mundra Power Project, with a total capacity of 4620 MW in the Special Economic Zone (SEZ) 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 PPA dated 2<sup>nd</sup> February 2007 for supply of 1000 MW power to Gujarat Urja Vikas Nigam Limited (GUVNL) from Phase III and PPA dated 7<sup>th</sup> August 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<sup>nd</sup> February 2007 to GUVNL and PPA dated 7<sup>th</sup> August 2008 to the Haryana Utilities. Detailed chronology of events is enclosed in Annexure I and a brief of the PPAs is as under:

#### **(A) PPA dated 2<sup>nd</sup> February 2007 with GUVNL**

In response to the Request for Proposal (RfP) issued by GUVNL on 24<sup>th</sup> November 2006, a consortium comprising AEL (Petitioner's holding company) and Vishal Exports Overseas Ltd (hereafter 'the Consortium') submitted its bid dated 4<sup>th</sup> January 2007 for supply of 1000 MW to Gujarat. It entailed quoted levelised tariff of Rs. 2.3495/unit (comprising energy charges and capacity charges of Rs. 1.3495/kWh and Rs. 1.00 /kWh respectively).

In response to the requirement of RfP to indicate the progress/ proof of fuel arrangements, it was indicated that AEL had tied up, through commitment letter dated 14<sup>th</sup> November 2006, the indigenous coal requirement of the project with Gujarat Mineral Development Corporation (GMDC) which had been allotted Morga II coal block in the State of Chhattisgarh. It was further indicated that AEL, with a view to ensure supply of fuel with optimum techno-commercial parameters, had executed an MOU for supply of imported coal with M/s Coal Orbis Trading GMBH, Germany and M/s Kowa Company Ltd., Japan, dated 9<sup>th</sup> September 2006 and 21<sup>st</sup> December 2006 respectively. The Consortium was selected as the successful bidder and the Letter of Intent dated 11<sup>th</sup> January 2007 was issued in its favour.

The PPA dated 2<sup>nd</sup> February 2007 for supply of 1000 MW of power was signed between GUVNL and APL as the Special Purpose Vehicle of the Consortium. Though initially it was agreed that the Petitioner would supply power from the project which was being set up at Korba in Chhattisgarh State, the Petitioner made a proposal to GUVNL in its letters dated 12<sup>th</sup> February 2007 and 20<sup>th</sup> February 2007 to supply power from its

Mundra Power Project. Subsequently, a supplementary PPA was signed on 18<sup>th</sup> April 2007 between the Petitioner and GUVNL for supply of 1000 MW power from Units 5 and 6 (Phase III) of Mundra Power Project. At the instance of GUVNL, GERC adopted the tariff and also approved the PPA.

The Fuel Supply Agreement (FSA) could not be entered due to persistent difference between the Petitioner, GMDC and GUVNL. The MoUs with Kowa Company Ltd and Coal Orbis Trading were also terminated. Thereafter the Petitioner executed a Coal Supply Agreement (CSA) with AEL on 24<sup>th</sup> March 2008 for purchase of coal with GCV of 5200 kcal/kg at CIF (Mundra port) price of USD 36/MT for Phase III project.

On account of non-fulfilment of conditions subsequent in accordance with the PPA due to non-materialisation of FSA for Phase III, the Petitioner issued a termination notice to GUVNL for termination of the PPA. Against the termination notice, GUVNL filed a petition before GERC and in order dated 31<sup>st</sup> August 2010, GERC set aside the termination notice on the ground that the PPA dated 2<sup>nd</sup> February 2007 is not dependent on the fuel supply by GMDC or any other particular source and also for the reason that the Petitioner had a FSA with AEL for supply of imported coal from Indonesia for Phase III.

The Petitioner challenged the said order in the Appellate Tribunal for Electricity in Appeal No.184/2010 which upheld the order of GERC. Thereafter, the Petitioner has challenged its judgement in the Supreme Court in Civil Appeal No. 11133 of 2011 which is pending hearing.

The Petitioner is stated to be supplying power from Mundra Power Project Phase III of the generating station in compliance with the directions of Appellate Tribunal from the date of commercial operation on 2<sup>nd</sup> February 2012 by using the imported coal from Indonesia purchased through Adani Enterprises Limited.

#### **(B) PPA dated 7<sup>th</sup> August 2008 with Haryana**

In response to the bids invited by Haryana Power Generation Company Ltd (HPGCL) on behalf of Uttar Haryana Bijli Vitaran Nigam Ltd (UHBVNL) and Dakshin Haryana Bijli Vitaran Nigam Ltd (DHBVNL) (collectively referred to as 'the Haryana utilities'), the Petitioner had submitted the bid on 24<sup>th</sup> November 2007 for supply of 1424 MW of power at levelised tariff of Rs. 2.94/kWh (comprising levelised energy charges and capacity charges of Rs. 1.963/kWh and Rs. 0.977/kWh respectively).

The Petitioner was declared as successful bidder and Letter of Intent (LoI) was issued dated 17<sup>th</sup> July 2008. Accordingly, two separate PPAs dated 7<sup>th</sup> August 2008 were executed by the Petitioner with UHBVNL and DHBVNL for supply of 712 MW of power each from Phase IV of the Mundra Power Project. Haryana Electricity Regulatory Commission at the instance of UHBVNL/DHBVNL adopted the tariff.

The Petitioner had made an application to the Standing Linkage Committee (Long Term), Ministry of Coal, Government of India for long term coal linkage on 28<sup>th</sup> January 2008. The Standing Linkage Committee (Long Term) {SLC(LT)} authorized issuance of Letter of Assurance (LOA) by Coal India Limited for capacity of 1386 MW for Phase IV of the project (70% of installed capacity of 1980 MW) as recorded in the minutes of the SLC (LT) dated 12<sup>th</sup> November 2008. The Petitioner received a letter of assurance dated 5<sup>th</sup> May 2009 from Mahanadi Coalfields Ltd. for supply of 6.409 Million MT per annum which corresponded to 70% of fuel requirement of Phase IV of the project.

The Petitioner in its letter dated 23<sup>rd</sup> September 2009 addressed to Haryana Power Purchase Centre, the authorized representative of Haryana Utilities, informed that LoA had been received by it from Mahanadi Coalfields Limited for supply of indigenous coal equivalent to 70% of its coal requirement of phase IV and for the balance, it was proposed to use the imported coal from the Petitioner's mines/ other mines in Indonesia.

The Petitioner entered into a Coal Supply Agreement (CSA) dated 9<sup>th</sup> June 2012 for supply of annual contracted quantity of 6.405 Million Tonnes of coal for a period of 20 years with Mahanadi Coalfields Ltd to meet the requirement of Phase IV of Mundra Power Project.

As per Schedule VII of the CSA, supply of coal under CSA from domestic sources is not likely to exceed 80% of annual contracted quantity and balance 20% shall be sourced through import subject to confirmation by the Petitioner either to accept the supply through import or to surrender the required annual contracted quantity. The Petitioner has exercised its option to accept 20% of annual contracted quantity through import. The FSA, subsequently executed by the Company, stipulated that the supply of domestic coal would be restricted to only 65% of the Annual Contracted Quantity for existing linkages.

After termination of the AEL's MoUs with the Kowa Company Ltd, Japan and with Coal Orbis Trading GMBH, Germany, as stated above, the Petitioner executed a Coal Supply Agreement with Adani Enterprises Limited on 15<sup>th</sup> April 2008 for supply of 6.5 MT of coal with GCV of 5200 kcal/kg at price of USD 36/MT for Phase IV units of Mundra Power Project.

### **(C) Subsequent developments relating to both the Gujarat and Haryana PPAs**

Adani Enterprises Limited through its wholly owned subsidiaries (Singapore based subsidiary, Adani Global PTE Ltd and Indonesia based PT Adani Global) had arranged to procure desired quantity of coal from Indonesia for Phase III and Phase IV. PT Adani Global had acquired mining rights in the Bunyu mines in Indonesia. As the coal from Bunyu mines was of inferior quality, on 14<sup>th</sup> December 2009, an FSA was executed between Adani Global PTE Ltd. and PT Dua Samudera Perkasa for supply of 10 MTPA of coal at price of USD 30 - 35/MT depending upon GCV of coal to meet the Petitioner's requirements.

On 23<sup>rd</sup> September 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"). Article 2 of the Indonesian Regulations provides that the holders of the mining permits and special mining permits for production and operation of mineral and coal mines shall be obliged to sell the minerals and coals by referring to the benchmark price either for domestic sales or exports, including to its affiliated business entities. As per Article 11 of the Indonesian Regulations, the Director General on behalf of the Minister shall set a benchmark price of coal on monthly basis based on a formula that refers to the average price index of coal in accordance with the market mechanism and/or in accordance with the prices generally accepted in the international market.

After promulgation of Indonesian Regulations, AEL wrote a letter to the Petitioner expressing its inability to perform its obligations under the CSA. 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 significantly which has rendered it commercially unviable to supply power to the Respondents at the PPA price. The Petitioner has submitted that short deliveries of domestic coal under the CSA with MCL have increased the requirement of imported coal, further increasing the cost of electricity.

Accordingly, the Petitioner approached the CERC to evolve 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) under the PPAs due to change in circumstances for the allotment of domestic coal by Gol/CIL and enactment of new coal pricing regulation by Indonesian Government.

The Petitioner approached CERC for mitigating the hardship on account of the Indonesian Regulations and non-availability of adequate quantity of domestic coal.

**Other Salient Points:**

1. The Petitioner has submitted that it participated in the GUVNL Bid premised on GMDC commitment for allocating coal from Morga-II coal mine in Chhattisgarh and quoted levelised tariff of Rs. 2.35/unit..

The Petitioner believed that since the increase in mining costs at the pit-head mine would have been minimal, and would be offset by reduction in capacity charges over a period, the coal cost was predictable resulting in fixed tariff stream at the time of bid. Besides, bid was based on the premise that domestic coal from pit head coal mine would be used and not coal at market rates, and hence there was no escalable component in the bid. Also, as per the Petitioner, the quoted capacity charge of Rs. 1.00/unit as against Rs. 1.21/unit in accordance to the prevailing CERC norms at the time of bid was based on the assumption of efficient procurement, operations and financing structure.

However, the dissent order of Shri S. Jayaraman for Petition No. 155/MP 2012 states that "...by quoting on non-escalable basis have assumed full risks on account of the capacity and fuel of the project for supply of 1000 MW power to GUVNL and the benefits of subsequent escalation are not available to the petitioner".

The submission of the Petitioner in the previous paragraph provides rationale/ reasoning for quoting non-escalable tariff.

2. The Petitioner has submitted that the Haryana bid price of Rs. 2.94/unit was based on use of 70% indigenous coal and 30% imported coal. The Petitioner has submitted that the bid relied on regulated CIL prices for domestic and long-term price hedge for imported coal that was then available in Indonesian market. Also, the levelised energy charges included transmission charges (including losses) of Rs. 0.48/unit. The Petitioner has submitted that the quoted capacity charge assumed efficient procurement, operations and financing structure, leading to a lower charge of Rs. 0.977/unit as against Rs. 1.19/unit in accordance to the prevailing CERC norms at the time of bid.

The Petitioner has submitted that the major reasons for shortfall in meeting the coal supply obligation included renegeing of GMDC from its commitment to supply coal from the Morga-II coal block, inferior quality of coal from Bunyu and the terms of the FSA with MCL for domestic Coal for Phase IV specifying the commitment was pegged at 80% of the Annual Contracted Capacity (corresponding to 85% PLF), and that it cannot meet the entire requirement of coal for supply of power committed under the PPAs. Therefore AEL through Adani Global PTE Ltd. entered into FSAs with M/s. PT Dua Samudera Perkasa for supply of coal from Indonesia @ USD 36/MT CIF for coal of 5200 GCV. However, promulgation in Indonesian Regulation has adversely impacted the Coal supply from Indonesia under these FSAs.

Also it was brought to notice by Petitioner that between the bid date and filing of the petition, the cumulative escalation of energy charges using the bid evaluation escalation rate approximates 20% as against the actual increase of 153% as per the present escalation rate. The Petitioner has submitted that such an unforeseeable and unprecedented increase in coal prices could not have been foreseen by any bidder and is not a normal risk.

3. A reference was made by the Petitioner on a study by J. Luis Guasch, published by World Bank Institute of Development Studies titled "Granting and Renegotiating Infrastructure Concessions – Doing it Right" which also points out that renegotiation of a contract is considered relevant if a concession contract has undergone a significant change or amendment not envisioned or driven by stated contingencies. It was pointed out in the study that renegotiation was a positive instrument to address the inherently incomplete nature of concession contracts as mechanism can enhance welfare if used properly. The study also shows that more than 46% of the contracts entered through competitive bidding have been renegotiated.

**CERC observation and Relief under Section 79 read with Section 63 of the Act**

Ld. Attorney General of India in his opinion dated 7<sup>th</sup> August 2012 on the request of Forum of Regulators has opined that term "regulate" under Section 79(1) (b) can even take within its ambit regulation/revision in price of rate adopted in Section 63 of the Electricity Act.

It has been submitted by the Petitioner that CERC has jurisdiction under Section 79 of the Electricity Act, 2003 and is empowered under the legal and regulatory framework read with the PPAs to regulate tariff of generating companies which have a composite scheme for generation and sale of electricity in more than one State under Section 79(1) (b) of the Act and have statutory function of adoption of tariff under Section 63 read with power to revise tariff under Section 62 of Act. The Commission can adjudicate upon any dispute regarding claim for any change in or regarding determination of tariff or any tariff related matters, or which partly or wholly could result in change in tariff.

As observed by CERC, in absence of any provision in the PPA that the change in law of the fuel exporting country would give effect to change in law under the PPAs, the change in Indonesian Regulations even if causing escalation in prices of Indonesian coal, cannot be covered under the provisions of "change in law" as the change in law clause in PPAs is restricted to Indian Laws. CERC also opined that since the Petitioner applied for linkage of domestic coal to CIL on 28<sup>th</sup> January 2008, i.e., after award of Lol by GUVNL and Haryana utilities, it cannot be said that the bids were premised on linkage of domestic coal, and hence the change in policy of Gol/ CIL cannot be considered as "change in law".

As regards Indonesian regulations, CERC opined that enactment of the Indonesian Regulations neither prohibits nor delays the Petitioner in performance of its duties under the PPAs, and hence it cannot be covered under the provisions of "force majeure". CERC also observed that Petitioner applied for linkage of domestic coal to CIL after award of Lol by GUVNL and Haryana utilities and hence, it cannot be said that the bids were premised on linkage of domestic coal. The Petitioner also executed contracts with AEL for coal supply with respect to PPAs with GUVNL and Haryana utilities. Hence non-availability of full coal linkage cannot be considered as "force majeure".

The Commission is of the view that despite the case of the Petitioner not falling under either "force majeure" or "change in law", it cannot be denied that Petitioner who is dependent to a large extent on the imported coal for running the Mundra Power Project is not 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. Further, it was noted that there is a perceptible difference between the international prices of coal which were prevalent at the time of submission of the bids by the Petitioner and the international prices prevalent at the time of finalisation of the order, which makes the operation of the power plant commercially unviable. Moreover, absence of full domestic coal linkage also has resulted in hardship to the Petitioner.

Hence, it was concluded that Petitioner has suffered and is suffering on account of sudden increase in coal price subsequent to the promulgation of Indonesian Regulations and non-availability of adequate quantity of domestic coal and would need to be compensated to make the project commercially viable and supply power to the Respondents in terms of the PPAs. Further, it was also viewed by the Commission that the absence of a clause for price escalation in the contract cannot be the ground for denying the compensation on account of actual expenditure on account of price rise.

The Commission also felt that the possibility of the Petitioner's inability to discharge its obligations under the PPAs due to the high cost of Indonesian Coal cannot be totally ruled out and this will affect the consumers in two ways. Firstly, the Respondents (i.e. Procurers) 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 are in the range of Rs. 3.5/kWh to Rs. 7.00/kWh which the consumers of Mundra Power Project shall also be required to pay. Hence at macro level, it will be a serious setback for the electricity sector as it would adversely affect the investment in 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. Hence it is mentioned that CERC cannot remain oblivious to the interest of consumers and lenders.

Further, there are provisions relating to determination of tariff contained in Part VII of the Electricity Act comprising Sections 61 to 66 which refers to determination of tariff by the Appropriate Commission while specifying the terms and conditions for such purpose under Section 61. Under clause (d) of Section 61, it is seen that safeguarding of the interest of the consumers of electricity is one of the factors to be considered by the Appropriate Commission. However, while safeguarding the interest of the consumers, it was felt that the Appropriate Commission has to strike a balance between the consumers' interest and the investors' (generating company, transmission licensee and distribution company) interest, with emphasis on the need for applying commercial principles in conducting the activities of generation, transmission, distribution and supply of electricity.

It was also noted that the common threads running along the length and breadth of the statutory scheme under the Electricity Act and the statutory instruments framed thereunder are the protection of the consumers' interest and ensuring adequate return on the investments in the sector. The consumers' interest is protected not only by fixing competitive tariff but it is equally imperative to ensure continuous, uninterrupted and reliable supply of electricity. For the purpose of qualitative supply of electricity, it is necessary that adequate investments are made for creating infrastructure for generation, transmission, distribution and supply of electricity and this is possible only when the investor gets adequate return on the investments made. Therefore, in the final analysis, the recovery of costs of the investors serves the consumers' interest by attracting investments in the sector by improving quality of supply of electricity to the consumers.

Therefore, in the view of CERC, ways and means need to be found to compensate Petitioner for the loss or additional expenditure incurred by it on account of procurement of coal from Indonesia at the international benchmark price as it was never in the contemplation of the Petitioner and even the Respondents that purchase price of coal from Indonesia will increase manifold on account of promulgation of Indonesian Regulations.

#### ***Kind of relief to be granted***

While such compensation is to be considered for the Petitioner; referring to the international practice, CERC is not inclined to favour any re-negotiation of the tariff discovered through the process of competitive bidding as in its 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. Hence in the view of CERC, 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.

The compensation package, to be called 'Compensatory Tariff', could be variable in nature commensurate with the hardship that 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 (CT) should be revised or withdrawn. In view of CERC, this is the most pragmatic way to make the PPAs workable while ensuring supply of power to the consumers at competitive rates.

Accordingly, CERC directed Petitioner and the Respondents and the respective State Governments to constitute a Committee within one week from the date of its order. 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 Petitioner over and above the tariff in the PPAs.

Committee shall keep in view inter-alia the following considerations while working out and recommending the Compensatory Tariff applicable upto a certain period:

- 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 (Phase III and Phase IV) should be factored to pass on the same in full to the beneficiaries in the compensatory tariff.
- The possibility of sharing the revenue due to sale of power beyond the target availability of Mundra Power Project (Phase III and Phase IV) to the third parties may be explored
- 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.

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

CERC had mandated the Committee to submit its report by 30<sup>th</sup> April 2013. However, there has been a delay in submission of the report on account of procedural issues in the formulation of the Committee, appointment of various consultants and greater deliberation amongst various stakeholders.

## 2. COMMITTEE PROCEEDINGS

### Process Flow

As per the CERC order dated 2<sup>nd</sup> April 2013 in respect of the petition no. 155/MP/2012 filed by Adani Power Ltd. ("CERC Order") constitution of a Committee was recommended to suggest a package for 'Compensatory Tariff'. As per the CERC Order, this Committee shall consist of 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.

After examining the CERC Order, Government of Gujarat and Haryana accepted the CERC directive and formation of a Committee subject to certain conditions. The Gujarat and Haryana government became the members of the Committee by Government Resolution dated 3<sup>rd</sup> May 2013 and letter dated 8<sup>th</sup> May 2013 respectively. Some of the observations and views of Government of Gujarat and Haryana are as follows. Overall hardship should be equally shared amongst all the concerned parties:

- ✚ The power producers may curtail their rate of return;
- ✚ Banks/Financial Institutions may be asked to waive/reduce the rate of interest to the maximum extent possible;
- ✚ Govt should reduce the import duty on Coal and other taxes etc.;
- ✚ In case of APL, since the port infrastructure is also owned by the same Group, port handling charges in respect of Coal, may also be reduced by APL;
- ✚ The Committee may also suggest any other measure for overall reduction in the cost of generation of power.

### First Meeting – 11<sup>th</sup> May 2013

Pursuant to the above, a Committee was formed and its first meeting was convened on 11<sup>th</sup> May 2013 at HDFC office in Ramon House, Churchgate.

The Committee was chaired by Mr. Deepak Parekh. Also, it was agreed that SBI Capital Markets Ltd. (SBICAP) would act as the independent financial analyst for this Committee. Representatives of Govt. of Haryana/Haryana utilities had invited Prof. Devi Singh, Director, IIM-Lucknow to attend this meeting. All the members agreed that he may be co-opted as a member of this Committee and he will provide necessary guidance to the financial analyst. Also, it was decided to appoint M/s KPMG for carrying out accounting due diligence on certain specific aspects relating to profits at the Indonesian coal mines of Adani Group and procurement of coal at APL and sale of power by APL.

In the first meeting, it was decided that Finance Sub-Group consisting of Mr. Deepak Parekh, Prof. Devi Singh and SBI Capital would work out the compensatory package. It would present its study/findings with the Committee at regular intervals for guidance/ approval. It was also decided that SBICAP will also be carrying out the secretarial responsibilities of the Committee.

Considering the complexity of the scope of the work, it was decided to appoint Mr. A. G. Karkhanis, former ED and Legal Advisor IDBI Limited, as 'Legal Consultant' and Mr. Chandra Pratap Singh, former Director (Engineering and R&D) BHEL, as 'Technical consultant' to assist 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 form of Compensatory Tariff. The members were informed about these appointments vide letter dated 24<sup>th</sup> May 2013.

### **Second Meeting – 26<sup>th</sup> June 2013**

The second meeting of the Committee was held on 26<sup>th</sup> June 2013 at HDFC office in Ramon House, Churchgate. SBICAP made a presentation outlining the recap of the last meeting, progress made so far and way forward. It was mentioned in the meeting that Finance Sub-Group consisting of Chairman, Prof. Devi Singh and SBICAP has been carrying out the groundwork to achieve the Committee objectives.

It was followed by a presentation by KPMG on process flow and timelines proposed. It was also mentioned that most of the information has been received by KPMG and their report may be available by first week of July.

Apart from the presentations, the Committee also discussed the coal supply mechanism approved by Cabinet Committee of Economic Affairs (CCEA) in their meeting held on 26<sup>th</sup> June 2013.

APL mentioned that they had to install a Flue Gas Desulphurizer (FGD) in Phase IV due to MoEF stipulation after the Haryana bid which resulted into higher capital cost of the project, increased auxiliary losses and O&M cost. The members were of the view that APL may approach appropriate commission for redressal under the terms of the relevant PPA(s) including the 'change in law' clause. APL also mentioned that they are in discussion with government for optimization/swapping of coal linkage from Mundra plant to Tiroda plant in Maharashtra which will rationalize the freight cost and quality of coal supplied. The Procurers stated that they had no objection if optimization/swapping of coal linkage are allowed by Gol/MoC. APL requested the members to (a) allow the same and (b) to allow APL to continue to claim energy charges on notional usage of domestic coal at Mundra. Both the petitioners submitted that sharp depreciation in Rupee has resulted in significant increase in their capital cost and debt servicing liability.

Haryana suggested that different scenarios can be analyzed to capture the understanding of the situation and then the Committee can deliberate for arriving at a decision to adopt the appropriate package for submission to CERC.

### **Third Meeting – 11<sup>th</sup> July 2013**

The third meeting of the Committee was held on 11<sup>th</sup> July 2013 at Amadeus, NCPA, Nariman Point, Mumbai.

In this meeting, SBICAP made a presentation regarding the past losses incurred by the Petitioner with respect to both the PPAs. KPMG's findings were also discussed in the meeting. Different scenarios were presented for determining Compensatory Tariff. All the members were open to the suggestion of compensating for the increase in fuel price. The exact mechanism for the same was also discussed in detail.

The Procurers insisted to schedule a meeting with the lenders of the projects to discuss with them the possibility of reduction in interest rates for the projects. It was agreed that a draft report be shared with the stakeholders.

### **Lender's meeting- 17<sup>th</sup> July 2013**

On the recommendation of the Committee, a meeting of major Lenders (Banks and Financial Institution) of the project was called on 17<sup>th</sup> July 2013 to solicit and discuss the views of the Lenders on reduction of rate of interest and other measures to mitigate the hardship faced by the company on account of continued losses.

Lenders appreciated the efforts made by the Committee to reduce the hardship faced by APL. They explained that the interest rate can be brought down only due to competitive considerations else this would be treated as restructuring of loans as per RBI stipulations. The projects will have a good case of interest rate reduction if the rating improves after the approval of compensatory tariff.

**Fourth Meeting- 30<sup>th</sup> July 2013**

In the last meeting of the Committee on 30<sup>th</sup> July 2013, some issues raised by the Discoms over the draft report were discussed. It was decided to finalize the report after incorporating the explanations to these observations. The chairman also suggested that a recommendation should be made in the report for according special dispensation by RBI for extending the loan tenor without attracting restructuring provisions. This issue will have to be taken up by the lenders, with support of CERC with RBI separately for special dispensation in terms of classification as Standard assets post changes in terms of the underlying loans to these projects.

Minutes of Meeting/ Record Note (for 30<sup>th</sup> July 2013) for the meetings are attached in the Annexure II for reference.

### 3. SCOPE OF THE COMMITTEE

#### Scope of the Committee

As per the CERC Order, the Committee needs to set down 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 changed Indonesian Regulations. The Committee shall consider 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 consultants to ascertain the cost of import of coal from Indonesia and suggest a package for Compensatory Tariff which can be allowed to APL over and above the tariff in the PPA.

Committee shall keep in view inter-alia the following considerations while computing and recommending the Compensatory Tariff applicable upto a certain period:

- ✚ The net profit less Govt. taxes and cess etc. earned by Adani Group'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 (Phase III and Phase IV) should be factored to pass on the same in full to the beneficiaries in the Compensatory Tariff;
- ✚ The possibility of sharing the revenue due to sale of power beyond the target availability of the Mundra Power Project (Phase III and Phase IV) to the third parties may be explored;
- ✚ 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.

The Committee is also at liberty to suggest any further measures which can be practicable and commercially sensible to address the situation

#### a. Scope of work of Financial Analyst

The Committee appointed SBICAP as the Financial Analyst of the Committee and the scope of work of the Financial Analyst included:

- ✚ Due diligence of Project Documents of APL;
- ✚ Calculate the Compensatory package for APL using different methods proposed by the Committee;
- ✚ Present the study/analysis to the committee at regular intervals for guidance;
- ✚ Carry out sensitivity analysis of key parameters on the Compensatory Tariff.

It was also decided at the request of representatives from Haryana that Dr. Devi Singh, Director, IIM Lucknow, shall be co-opted as a member of the Committee and he will provide necessary guidance to the Financial Analyst. It was also decided that SBICAP will also be carrying out the secretarial responsibilities of the Committee.

#### b. Scope of work of Legal Consultant (Mr. A. G. Karkhanis)

It was decided that Mr. Karkhanis, former ED and Legal Advisor IDBI Limited, would provide guidance with respect to Legal matters viz. scope of work of the Committee, period of Compensatory Tariff, assistance to other co-consultants, assistance in finalizing report and opining on legal tenability of Committee recommendations.

**c. Scope of work of Technical Consultant (Mr. C.P Singh)**

It was decided that Mr. C.P. Singh, ex Director (Engineering and R&D) BHEL, would render technical assistance to the Committee on matter including exploring the possibility of using low GCV coal for generation, understanding the characteristics of Indonesian coal mines partially/fully owned by Petitioners, carry out benchmarking study for cost of similar power projects in terms of technology and capacity, benchmarking fuel cost for various projects, analyse and authenticate the actual operating parameters vis-a-vis design parameters given by EPC contractor adjusted for site operating conditions and suggest operating parameters such as SHR, Auxiliary Consumption, optimum blend of coal, transmission losses and others related parameters.

**d. Scope of work of Independent Consultant (KPMG)**

It was decided that KPMG would render services as Independent Consultant including reading of FSA and sample checking of coal Supply invoices and PPA revenues from SCOD, sample checking of coal purchases by power plants and assist in assessing revenues and profits earned by Petitioner's mining companies in Indonesia and power generating Company in India.

## 4. COMPANY ANALYSIS

This chapter covers the financial analysis of the Company as a whole and phase III and Phase IV on standalone basis. It may be observed that the Company has suffered significant losses resulting in depletion of net worth to a large extent.

### 4.1. Financial Analysis- APL (Standalone)

APL started commercial operations in August 2009 with Phase I unit 1 of 330 MW getting commissioned, while unit 2 of 330 MW achieved commercial operation in March 2010. Subsequently, the company started operations of Unit 1 and 2 of Phase II (660MW) in July 2010 and December 2010 respectively.

Unit 1 and 2 of Phase III (1320 MW) achieved commercial operation in February 2011 and December 2012 respectively and Unit 1, 2 and 3 of Phase IV (1980MW) achieved commercial operation in November 2011, March 2012 and May 2012 respectively. A summary of the financial analysis of APL (Standalone) for the past 3 years as per the audited annual report is as under:

(Rs. Cr.)

| FY ending March 31,                             | 2011        | 2012        | 2013         |
|---|-------------|-------------|--------------|
| Net Sales                                       | 2106        | 3949        | 6333         |
| Other income                                    | 88          | 291         | 535          |
| <b>Total</b>                                    | <b>2194</b> | <b>4240</b> | <b>6868</b>  |
| <b>Expenditure</b>                              |             |             |              |
| Fuel Cost                                       | 676         | 2264        | 4699         |
| Employee Benefit Expense                        | 30          | 52          | 137          |
| Transmission, Admin and others                  | 159         | 392         | 699          |
| <b>Total</b>                                    | <b>865</b>  | <b>2709</b> | <b>5536</b>  |
| <b>PBDIT</b>                                    | <b>1329</b> | <b>1531</b> | <b>1332</b>  |
| Depreciation & Ammortisation                    | 180         | 551         | 1138         |
| <b>PBIT</b>                                     | <b>1148</b> | <b>980</b>  | <b>194</b>   |
| Finance Costs                                   | 317         | 788         | 1739         |
| Profit before Exceptional items and Tax         | 832         | 191         | -1545        |
| Mark to market losses on derivative instruments | 8           | 195         | -            |
| Extraordinary items                             | 0           | 0           | 52           |
| Foreign exchange fluctuation related to fuel    | 29          | 142         | -            |
| <b>PBT</b>                                      | <b>832</b>  | <b>-4</b>   | <b>-1494</b> |
| Total Taxes (incl. Deferred taxes)              | 300         | 290         | 458          |
| <b>PAT</b>                                      | <b>524</b>  | <b>-294</b> | <b>-1952</b> |
| Gross Cash Accruals                             | <b>1012</b> | <b>743</b>  | <b>-355</b>  |
| EBIDTA Margin                                   | 60.56%      | 36.11%      | 19.40%       |
| PBT Margin                                      | 37.54%      | NA          | NA           |
| PAT Margin                                      | 23.87%      | NA          | NA           |
| Interest Coverage Ratio                         | 3.62        | 1.24        | 0.11         |

Source: Audited Annual Reports



During FY 11-12, total income of APL was Rs. 4240 Cr. with EBIDTA of Rs. 1531 Cr. and net loss of Rs. 294 Cr. (cash profit of Rs. 743 Cr.). For FY 12-13, total income of APL was Rs. 6868 Cr. with EBIDTA of Rs. 1332 Cr. and loss of Rs. 1952 Cr. (cash loss of Rs. 355 Cr.).

#### 4.2. Dilution in Credit rating- APL (Standalone)

The table below summarizes the CRISIL Credit rating enjoyed by APL for various long term bank facilities for a period of 3 years from June 2010 to June 2012.

|           | Credit Rating |
|-----------|---------------|
| June 2010 | BBB Stable    |
| June 2011 | A- Stable     |
| July 2012 | BBB Negative  |

It may be observed that poor profitability and financial performance of the Company has resulted in deterioration of the credit rating of the Company. It has also resulted in breach of financial covenants thereby attracting penal provisions as per loan agreements, non-availability of sufficient funds including working capital and higher rate of interest. If the existing hardship of the Company continues, there may be further deterioration in performance as well as credit worthiness of the Company.

#### 4.3. Overall Analysis: APL Phase III

Set out below is the completed cost of Phase III as well as hardship suffered by the company on account of energy charge and capacity charge for supplying power under PPA from SCOD up to 31<sup>st</sup> March 2013:

##### a. Capital Cost of Phase III (excluding Mundra- Dehgam transmission line)

| Project Cost Break-up                               | Appraised Cost<br>in June 2011 | As on 31st<br>March<br>2013** | (Rs. Cr.)                    |
|---|--------------------------------|-------------------------------|------------------------------|
|   |                                |                               | Change in<br>Project<br>Cost |
| Land, Site Development and Non-EPC cost             | 47                             | 47                            | -                            |
| Engineering Procurement and Construction Cost (EPC) | 5131                           | 6632                          | 1501                         |
| Preliminary & Pre-operative Expenses                | 211                            | 159                           | -52                          |
| IDC   | 526                            | 859                           | 333                          |
| Contingencies                                       | 11                             | 0                             | -11                          |
| Total project Cost*                                 | 5926                           | 7697                          | 1771                         |
| Project cost per MW                                 | 4.49                           | 5.83                          |                              |

\* excludes Margin Money of Rs. 113 Cr.\*\* As per Statutory Auditor Certificate

The project cost as appraised by lenders in June 2011 was around Rs. 5926 Cr. (excluding around Rs. 113 Cr. of Margin Money). The completed project cost as per Statutory Auditor Certificate is Rs. 7697 Cr. The phase III project has suffered a cost over-run of about Rs. 1771 Cr. comprising primarily increase in EPC cost as shown in the above table. The increase in EPC cost is mainly on account of adverse currency movement.

##### b. Actual Hardship from SCOD to FY 12-13

The company started electricity supply under Gujarat PPA (1000 MW on Net basis) from SCOD, i.e., 2<sup>nd</sup> February 2012.

**Committee Report for Adani Power Limited**

Set out below is a brief snapshot of Profit and Loss statement for Phase III project from SCOD till 31<sup>st</sup> March 2013. The table below showing the losses of about Rs. 839 Cr. is based on the Statutory Auditor Certificate for the relevant periods furnished by the Company.

(Rs. Cr.)

|   | PPA            | Non PPA       | Total          |
|---|----------------|---------------|----------------|
| Sale units excluding UI (in MUs)                              | 4709.41        | 268.54        | 4878.84        |
| Sales   | 1055.76        | 102.45        | 1158.21        |
| UI charges  | 0.00           | 29.86         | 29.86          |
| Other income  | 0.94           | 0.06          | 1.00           |
| Less: Rebate for Prompt Payment                               | 21.60          | 0.85          | 22.45          |
| <b>Total Income</b>   | <b>1035.09</b> | <b>131.52</b> | <b>1166.62</b> |
| Coal Cost   | 1122.35        | 44.04         | 1166.39        |
| Secondary Fuel  | 7.96           | 0.31          | 8.27           |
| Total O&M   | 82.92          | 3.25          | 86.17          |
| Open Access & transmission                                    | 0.00           | 2.77          | 2.77           |
| Other Expenses  | 3.07           | 0.12          | 3.19           |
| <b>PBDIT</b>  | <b>-181.19</b> | <b>81.02</b>  | <b>-100.17</b> |
| Depreciation  | 299.58         | 11.76         | 311.34         |
| <b>PBIT</b>   | <b>-480.78</b> | <b>69.26</b>  | <b>-411.51</b> |
| Interest  | 485.33         | 19.06         | 504.39         |
| <b>PBT before Other Income</b>                                | <b>-966.11</b> | <b>50.20</b>  | <b>-915.90</b> |
| Other income  |                |               | 76.27          |
| <b>PBT</b>  |                |               | <b>-839.63</b> |
| <b>Per Unit Analysis for Gujarat PPA</b>                      |                |               |                |
|   | Realised       | Actual Cost   |                |
| Energy Charge per unit  | 1.35           | 2.38          |                |
| Capacity charge per unit                                      | 0.85*          | 1.87          |                |
| Hardship on account of Energy cost for PPA supply (Rs. Cr.)   | 486.81         |               |                |
| Hardship on account of Capacity cost for PPA supply (Rs. Cr.) | 479.30         |               |                |

Source: Statutory Auditor Certificate

\*Actual Quoted tariff for FY 11-12 and FY 12-13 is Rs. 1/unit but weighted average realization is 85p/unit for FY 11-12 and FY12-13, which is adjusted for discount for prompt payment, other operating income, etc.

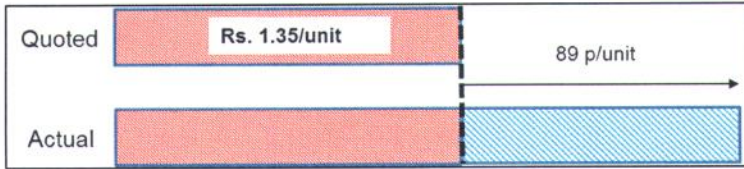
The company has suffered a loss of about Rs. 839 Cr. in Phase III (about Rs. 966 Cr. for supply under PPA) since SCOD till 31<sup>st</sup> March 2013. The loss is mainly on account of increase in fuel cost and increase in completed cost of the project on account of adverse currency movement.

**c. Illustrative Analysis of Costs/ tariff for FY 13-14**

In this sub-section, an attempt has been made to analyze illustrative tariff for FY13-14 (both illustrative capacity charges and illustrative energy charges) vis-a- vis the quoted PPA tariff for FY13-14 for Phase III.

**Energy Charges:**

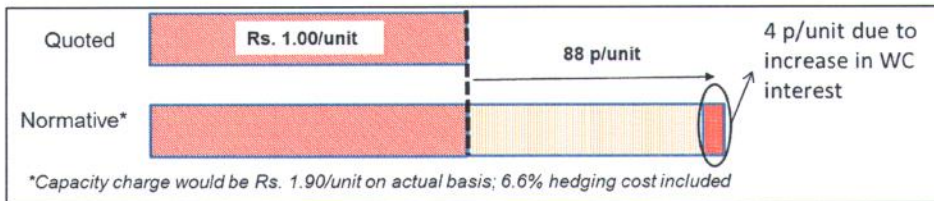
The diagram below shows the analysis of illustrative per unit energy charges as on 30<sup>th</sup> June 2013 vis-a- vis the quoted energy charges as per PPA for FY13-14.



As may be seen from the figure above, the illustrative per unit energy charge as on 30<sup>th</sup> June 2013 is Rs. 2.24/unit as against the PPA quoted energy charge of Rs. 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 Rs. 2407/ton and 6322 GCV coal with landed cost of Rs. 5934/ton respectively. Please refer Annexure IV for illustrative calculations.

**Capacity Charges:**

The diagram below shows the analysis of illustrative capacity charges for FY13-14 vis-a- vis the quoted capacity charge as per PPA for FY13-14. (on both actual and normative basis).



As may be seen from the figure above, for FY13-14, the capacity charge on normative basis after including estimated hedging cost (as on date ECB loans are not hedged) is Rs. 1.88/unit and on actual basis Rs. 1.90/unit. Also, in this case, the levelised capacity charges on normative and actual basis approximate to Rs. 1.59/unit and Rs. 1.54/unit respectively.

Assuming rupee depreciation and no hedging costs, the capacity charges on normative basis and actual basis are Rs. 1.60/unit and Rs. 1.61/unit respectively. Also in this case, the levelised capacity charges on normative and actual basis approximate to Rs. 1.46/unit and Rs. 1.49/unit respectively. The same has been tabulated as under:

(Rs. /unit)

|           | Hedged |           | Unhedged |           |
|-----------|--------|-----------|----------|-----------|
|           | Actual | Normative | Actual   | Normative |
| FY 13-14  | 1.90   | 1.88      | 1.61     | 1.60      |
| Levelised | 1.54   | 1.59      | 1.49     | 1.46      |

All the above capacity charge numbers include RoE of Rs. 0.29/unit.

#### 4.4. Overall Analysis: APL Phase IV

##### a. Capital Cost of Phase IV

| Project Cost Break-up                         | (Rs. Cr.)                       |                                     |                        |
|---|---------------------------------|-------------------------------------|------------------------|
|   | Appraised Cost in November 2010 | As on 31 <sup>st</sup> March 2013** | Change in Project Cost |
| Land, Site Development and Non-EPC cost       | 20                              | 88                                  | 68                     |
| Engineering Procurement and Construction Cost | 6869                            | 8991                                | 2122                   |
| Preliminary & Pre-operative Expenses          | 69                              | 240                                 | 171                    |
| IDC   | 610                             | 570                                 | -40                    |
| Contingencies                                 | 58                              | 0                                   | -58                    |
| Total project Cost*                           | 7626                            | 9889                                | 2263                   |
| FGD (as detailed below)                       |                                 | 614.70                              |                        |
| Total Project cost (incl. FGD)                |                                 | 10,503.70                           |                        |
| Project Cost per MW                           | 3.85                            | 5.30                                |                        |

\* excludes Margin Money of Rs. 160 Cr. \*\* As per statutory auditor certificate

The project cost as appraised by lenders in November 2010 was about Rs. 7626 Cr. (excluding about Rs. 160 Cr. of Margin Money). As per Statutory Auditor's Certificate, the completion cost of Phase IV of Project was Rs. 9889 Cr. and cost incurred on FGD as on 31<sup>st</sup> March 2013 was Rs. 614 Cr.

Phase IV of the project has suffered a cost over-run of about Rs. 2263 Cr. as shown in the above table. The increase in EPC cost is mainly on account of adverse currency movement.

##### Capital Cost of Flue Gas Desulphurization Plant

(Rs. Cr.)

| Project Cost Break-up                         | As on 31 <sup>st</sup> March 2013 |
|---|-----------------------------------|
| Engineering Procurement and Construction Cost | 590.69                            |
| Total Hard Costs                              | 590.69                            |
| Interest During Construction                  | 24.01                             |
| Total project Cost                            | 614.70                            |

Source: Statutory Auditor Certificate

The total project cost of Phase IV project (including FGD plant) is about Rs. 10503 Cr. as on 31<sup>st</sup> March 2013.

##### b. Actual Hardship from SCOD to FY12-13

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

Following is a brief snapshot of Profit and Loss statement for Phase IV project from SCOD till 31<sup>st</sup> March 2013.

The table below showing the losses of about Rs. 798 Cr. is based on the Statutory Auditor Certificate for the relevant period furnished by the Company.

**Committee Report for Adani Power Limited**

(Rs. Cr.)

| <b>Revenue Generated</b>   | <b>Haryana PPA</b> | <b>Others</b>   | <b>Total</b>       |
|--|--------------------|-----------------|--------------------|
| Sale units excluding UI (in MUs)   | 2712.12            | 5708.78         | 8537.90            |
| Sales  | 631.26             | 2255.76         | 2887.02            |
| Sales Realized from UI   |                    | 90.75           | 90.75              |
| Less: Rebate given for prompt payment  | 8.89               | 18.70           | 27.59              |
| Other Operating Income   | 4.43               | 9.825           | 14.26              |
| <b>Total</b>   | <b>626.81</b>      | <b>2337.63</b>  | <b>2964.44</b>     |
| <b>Expenditure</b>   |                    |                 |                    |
| Fuel Cost  | 654.88             | 1451.21         | 2106.09            |
| SFO  | 11.66              | 25.85           | 37.51              |
| Transmission charge / Open Access  | 179.37             | 201.26          | 380.63             |
| O & M Expenses   | 46.14              | 102.24          | 148.38             |
| <b>Cost of Operation</b>   | <b>892.05</b>      | <b>1780.57</b>  | <b>2672.62</b>     |
| <b>PBDIT</b>   | <b>-265.24</b>     | <b>557.06</b>   | <b>291.82</b>      |
| Depreciation   | 155.58             | 344.76          | 500.33             |
| Interest   | 205.46             | 455.31          | 660.77             |
| <b>PBT before other income</b>   | <b>-626.29</b>     | <b>-243.00</b>  | <b>-869.28</b>     |
| Other Non-Operating income   | 22.12              | 49.01           | 71.13              |
| <b>PBT</b>   |                    |                 | <b>-798.15</b>     |
| <b>Per Unit Analysis for Haryana PPA</b>   |                    |                 |                    |
|  |                    | <b>Realized</b> | <b>Actual Cost</b> |
| Capacity Charge per Unit   |                    | 1.121*          | 1.544              |
| Energy Charge per Unit   |                    | 1.19            | 2.415              |
| Transmission Charge per Unit   |                    |                 | 0.661              |
| Hardship on account of Energy cost for PPA supply (including Transmission expenses) (in Rs. Cr.) |                    | 511.5           |                    |
| Hardship on account of Capacity loss for PPA supply (in Rs. Cr.)                                 |                    | 114.8           |                    |

Source: Statutory Auditor Certificate

\*Actual Quoted tariff for FY 12-13 is Rs. 1.155 per unit which is adjusted for discount for prompt payment, other operating income, etc.

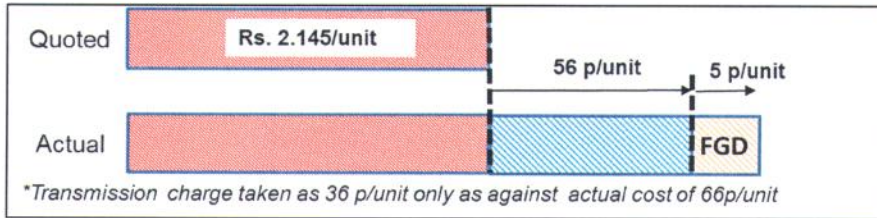
The company has suffered a loss of about Rs. 798 Cr. in Phase IV (about Rs. 604 Cr. for supply under PPA) in FY 12-13. The loss is mainly on account of increase in fuel cost and increase in completed cost of the project on account of adverse currency movement.

**c. Illustrative Analysis of costs/Tariff for FY13-14:**

In this sub-section, an attempt has been made to analyze illustrative tariff for FY13-14 (both illustrative capacity charges and illustrative energy charges) vis-a- vis the quoted PPA tariff for FY 13-14 for Phase IV.

**Energy Charges:**

The diagram below shows the analysis of illustrative per unit energy charges as on 30<sup>th</sup> June 2013 vis-a- vis the quoted energy charges as per PPA for FY13-14.



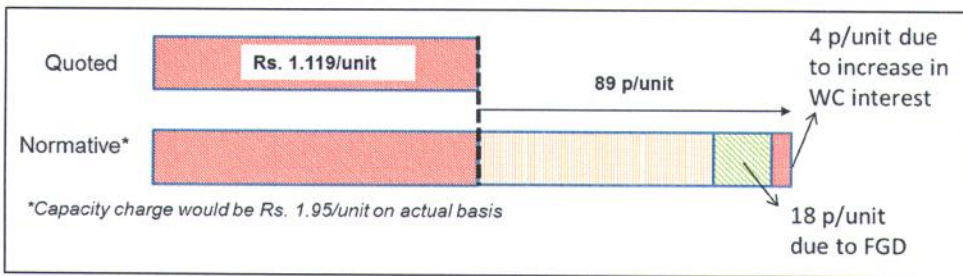
As set out in the figure above, the illustrative per unit energy charge as on 30<sup>th</sup> June 2013 was Rs. 2.75/unit (excluding electricity duty but including transmission charge) and quoted energy charge as per PPA was Rs. 2.145/unit. The energy cost was arrived at considering blending ratio of 58:42 (by weight) for 3300 GCV domestic coal with landed cost of Rs. 2786/ton and 6322 GCV coal with landed cost of Rs. 5934/ton respectively. Please refer 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 Charges:**

The diagram below shows the analysis of illustrative capacity charges for FY13-14 vis-a- vis the quoted capacity charge as per PPA for FY13-14.(on both actual and normative basis).



As set out in from the figure above, the FY14 capacity charge on normative basis is Rs. 2.01/unit and on actual basis Rs. 1.95/unit. Levelised capacity charge on normative and actual basis at CERC's current bid evaluation discount rate of 13.10% is Rs. 1.67/unit and Rs. 1.70/unit respectively.

The same has been tabulated as under:

|           | (Rs. /unit) |           |
|-----------|-------------|-----------|
|           | Actual      | Normative |
| FY 13-14  | 1.95        | 2.01      |
| Levelised | 1.70        | 1.67      |

All the above actual and normative capacity charge numbers include RoE of Rs. 0.28/unit and Rs. 0.27/unit respectively.

Hence, the power producer is expected to incur losses not only on energy charges but also on account of capacity charges over quoted tariff. However the scope of Committee is limited to evaluate and evolve mechanism to mitigate the hardship on account of energy charges.

In regard to hardship on account of capacity charges, the Committee suggests that the same shall have to be mitigated by the Company and other stake holders like 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.

As discussed in the Lender's meeting dated 17<sup>th</sup> July 2013 and Committee meeting on 30<sup>th</sup> July 2013, the hardship is also suggested to be mitigated by extension of tenor of loans and providing moratorium for which recommendation is being made by the Committee, as a part of this report. This will help the company in reducing the under-recovery on the capacity cost.

Conclusion:

It appears from the analysis above, that the Company is suffering financial losses currently due to under recovery of capacity and energy costs. As also submitted by the Company in the Petition, if the current operations of the Plant continue with imported coal, the networth of the Company may get eroded in 2 years' time. In such a situation, the Company may be forced to shut down its operations rather than continuously incur losses. In such a scenario, the Company also runs the risk of lenders foreclosing and recall of the loans on account of deteriorating creditworthiness of the Company.

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.

Some mechanism may be put in place for immediate mitigation of hardship and to avoid consequent repercussions on the Company enabling it to continue supply of power to the Procurers.

## 5. INDUSTRY ANALYSIS

This chapter sets out capital cost comparison of APL with its peers to ascertain Company's competitive advantage over its peers. The comparison is with respect to the following areas:

- ✚ Capital Cost
- ✚ Variable cost per unit
- ✚ Recent bids

A brief overview of the impact of Indonesian Regulations on the coal prices is also covered in the Annexure V as it is a major factor contributing to the hardship, challenges and losses of the industry.

### 5.1 Capital Cost comparison

The total project cost of Phase III (excluding transmission line from Mundra-Dehgam) is around Rs. 7696 Cr. and the total project cost of Phase IV (excluding HVDC transmission line from Mundra- Mohindergarh) is about Rs. 10503 Cr.

Based on these total project costs, the per MW cost of the project approximates to Rs. 5.83 Cr. for Phase III and around Rs. 5.30 Cr. for Phase IV respectively.

As per CERC order dated 4<sup>th</sup> June 2012 benchmarked Capital Cost (Hard cost) for Thermal Power Stations with Coal as Fuel, the applicable benchmark for hard cost for Phase III and phase IV is Rs. 5.01 Cr./MW and Rs. 4.67<sup>1</sup> Cr./MW respectively with December 2011 indices as base. Applying WPI and forex depreciation for the years, the benchmark hard cost works out to be Rs. 5.92 Cr./MW and Rs. 5.52 Cr./MW respectively.

The Actual Hard cost per MW for Phase III and Phase IV approximates to Rs. 5.06 Cr. /MW (excluding Transmission line from Mundra- Dehgam) and Rs. 4.89 Cr./MW (excluding HVDC transmission line from Mundra- Mohindergarh) respectively which indicates the capital cost is competitive compared with the CERC benchmark.

A comparison of project cost of APL- Phase III and Phase IV with that of other comparable coal based power projects being currently developed are given below:

#### Completed Projects:

| Project                 | Developer | Capacity (MW) | Cost (Rs. Cr.) | Cost (Rs. Cr./MW) | Remark         |
|-------------------------|-----------|---------------|----------------|-------------------|----------------|
| Jhajar TPP              | CLP       | 1320          | 6398           | 4.85              | Super critical |
| Warora TPP, Maharashtra | GMR       | 600           | 3948           | 6.58              | Sub-critical   |
| Maithon TPP, Jharkhand  | Tata      | 1050          | 5232           | 4.98              | Sub-critical   |

#### Under Implementation:

| Project           | Developer | Capacity (MW) | Expected Completion Cost (Rs. Cr.) | Cost (Rs. Cr./MW) | Remark       |
|-------------------|-----------|---------------|------------------------------------|-------------------|--------------|
| Chhattisgarh TPP  | DB Power  | 1200          | 6533                               | 5.44              | Sub-critical |
| RKM Powergen TPP, | RKM       | 1400          | 7233                               | 5.17              | Sub-critical |

<sup>1</sup> Using the benchmark rate for 660 MWX3 units for Green Field in absence of benchmark rate for extension for the same configuration.



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| Project                      | Developer | Capacity (MW) | Expected Completion Cost (Rs. Cr.) | Cost (Rs. Cr./MW) | Remark         |
|------------------------------|-----------|---------------|------------------------------------|-------------------|----------------|
| Chhattisgarh                 |           |               |                                    |                   |                |
| Kanderai TPP, Orissa         | KVK       | 1050          | 6300                               | 6.00              | Sub-critical   |
| Bara TPP, Uttar Pradesh      | Jaypee    | 1980          | 10780                              | 5.44              | Super critical |
| Rajpura TPP, Punjab          | L&T       | 1400          | 9600                               | 6.86              | Super critical |
| Chhattisgarh TPP             | GMR       | 1370          | 8290                               | 6.05              | Super critical |
| Amarkantak TPP, Chhattisgarh | Lanco     | 1320          | 7400                               | 5.60              | Super critical |
| Babandh TPP, Orissa          | Lanco     | 1320          | 6930                               | 5.25              | Super critical |
| Vidarbha TPP, Maharashtra    | Lanco     | 1320          | 8788                               | 6.66              | Super critical |
| Talwandi Sabo TPP, Punjab    | Sterlite  | 1980          | 11000                              | 5.56              | Super critical |
| Mouda STPP Stage II          | NTPC      | 1320          | 8190                               | 6.20              | Super Critical |
| Solapur STPP                 | NTPC      | 1320          | 9395                               | 7.12              | Super Critical |
| Lara STPP                    | NTPC      | 1600          | 11846                              | 7.40              | Super Critical |
| Kudagi STPP Stage I          | NTPC      | 2400          | 15166                              | 6.32              | Super Critical |
| Barh STPP Stage II           | NTPC      | 1320          | 7340                               | 5.56              | Super Critical |
| Bongaigaon TPP               | NTPC      | 750           | 4400                               | 5.87              | Sub-Critical   |
| Rihand STPP Stage III        | NTPC      | 1000          | 6231                               | 6.23              | Sub-Critical   |

Source: Market reports; other public information

It may be observed from the above table, the cost per MW of APL Phase III & IV Project is competitive with similar projects being set up by other companies.

**Transmission tariff in PPA for Phase IV**

The Haryana utilities have represented that the quoted energy tariff for Phase IV does not include transmission tariff. It has been submitted by APL that the transmission charges had been factored in the energy tariff in the Haryana bid. Reference may be made to clause 2.1.3 of RfP for Haryana wherein the Company was given the liberty to factor in the transmission cost in either energy or capacity components. Relevant Extract of the Clause is reproduced as under:

*“The Transmission Charge for the CTU transmission network used by the Seller upto the Delivery Point CTU-HVPM Interconnection Point) shall be paid on actuals. If a Project is not connected (or is envisaged to be connected) to the CTU network, then the bidder can also explore the possibility of using the network of the concerned STU or may build a dedicated transmission line for connecting to the nearest point in the CTU network. The Transmission Charge/cost pertaining to such STU network or the dedicated transmission line shall not be paid by the Procurer and therefore, it should be included by the Bidder in other components of tariff quoted by him. The payment to the Seller will be made during the term of the agreement on the basis of transmission charges notified by CTU for wheeling power upto the Delivery Point. In the event, the CTU grants open access right from the Project Switchyard and collects transmission charges for STU network as well, the transmission charges for the Transmission Corridor Reservation Capacity approved by the CTU shall be reimbursed by the Procurer net of transmission charges pertaining to STU network”*

It is important to highlight that it would be impractical to assume that transmission tariff was included as part of the capacity charge which was Rs. 0.997 per unit on a levelised basis. After considering the prevailing charges at the time of RfP for Gujarat, WR, WR-NR link and NR CTU, the total transmission cost would have

been around 77 p/unit (including losses) and this figure has been verified by the technical consultant also. The transmission charges for the bid capacity were also indicated in the RfP. Additionally, following table shows the quoted capacity charge by various bidders for Haryana bid:

| Company            | Capacity charge (Rs./unit) |
|--------------------|----------------------------|
| Adani Power        | 0.977                      |
| Lanco              | 1.284                      |
| PTC – GMR          | 1.346                      |
| Essar              | 2.121                      |
| Reliance Rosa      | 1.306                      |
| Reliance Chitrangi | 1.170                      |
| Tata Power         | 1.547                      |
| Electrosteel       | 2.785                      |

In the above table, only Adani Power had bid with dedicated transmission line while for other bidders, a normative transmission charge was added for evaluation.

Further, the Company in its petition represented that it had assumed a transmission tariff of 48 p/unit based upon the proportionate cost of capital of its dedicated line for the contracted capacity. If the estimated transmission tariff is adjusted from the levelized quoted capacity tariff, the effective capacity tariff comes out to be around 49.7p/unit. In light of capital cost of power plants of similar technology and capacity (as covered in the previous section), it may be inferred that a power plant cannot be installed at such a low cost.

Hence, it would be reasonable to assume that the transmission cost was part of the quoted energy tariff and not the capacity charge.

## **5.2 Variable Cost comparison**

An attempt has been made to ascertain the competitiveness of the power produced by APL- Phase III and Phase IV in terms of the merit order dispatch / ranking. Higher order dispatch of power and price advantage makes it more likely that the respective state electricity boards would not be in the position to purchase power at this price from other sources.

While preparing the merit order table for both Gujarat and Haryana, variable cost of generation has been compared for Central and State generating stations and other Independent Power Producers. It may be possible that the energy charge from these stations may undergo an upward revision owing to escalation in fuel charges, O&M expenses, etc. In such a scenario, APL- Phase III & Phase IV may enjoy a higher ranking in the merit order dispatch as discussed below.

### **Merit Order for State of Gujarat:**

Please find below the merit order table for first quarter ended 30<sup>th</sup> June 2013 shared by Gujarat discom.

The merit order table indicates that Adani would be able to retain its competitive advantage at the present energy cost of Phase III Project of Rs. 2.24/unit (as discussed in the preceding chapter) over more than ~20% of the below mentioned power producers. The position of the Company may improve further in case of any upward revision in variable cost of the power producers as listed below.

**Committee Report for Adani Power Limited**

| Stations                         | Status   | Purchase (MUs) | VC (Rs./ Unit) | Cumulative Purchase (MUs) | Cumulative Purchase | Rank |
|----------------------------------|----------|----------------|----------------|---------------------------|---------------------|------|
|                                  |          |                |                |                           | (in %)              |      |
| GSECL Ukai Hydro                 | Must Run | 98             | 0.00           | 98                        | 0.54%               | 1    |
| GSECL Kadana Hydro               | Must Run | 13             | 0.00           | 111                       | 0.61%               | 2    |
| NPC-TAPS                         | Must Run | 151            | 1.04           | 262                       | 1.44%               | 3    |
| SSNL (Hydro)                     | Must Run | 145            | 2.05           | 407                       | 2.23%               | 4    |
| NPC-KAPP                         | Must Run | 231            | 2.37           | 638                       | 3.50%               | 5    |
| Captive Plants                   | Must Run | 5              | 2.68           | 643                       | 3.53%               | 6    |
| NPC-TAPS ( 3 & 4)                | Must Run | 315            | 3.05           | 958                       | 5.26%               | 7    |
| Wind Farms                       | Must Run | 768            | 3.41           | 1726                      | 9.47%               | 8    |
| Other Renewables                 | Must Run | 17             | 3.44           | 1743                      | 9.57%               | 9    |
| Solar                            | Must Run | 364            | 13.34          | 2107                      | 11.56%              | 10   |
| ACB India Ltd                    |          | 366            | 0.55           | 2473                      | 13.57%              | 11   |
| GMDC Akrimota (Lignite)          |          | 0              | 1.03           | 2473                      | 13.57%              | 12   |
| GIPCL(SLPP)                      |          | 665            | 1.15           | 3138                      | 17.22%              | 13   |
| NTPC-V'CHAL-IV                   |          | 159            | 1.23           | 3297                      | 18.09%              | 14   |
| NTPC-V'CHAL -I                   |          | 370            | 1.23           | 3667                      | 20.12%              | 15   |
| NTPC-Korba                       |          | 789            | 1.24           | 4456                      | 24.45%              | 16   |
| NTPC-V'CHAL-III                  |          | 544            | 1.30           | 5000                      | 27.44%              | 17   |
| NTPC-V'CHAL-II                   |          | 466            | 1.30           | 5466                      | 30.00%              | 18   |
| GSECL Kutch Lignite              |          | 417            | 1.34           | 5883                      | 32.28%              | 19   |
| APL (Mundra) Bid 2               |          | 1560           | 1.35           | 7443                      | 40.84%              | 20   |
| CGPL- Mundra UMPP                |          | 2460           | 1.41           | 9903                      | 54.35%              | 21   |
| Essar Power Bid 2 - (Coal)       |          | 1402           | 1.47           | 11305                     | 62.04%              | 22   |
| APL (Mundra) Bid 1               |          | 1701           | 1.57           | 13006                     | 71.37%              | 23   |
| NTPC-SIPAT                       |          | 1003           | 1.68           | 14009                     | 76.88%              | 24   |
| NTPC-Kahlagaon                   |          | 62             | 1.88           | 14071                     | 77.22%              | 25   |
| GSECL Ukai                       |          | 1064           | 2.36           | 15135                     | 83.06%              | 26   |
| NTPC-Gandhar GPS                 |          | 156            | 2.46           | 15291                     | 83.91%              | 27   |
| NTPC-KAWAS                       |          | 111            | 2.54           | 15402                     | 84.52%              | 28   |
| GSECL (Wanakbori Unit 7)         |          | 343            | 2.57           | 15745                     | 86.41%              | 29   |
| GSECL Wanakbori 1-6              |          | 1216           | 2.65           | 16961                     | 93.08%              | 30   |
| GSECL (Gandhinagar Unit 5)       |          | 355            | 2.69           | 17316                     | 95.03%              | 31   |
| Essar Power - GPS                |          | 0              | 2.72           | 17316                     | 95.03%              | 32   |
| GSECL Dhuvaran 1 & 2 - Gas based |          | 58             | 2.93           | 17374                     | 95.35%              | 33   |
| NTPC-Mauda                       |          | 0              | 3.03           | 17374                     | 95.35%              | 34   |
| GSEG Hazira - GPS                |          | 89             | 3.35           | 17463                     | 95.83%              | 35   |
| GSECL Gandhinagar 1-4            |          | 338            | 3.37           | 17801                     | 97.69%              | 36   |
| GSECL (Utran)                    |          | 9              | 3.49           | 17810                     | 97.74%              | 37   |
| GSECL Sikka                      |          | 136            | 3.60           | 17946                     | 98.49%              | 38   |

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| Stations      | Status | Purchase (MUs) | VC (Rs./ Unit) | Cumulative Purchase | Cumulative Purchase | Rank |
|---------------|--------|----------------|----------------|---------------------|---------------------|------|
| GIPCL(145 MW) |        | 69             | 3.90           | 18015               | 98.86%              | 39   |
| GIPCL(160 MW) |        | 54             | 5.00           | 18069               | 99.16%              | 40   |
| CLPI (GPEC)   |        | 153            | 5.88           | 18222               | 100.00%             | 41   |
| Grand total   |        | 18222          |                |                     |                     |      |

Source: Gujarat discom

**Merit Order for State of Haryana:**

Please find below the merit order table for first quarter ended 30<sup>th</sup> June 2013 shared by Haryana discom (scheduled basis).

The merit order table also indicates that Adani would be able to retain its competitive advantage over more than ~49% of the under mentioned power producers at the present energy cost. The position of Adani may improve further in case there is any upward revision in the variable cost of the under mentioned power producers.

| Stations       | Purchase (MUs) | VC (Rs/ Unit) | Cumulative Purchase (MUs) | Cumulative Purchase (in %) | Rank |
|----------------|----------------|---------------|---------------------------|----------------------------|------|
| BBMB           | 8428           | 0.27          | 8428                      | 7.75%                      | 1    |
| Salal          | 1609           | 0.50          | 10037                     | 9.23%                      | 2    |
| URI            | 564            | 0.81          | 10601                     | 9.75%                      | 3    |
| Chamera        | 1305           | 0.92          | 11906                     | 10.95%                     | 4    |
| SSTPS          | 3463           | 0.95          | 15369                     | 14.14%                     | 5    |
| Bairasuil      | 689            | 0.95          | 16058                     | 14.77%                     | 6    |
| RHTPS-3        | 495            | 1.05          | 16553                     | 15.23%                     | 7    |
| RHTPS          | 1148           | 1.06          | 17701                     | 16.28%                     | 8    |
| RHTPS-2        | 1137           | 1.07          | 18838                     | 17.33%                     | 9    |
| WYC/Kakroi     | 539            | 1.11          | 19376                     | 17.82%                     | 10   |
| Tanakpur       | 47             | 1.13          | 19424                     | 17.87%                     | 11   |
| SJVNL          | 1207           | 1.14          | 20630                     | 18.98%                     | 12   |
| Chamera-II     | 376            | 1.36          | 21007                     | 19.32%                     | 13   |
| Dhauliganga    | 198            | 1.39          | 21205                     | 19.50%                     | 14   |
| CGPL           | 6367           | 1.40          | 27571                     | 25.36%                     | 15   |
| KHTPS2         | 638            | 1.84          | 28209                     | 25.95%                     | 16   |
| PTC TALA       | 134            | 2.02          | 28343                     | 26.07%                     | 17   |
| KHTPS1         | 288            | 2.03          | 28631                     | 26.33%                     | 18   |
| THDC Koteshwar | 194            | 2.11          | 28824                     | 26.51%                     | 19   |
| SEWA-II        | 124            | 2.12          | 28949                     | 26.63%                     | 20   |
| Adani Phase IV | 25986          | 2.14*         | 54934                     | 50.53%                     | 21   |
| Chamera III    | 228            | 2.15          | 55162                     | 50.74%                     | 22   |
| FSTPS          | 140            | 2.31          | 55303                     | 50.87%                     | 23   |
| FGTPS          | 122            | 2.34          | 55424                     | 50.98%                     | 24   |
| FGTPS-2        | 240            | 2.34          | 55664                     | 51.20%                     | 25   |

**Committee Report for Adani Power Limited**

| <b>Stations</b>           | <b>Purchase (MUs)</b> | <b>VC (Rs/ Unit)</b> | <b>Cumulative Purchase (MUs)</b> | <b>Cumulative Purchase (in %)</b> | <b>Rank</b> |
|---------------------------|-----------------------|----------------------|----------------------------------|-----------------------------------|-------------|
| FGTPS-3                   | 102                   | 2.36                 | 55766                            | 51.29%                            | 26          |
| DVC                       | 1721                  | 2.38                 | 57487                            | 52.87%                            | 27          |
| NAPS                      | 450                   | 2.48                 | 57937                            | 53.29%                            | 28          |
| THDC                      | 446                   | 2.51                 | 58383                            | 53.70%                            | 29          |
| Faridabad Gas             | 3630                  | 2.52                 | 62013                            | 57.04%                            | 30          |
| NCTPS (Dadri-II)          | 69                    | 2.62                 | 62082                            | 57.10%                            | 31          |
| Jhajjar Power Ltd.        | 6337                  | 2.66                 | 68419                            | 62.93%                            | 32          |
| DCRTPP unit-1 - 2         | 8250                  | 2.71                 | 76669                            | 70.52%                            | 33          |
| Anta                      | 214                   | 2.71                 | 76883                            | 70.71%                            | 34          |
| Dhulhasti                 | 461                   | 2.84                 | 77344                            | 71.14%                            | 35          |
| Dadri                     | 270                   | 2.94                 | 77614                            | 71.39%                            | 36          |
| Auriya                    | 191                   | 3.01                 | 77806                            | 71.56%                            | 37          |
| RAPS                      | 1815                  | 3.03                 | 79621                            | 73.23%                            | 38          |
| RGTPP                     | 9783                  | 3.07                 | 89404                            | 82.23%                            | 39          |
| PNP TH- V                 | 205                   | 3.13                 | 89609                            | 82.42%                            | 40          |
| Puri Oil Mill             | 39                    | 3.16                 | 89648                            | 82.46%                            | 41          |
| Bhoruka Power Corps. Ltd. | 47                    | 3.18                 | 89695                            | 82.50%                            | 42          |
| PNP TH- VII               | 4466                  | 3.20                 | 94161                            | 86.61%                            | 43          |
| Pragati Power             | 173                   | 3.21                 | 94334                            | 86.77%                            | 44          |
| PNP TH- VIII              | 4760                  | 3.22                 | 99094                            | 91.14%                            | 45          |
| PNP TH- VI                | 3315                  | 3.31                 | 102409                           | 94.19%                            | 46          |
| Aravali Co. Pvt. Ltd.     | 2997                  | 3.40                 | 105406                           | 96.95%                            | 47          |
| PTC J&K                   | 996                   | 3.74                 | 106403                           | 97.87%                            | 48          |
| Shahbad Sugar Mill        | 104                   | 4.05                 | 106507                           | 97.96%                            | 49          |
| Haryana Co. Sugar Mill.   | 4                     | 4.05                 | 106510                           | 97.97%                            | 50          |
| Ch. Devi Lal Sugar Mill   | 5                     | 4.12                 | 106515                           | 97.97%                            | 51          |
| Hafed Sugar Mill          | 6                     | 4.13                 | 106521                           | 97.98%                            | 52          |
| PNP TH- I to IV           | 2081                  | 4.17                 | 108602                           | 99.89%                            | 53          |
| P&R Gogripur              | 13                    | 4.89                 | 108615                           | 99.90%                            | 54          |
| Star Wire India           | 80                    | 5.59                 | 108696                           | 99.98%                            | 55          |
| SDS Solar Pvt. Ltd. DH    | 4                     | 5.67                 | 108700                           | 99.98%                            | 56          |
| C&S Electrical            | 4                     | 5.67                 | 108704                           | 99.98%                            | 57          |
| Chandraleela Solar DH     | 3                     | 5.67                 | 108707                           | 99.99%                            | 58          |
| H.R. Mineral Solar UH     | 3                     | 5.67                 | 108710                           | 99.99%                            | 59          |
| Sukhbir Solar DH          | 3                     | 5.67                 | 108714                           | 99.99%                            | 60          |
| Jamil Solar DH            | 3                     | 5.67                 | 108716                           | 99.99%                            | 61          |
| VKG Solar UH              | 3                     | 5.67                 | 108719                           | 100.00%                           | 62          |
| Tayal & Co. Solar UH      | 3                     | 5.67                 | 108722                           | 100.00%                           | 63          |
| <b>Total</b>              | <b>108722</b>         |                      |                                  |                                   |             |

\*including transmission charges.

### 5.3 Evaluation of Recent Bids

In the last few years, various procurement processes have been initiated by Distribution companies under Case I Long term and Medium Term competitive bidding Process.

Out of the 8 processes, only 5 processes have been completed in respect of PPA signing and PPAs have not been signed for the remaining processes. Details of the processes where PPAs were signed are set out below:

| Procurer State | PPA term    | Requisite Quantum (MW) | Tariff discovered (Rs./kWh) |
|----------------|-------------|------------------------|-----------------------------|
| Bihar          | Medium Term | 450                    | Rs. 4.41/ kWh               |
| Tamil Nadu     | Medium Term | 450                    | Rs. 4.99/kWh                |
| Tamil Nadu     | Long term   | 1000                   | Rs. 4.91/ kWh               |
| Andhra Pradesh | Long term   | 2000                   | Rs. 4.25/kWh                |
| DNH            | Long term   | 200                    | Rs. 4.62/kWh                |

Source: Market reports; other public information

Also, recent bids invited by Uttar Pradesh Power Corporation Limited (UPPCL) and Rajasthan DISCOMS under Case-1 (long term) indicated that the levelised tariff has been quoted by the bidders in the range of Rs. 4.4486/kWh to Rs. 7.100/kWh.

Bids were invited by UPPCL for 600 MW. However, till date, Lol have been issued only to the following bidders:

| Name of the Bidder | Quoted MW | Quoted Tariff |
|--------------------|-----------|---------------|
| NSL-Odisha         | 300       | 4.48          |
| PTC (TRN/ACB)      | 390       | 4.886         |
| Lanco Babandh      | 423.9     | 5.074         |
| RKM Powergen       | 350       | 5.088         |

Bids were invited by Rajasthan for 1000 MW. Following is the quoted tariff by various bidders:

| Sr. No | Name of the Bidder                    | Quoted MW | Quoted Tariff (Rs./kWh) |
|--------|---------------------------------------|-----------|-------------------------|
| 1      | Maruti Clean Coal and Power Ltd (PTC) | 195       | 4.517                   |
| 2      | Diligent Power (DB Power) Ltd (PTC)   | 311       | 4.811                   |
| 3      | Lanco Babandh                         | 100       | 4.943                   |
| 4      | Athena Chhattisgarh Power Ltd         | 200       | 5.143                   |
| 5      | SKS Power Chhattisgarh Generation Ltd | 100       | 5.300                   |
| 6      | Lanco-Vidharbha                       | 100       | 5.490                   |
| 7      | Annupur Thermal Power Project         | 200       | 5.517                   |
| 8      | KSK Mahanadi Power Project            | 475       | 5.572                   |
| 9      | Jindal                                | 300       | 6.038                   |
| 10     | Lanco Amarkantak                      | 100       | 7.110                   |

Source: Market reports; other public information

A summary of the state wise bids is reproduced in Annexure III for reference.

It is pertinent to assess the present bids in the light of changing business scenarios. The table below summarizes the various significant changes in some key parameters which are used in determining tariff vis-à-vis the year 2007 (i.e. when APL signed its PPAs):

|   | 2007  | Present   |
|---|---|---|
| SBI PLR   | 12.75%  | 14.45%  |
| MAT   | 10%   | 18.5%   |
| Exchange rate                                       | Rs. 40/ USD   | Rs. 60/ USD   |
| <i>Domestic Coal related</i>                        |   |   |
| Pricing mechanism of Domestic coal                  | UHV basis, Number of declared grade: A to F   | GCV (ADB) basis<br>Number of declared grade: G1 to G13  |
| Notified Basis Prices of "F" grade                  | Rs. 400 per MT  | Rs. 660 per MT (65% increase over 2007)   |
| Royalty   | Rs. 55+ 5% of basic pithead price of ROM  | 14% ad-valorem on basic pithead price   |
| Clean Energy Cess                                   | Nil   | Rs. 50/ton  |
| Central Excise Duty                                 | Nil   | 6.18% calculated on amount including Royalty and Stowing excise duty                                  |
| <i>Railway freight related</i>                      |   |   |
| Pricing   | Regulated   | De-regulated, linked to diesel prices.  |
| Busy Season Surcharge                               | 5% on applicable base freight for busy season from 1 <sup>st</sup> Oct to 30 <sup>th</sup> June   | 12% on applicable base freight rate for busy season from 1 <sup>st</sup> Oct to 30 <sup>th</sup> June |
| Service tax   | Nil   | 12% (excl 2% edu cess and 1% higher edu cess)   |
| Development Surcharge                               | 2% on normal tariff rate (basic plus busy season surcharge)   | 5% on Normal Tariff rate  |
| Electricity duty                                    | Nil   | Rs. 30 per 1000 units (excl 2% edu cess and 1% higher edu cess)                                       |
| Regulatory framework for pricing of Indonesian coal | Bi-lateral, fixed prices long term contract permitted   | Not less than HBA prices  |
| Mega Power Policy (MPP)                             | MPP benefits were available to the Company such as: <ul style="list-style-type: none"> <li>✓ exemption from customs duty on imports of equipment and material</li> <li>✓ Refund of terminal excise duty paid by various domestic suppliers on supply of equipment and material based on Deemed Export Benefit.</li> <li>✓ Security of payment through the sale of power to Power Trading Corporation (PTC), which in turn would have to sell power to beneficiary states and would have recourse to central plan assistance in the event of default by SEBs.</li> </ul> | Withdrawn   |

Source: Market data, Public Information

As it is evident from the table above, the cost of investment including finance cost and fuel cost and costs of domestic coal and coal transportation has increased substantially. This corroborates the observation in the CERC Order that if performance of power supply obligations of the Petitioner under the PPAs in question is rendered impossible, new replacement supply arrangement is likely to be costlier.

**Inference**

Based on the above, it may be inferred that the capacity charges quoted under the two PPAs (for 25 years), i.e., fixed capacity charge of Rs. 1/unit for GUVNL and levelised capacity charges of Rs. 0.997/unit for Haryana are quite competitive.



## 6. COMPENSATORY TARIFF DETERMINATION: EXPLORING OPTIONS/ALTERNATIVES

Based on the deliberations at the Committee meetings, discussions with Finance Sub-Group, inputs and findings from various consultants, comments and views of the procurers and developers and under the guidance of Shri Deepak Parekh, it may be recommended that:

- ↓ The Company may be compensated for historical losses on account on energy cost under-recoveries from PPA obligation date to the cut-off date, i.e., from SCOD to 31<sup>st</sup> March 2013 (calculations provided earlier in the report).
- ↓ A methodology may be formulated to compensate the Company for the prospective hardship on account of inadequate availability of domestic coal compared to FSA and promulgation of Indonesian Law, having an impact on price of coal from Indonesia and unprecedented increase in global coal prices, etc.

This chapter explores various alternatives to determine Compensatory Tariff and attempts to select the best possible alternative for computation of Compensatory Tariff (CT). In selection of the best possible alternate, 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 Rs. 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)<br>(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 Rs 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)<br>(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 Rs 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: Rs. 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 Rs. 2.24/unit (i.e.  $0.294 \times 2407 / 1000 + 0.259 \times 5934 / 1000$ ). Quoted tariff is Rs. 1.35/unit.

Therefore, the fuel cost adjustment factor approximates to 89p/unit.

The detailed illustrative calculation are attached in Annexure IV

### Conclusion:

From the above, it appears that Alternative 3 is preferable over other alternatives discussed above. Since imported coal in various proportion (due to inadequate supply of domestic coal under linkage) is used in Phase IV, the same alternative will be applicable to Phase IV also. Alternative 3 offers the following advantages as discussed below:

- ✚ 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, Govt 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. The detailed methodology to determine Compensatory Tariff has been discussed in the subsequent chapter.

## 7. COMPENSATORY TARIFF

On the basis of discussions and foregoing analysis, in this chapter mechanism to determine the Compensatory Tariff (including past losses) has been suggested, in an attempt to compensate the Company for the hardship suffered by it on account of non-availability of domestic coal and promulgation of Indonesian Law.

For ease of reference, this chapter has been divided into two sections:

- ↓ 7(A) pertaining to Phase III compensation – Gujarat PPA,
- ↓ 7(B) pertaining to Phase IV compensation- Haryana PPA

These sections set out the suggested mechanism to compensate the Company for:

- ↓ The actual hardship suffered by it on account of energy charges from SCOD to 31<sup>st</sup> March 2013, i.e., PPA obligation date to cut off date;
- ↓ Mechanism to determine Compensatory Tariff for subsequent years to attempt to mitigate the hardship to the Company as per the mandate of the Committee.

In putting forth the recommendations/suggestions, the recent CERC directives/CCEA order/ MoC notification/ MoP directive have been noted and considered. A brief of these orders/ directives is as below.

### 7.1 CERC advise to MOP

Ministry of Power (MoP) vide letter No. FU-12/2011-IPC (Vol.-II) dated 9<sup>th</sup> May 2013 had sought advice of CERC under section 79 (2) of the Electricity Act, 2003 regarding the impact on tariff on the concluded PPAs due to domestic coal availability.

CERC vide its letter dated 20<sup>th</sup> May 2013 has made the following observations:

- ↓ CERC appreciates the need for securing fuel supply for various projects in order to ensure optimum generation from the power plants in the country. Non- availability of adequate quantum of coal has posed challenge to power generation in the country.
- ↓ The proposal to make CIL supply imported coal on cost plus basis to all power projects commissioned or to be commissioned during the period from 1<sup>st</sup> April 2009 to 31<sup>st</sup> March 2015 and willing to take such coal would require appropriate change in the NCDP and FSAs between CIL/ its subsidiaries and the power producers.
- ↓ As regards allowing the additional cost of imported coal under the existing provisions of the PPA, Article 10.1.1 of the Standard PPA for Procurement of Power under Case I Bidding Procedure provided for Change in Law. For claiming any benefits under Change in Law, the Project Developer would need to move the appropriate Commission and the decision of that Commission in this regard would be final. The Appropriate Commission is expected to take decisions on case to case basis including the claims of the Project Developers for compensation on account of imported coal after consultation with the stake holders.
- ↓ The bidding guidelines under section 63 of the Electricity Act 2003 should be suitably modified to enlarge the scope of the regulatory intervention to take care of situation arising from the change in policy of a Sovereign Government.
- ↓ Suitable Amendments in the National Electricity Policy and Tariff Policy may be called for in the long term to provide for intervention by the appropriate commission to address the situation which has arisen and have been referred to by the Ministry.

## 7.2 CCEA order

In the meeting held on 5<sup>th</sup> February 2013 the CCEA had laid down certain guidelines for import of coal on cost-plus basis/ pooling of prices for 78000 MW capacity having linkage and also directed formation of an Inter-Ministerial Committee (IMC) to consider the cases of power plants with aggregate capacity of about 16000 MW which are expected to be commissioned by 31<sup>st</sup> March 2015 but currently do not have any linkage for supply of coal.

The revised proposals submitted by Ministry of Coal (MoC) in pursuance of the above directions and in consultation with Ministry of Power and other Ministries were considered by the CCEA in the meeting held on 21<sup>st</sup> June 2013 and it was decided as under:-

- ✚ Coal India Ltd (CIL) to sign Fuel Supply Agreements (FSA) for a total capacity of 78000 MW including cases of tapering linkage, which are likely to be commissioned by 31<sup>st</sup> March 2015. Actual coal supplies would however commence when long term PPAs are tied up.
- ✚ Taking into account the overall domestic availability and actual requirements, FSAs to be signed for domestic coal quantity of 65%, 65%, 67% & 75% of Annual Contracted Quantity (ACQ) for the remaining 4 years of the XII five year plan. (i.e. 2014-17)
- ✚ To meet its balance FSA obligations, CIL may import coal and supply the same to the willing TPPs on cost plus basis. TPPs may also import coal themselves. MoC will issue suitable instructions.
- ✚ Higher costs of imported coal to be considered for pass through as per modalities suggested by CERC. MoC to issue suitable orders supplementing the New Coal Distribution Policy (NCDP). MoP to issue appropriate instructions to CERC/ SERCs including modifications if any in the bidding guidelines to enable the appropriate Commissions to decide the pass through of higher cost of imported coal on case to case basis.
- ✚ A mechanism will be explored to supply coal subject to its availability to the TPPs with 4660 MW capacity and other similar cases which do not have any coal linkage but are likely to be commissioned by 31<sup>st</sup> March 2015, and have long term PPAs and a high Bank exposure and without affecting the above decisions.

Thus the CCEA decision in principal suggests mitigating hardship by allowing pass through of increase in fuel cost over quoted tariff.

## 7.3 MoC notification for Change in NCDP

The notification for change in New Coal Distribution Policy was issued by Ministry of Coal (MoC) vide F. No. 23011/90/2013-CPD dated 26<sup>th</sup> July 2013. A summary of the said notification is set out below:

The New Coal Distribution Policy (NCDP) was issued by Ministry of Coal vide Memorandum No. 23011/4/2007-CPD dated 18<sup>th</sup> October 2007, laying down the guidelines for distribution and pricing of coal to various sectors. As per para 2.2 of the said policy, Power Utilities including Independent Power Producers were to be supplied 100 per cent of the quantity as per their normative requirement through Fuel Supply Agreement(s) (FSAs) by Coal India Limited (CIL) at fixed prices to be declared/notified by CIL. As per para 5.2, in order to meet the domestic requirement, CIL was to import coal as required from time to time, if feasible and adjust the overall price accordingly.

Government has now approved a revised arrangement for supply of coal to the identified Thermal Power Plants (TPPs) of 78000 MW capacity commissioned or likely to be commissioned during the period from 1<sup>st</sup> April 2009 to 31<sup>st</sup> March 2015. Taking into account the overall domestic availability and the likely actual requirements of these TPPs, it has been decided that FSAs will be signed for the domestic coal quantity of

65%, 65%, 67% and 75% of ACQ for the remaining four years of the 12<sup>th</sup> Plan for the power plants which have existing coal linkages.

Cases of tapering linkage would get coal supplies as per the Tapering Linkage Policy. To meet its balance FSA obligations towards the requirement of the said 78000 MW TPPs, CIL may import coal and supply the same to the willing power plants on cost plus basis. Power plants may also directly import coal themselves, if they so opt, in which case, the FSA obligations on the part of CIL to the extent of import component would be deemed to have been discharged.

Para 2.2 and 5.2 of the New Coal Distribution Policy issued vide OM No. 23011/4/2007 -CPO dated 18<sup>th</sup> October 2007 stand modified to the above extent.

The above guidelines will also be applicable to the distribution of coal from Singareni Collieries Company Limited (SCCL). CIL and its subsidiaries and SCCL were advised to take further action accordingly.

#### **7.4 MoP directive to CERC**

After considering advice of CERC, the Ministry of Power issued notification vide FU- 12/2011-IPC (Vol-III) dated 31<sup>st</sup> July 2013 regarding Impact on tariff in the concluded PPAs due to shortage in domestic coal availability. The summary on the said notification is set out below:-

In view of the demand for coal of power plants that were provided coal linkage by Govt. of India and CIL not signing any Fuel Supply Agreement (FSA) after March 2009, several meetings at different levels in the Government were held to review the situation. In February 2012, it was decided that FSAs will be signed for full quantity of coal mentioned in the letter of Assurance (LoAs) for a period of 20 years with a trigger level of 80% for levy of disincentive and 90% for levy of incentive. Subsequently, MoC indicated that CIL will not be able to supply domestic coal at 80% level of ACQ and coal will have to be imported by CIL to bridge the gap. The issue of increased cost of power due to import of coal/e-auction and its impact on the tariff of concluded PPAs were also discussed and CERC's advice was sought.

After considering all aspects and the advice of CERC in this regard, Government has decided the following in June 2013:-

- i) taking into account the overall domestic availability and actual requirements, FSAs to be signed for domestic coal component for the levy of disincentive at the quantity of 65%, 65%, 67% and 75% of Annual Contracted Quantity (ACQ) for the remaining four years of the 12<sup>th</sup> Plan.
- ii) to meet its balance FSA obligations, CIL may import coal and supply the same to the willing TPPs on cost plus basis. TPPs may also import coal themselves if they so opt.
- iii) higher cost of imported coal to be considered for pass through as per modalities suggested by CERC.

Ministry of Coal vide letter dated 26<sup>th</sup> July 2013 has notified the changes in the New Coal Distribution Policy (NCDP) as approved by the CCEA in relation to the coal supply for the next four years of the 12<sup>th</sup> Plan.

The ERCs are advised to consider the request of individual power producers in this regard as per due process on a case to case basis in public interest. The Appropriate Commissions are requested to take immediate steps for the implementation of the above decision of the Government.

## 7.5 Suggested Mechanism for Hardship Mitigation

This section has been divided into the following two Sub-sections to determine the Compensatory Tariff package for:

- A. Compensatory Tariff for Gujarat- APL Phase III
- B. Compensatory Tariff for Haryana- APL Phase IV

### A. Compensatory Tariff for Gujarat-APL Phase III

#### a) Brief Introduction

In view of inadequate availability of domestic coal 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 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 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. Accordingly, APL has approached the Commission for mitigating the hardship on account of the Indonesian Regulations.

**Reference may be drawn to paragraph 72 of the CERC order** where the Hon'ble Commission has notes that it has concluded in para 54 of the Order that APL is suffering on account of sudden increase in coal prices subsequent to the promulgation of Indonesian Regulations and non-availability of adequate quantity of domestic coal and APL deserves to be compensated to make the project commercially viable to operate and supply power to the Respondents in terms of the PPAs. The Hon'ble Commission further added that the adjustment in the tariff is in the interest of consumers, investors and power sector as a whole.

In this regard, the observations made by the Hon'ble Commission are reproduced below:

- ✓ That the alignment of Indonesian coal price with the international benchmark price has, prima facie, altered the premise on which the energy charges were quoted in the bids submitted to GUVNL and Haryana Utilities.
- ✓ Also, the competitive advantage of hedging in coal prices that APL 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 due to promulgation of Indonesian Regulations.
- ✓ APL is required to incur extra expenditure for import of the coal from Indonesia compared to what has been factored in the levelised tariff.
- ✓ Sourcing of coal from alternative international market does not, at this moment, appear to be a viable option compared to the Indonesian Market.

Hon'ble Commission has directed the Committee so constituted to work out a compensation package. The compensation package, to be called 'Compensatory Tariff', could be variable in nature commensurate with the hardship that APL is suffering on account of the unforeseen events leading to non-availability of coal linkage and/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.

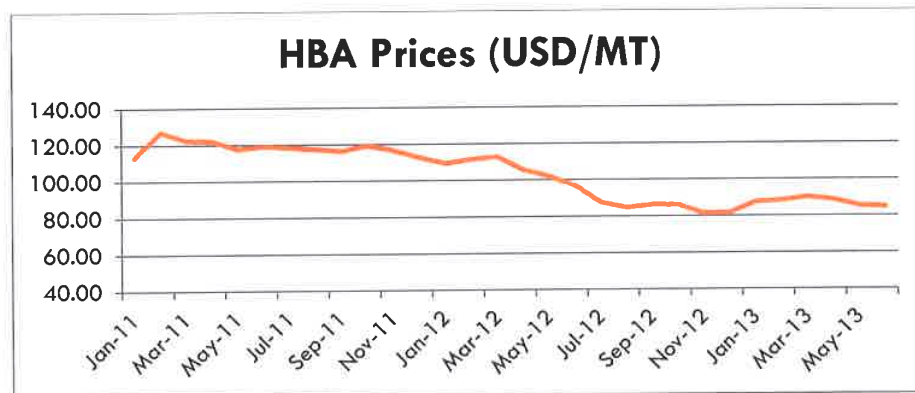
The Hon'ble Commission insisted on a pragmatic way to make the PPAs workable while ensuring supply of power to the consumers at competitive rates.

**b) Committee Observations**

Based on the deliberations at the Committee meetings, discussions with Finance Sub-Group, inputs and findings from various consultants, comments and views of the procurers and developers and under the guidance of Shri Deepak Parekh, it was discussed that if actual cost towards energy charges (including transmission losses and charges) incurred by the Company were paid on actuals, subject to a benchmark rate, it would mitigate the hardship suffered by APL on account of under recovery of fuel cost. This is based on the principle that fuel costs are dependent on various factors which are not in the control of the generators and should be passed on in full to the procuring utilities, which are best placed to manage these risks. Such a mechanism would also be useful in the event of any reduction in coal prices (which may even reduce in the long term) as it would prevent the Company from availing of any undue benefit.

This is also in line with one of the objectives of the National Electricity Policy 2005 i.e. the financial turnaround and commercial viability of the electricity sector. National Electricity Policy addresses the issues of recovery of cost of services to make the electricity sector sustainable, promotion of competition which ultimately benefits the consumers and protection of consumers' interests. The National Electricity Policy further recognizes the need for providing adequate return on investment so that the electricity sector is able to attract adequate investments.

In fact the Indonesian coal prices have reduced from about 125 USD/MT upto 80 USD/MT in last two years, which can be seen from the chart of HBA prices shown below. There are expectations in the market that the prices may reduce further with slowing down of Chinese demand for coal.

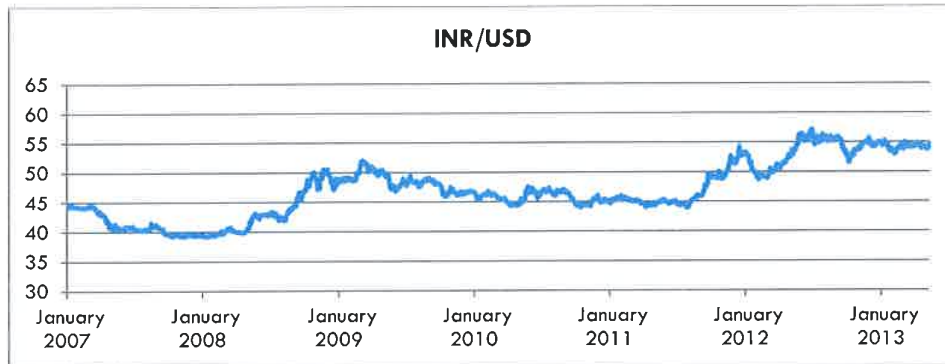


This Compensatory Tariff will enable generators to recover cost which in turn will enable APL to sustain its operations thus ensuring supply of contracted power to consumers.

Since the PPA is for a very long period of 25 years, it is very difficult for any company to assume the fuel price risk for such a long tenor. This has also been emphasized in the new Standard Bidding Documents (SBD). Forex component being an integral part of imported coal cost, has also been factored in to arrive at the hardship faced by the Company in this case. The same is also in line with the mandate given to the Committee



to devise a variable compensation package commensurate with the hardship that the Company is suffering on account of the unforeseen events.



Forex rates have been volatile since the last 6 years as can be seen from the graph above. The compensation package would also take into account favourable/adverse forex movements in the formulation of Compensatory Tariff. In this case, any favourable movement in forex rate in future would bring relief to the procurers.

The Company also faces substantial under recovery of capacity related costs. The actual capacity charges of the Project have increased beyond quoted capacity charges under the PPA mainly on account of unprecedented and uncontrollable factors such as depreciation of INR, increase in interest rates, etc. APL will have to undertake various cost reduction/efficiency improvement/cost optimization methods such as linkage swapping/rationalization, reduction in interest rate, sharing of profit beyond normative availability on merchant basis, etc. to reduce under recovery on capacity charge fronts and generate positive return on Equity invested.

Considering the above facts and situations, it is recommended by the Committee that the actual energy costs (including transmission losses and charges) incurred by the Company may be allowed to be paid on actuals, subject to benchmark rates. Accordingly, the methodology for implementation of such recommended mechanism is set out below:

| Particulars                            | Unit     | FY 11-12<br>(from 2 <sup>nd</sup> Feb<br>2012) | FY 12-13 | Total from<br>SCOD to 31 <sup>st</sup><br>Mar 2013 |
|--|----------|--|----------|--|
| PPA sale                               | MUs      | 609  | 4100     | 4709   |
| Total PPA Revenue                      | Rs. Cr.  | 134  | 921      | 1055   |
| Quoted Capacity charge per unit        | Rs./unit | 1.00   | 1.00     |  |
| Net Realized Capacity Charge Per Unit* | Rs./unit | 0.813  | 0.854    |  |
| Quoted Energy charge per unit          | Rs./unit | 1.35   | 1.35     |  |
| Total Fuel Cost                        | Rs. Cr.  | 139  | 983      | 1122   |
| Capacity cost per unit                 | Rs./unit | 2.39   | 1.79     |  |
| Energy cost per unit                   | Rs./unit | 2.28   | 2.40     |  |

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| Particulars                      | Unit    | FY 11-12<br>(from 2 <sup>nd</sup> Feb<br>2012) | FY 12-13   | Total from<br>SCOD to 31 <sup>st</sup><br>Mar 2013 |
|----------------------------------|---------|--|------------|--|
| <b>Under-recovery (capacity)</b> | Rs. Cr. | <b>96</b>                                      | <b>383</b> | <b>479</b>   |
| <b>Under recovery (energy)</b>   | Rs. Cr. | <b>57</b>                                      | <b>430</b> | <b>487</b>   |

\* adjusted for discount for prompt payment, other operating income, etc.

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

Source: Statutory Auditor Certificate

As observed from the table above, the total under-recovery on account of energy charges approximates to about Rs. 487 Cr. This loss would however be Rs. 451 Cr. (Rs. 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 Rs. 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.

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 the Committee's recommendation in this respect.

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 Rs. 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.

**d) Committee Recommendations: Mechanism for determination of Compensatory Tariff for the period beyond 31<sup>st</sup> March 2013:**

**(i). Compensatory Tariff Mechanism**

On the basis of discussions and deliberations conducted by the Committee and the analysis as covered in this report, the Committee proposes the following formula for computation of Compensatory Tariff:

|   |   |   |   |   |
|---|---|---|---|---|
| Compensatory Tariff/Fuel Cost Adjustment Charge for a particular year (Rs. Cr.) | = | Energy Costs at PPA defined delivery point (Rs. 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 (Rs. Cr.) corresponding to units supplied during the year |
|---|---|---|---|---|

**Methodology for recovery of Compensatory Tariff**

Compensatory Tariff to be recovered in the following three steps as under:

**1. Provisional Compensatory Tariff (PCT) to be charged in the monthly bill:**

For ease of understanding, the discussion of Provisional Compensatory Tariff (PCT) refers to two time periods- for FY 13-14 and FY14-15 & onwards.

**For FY13-14-** PCT per unit shall be calculated by APL within 7 days after CERC order in this regard, on the basis of the principles/mechanism laid down by the Committee and recommended in this report. Difference between the provisional per unit energy charge so calculated and PPA energy charge for FY 13-14, will be referred as PCT for FY 13-14. The sharing of benefit on account of profit from Indonesian coal mining and sale of power (if any) above normative availability will be adjusted only during the annual true up exercise.

The recovery of CT beyond the cut-off date i.e. 31<sup>st</sup> March 2013 till the date of implementation of CERC order in this regard, would be reimbursed at the time of true up exercise for FY13-14. This is recommended with a view to enable power procurers to make payment without impacting their immediate cash flows.

**FY 14-15 & onwards:** For FY 14-15 and subsequent financial years, the Actual Compensatory Tariff (ACT) paid by the Procurer for the immediate previous year, shall be considered as PCT for the current year.

Illustratively, ACT paid for FY13-14 determined after true up and reconciliation as per Para 3 below will be the PCT for FY 14-15. Till the true up exercise is completed for the immediate previous year i.e. FY14, the tariff payment for the current financial year i.e. FY14-15 will continue as per the PCT of the previous year. The same methodology shall be applicable for subsequent financial years.

In order to devise a formula to adjust the tariff on regular basis The provisional tariff for particular year may be corrected/adjusted in case the landed coal prices varies by more than  $\pm 5\%$  as compared to landed prices considered in the computation of provisional tariff.

**2. Calculation of Actual Compensatory Tariff (ACT) at the end of the Particular Year:**

There may be certain differences in Actual energy charges and Provisional energy charges. Within 30 days from the end of a particular financial year, APL has to file a report with GUVNL providing detailed calculation of actual energy costs incurred on the basis of principles/ mechanism laid down by the Committee. The report to be submitted must contain figures duly audited and authenticated by Company's statutory auditors. GUVNL will approve the same in a time bound manner.

**3. Truing up/ Reconciliation exercise:**

On the actual energy charges being approved by GUVNL, the Compensatory Tariff may be trued up. The truing up of CT is to be done in a time bound manner (within 30 days). After trued up Compensatory Tariff is approved, the difference between ACT and PCT will be payable by GUVNL/ the Company to the Company/ GUVNL within 30 days from the date of approval. In case the payment is not made as per the timeline specified in the approval, GUVNL/ the Company will pay carrying cost

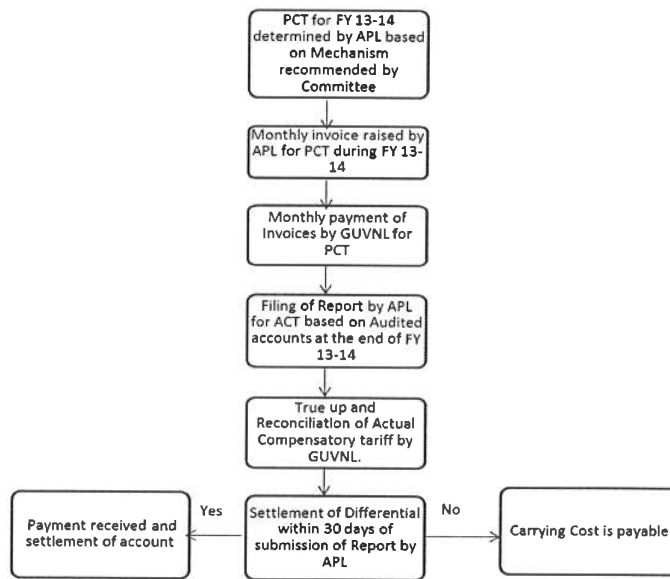
However, in place of the truing up/ reconciliation mechanism, any other indexed based formula to determine prevailing tariff may also be considered on a mutually agreed basis by the Procurers and the developers.

In case of any deviation from the principle laid down by the Committee or in case of any dispute in interpretation of the said principles, aggrieved party shall approach CERC for adjudication of dispute.

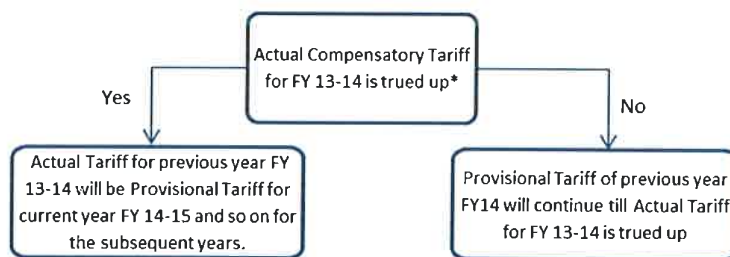
**(ii). Illustrative Process Flow diagram:**

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

**(iii). Principles for Actual Cost determination:**

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

|   | Particular   | Gujarat PPA  |
|---|--|--|
| A | Cost of Coal (Rs. 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 (Rs. Cr. for the year)  | Not Applicable, since delivery point is plant bus bar  |
| C | Total Revised Energy Charges (Rs. 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) (Rs. 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 Energy Charges   | (C)-(D)-(E)  |

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, | 2380 kcal/kWh      |

| Particulars                      | Gujarat PPA  | Present CERC norms  |
|----------------------------------|--|---|
|                                  | whichever is lowest.   |   |
| 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. |

**Landed Cost of Fuel**

|                                       | 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 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 Rs. 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 7.5 A of this report.

## B. Compensatory Tariff for Haryana- APL Phase IV

### a) Brief Introduction

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 Rs. 1.963/kWh, and included transmission charges and losses of HVDC line of Rs. 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.

**Reference may be drawn to paragraph 72 of the CERC order** where the Hon'ble Commission notes that it has concluded in para 54 of the Order that APL is suffering on account of sudden increase in coal price subsequent to the promulgation of Indonesian Regulations and non-availability of adequate quantity of domestic coal and APL deserves to be compensated to make the project commercially viable to operate and supply power to the Respondents in terms of the PPAs. The Hon'ble Commission further added that the adjustment in the tariff is in the interest of consumers, investors and power sector as a whole.

In this regard, the observations made by the Hon'ble Commission are reproduced below:

- ✓ That the alignment of Indonesian coal price with the international benchmark price has, *prima facie*, altered the premise on which the energy charges were quoted in the bids submitted to GUVNL and Haryana Utilities.
- ✓ Also, the competitive advantage of hedging in coal prices that APL 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 due to promulgation in Indonesian Regulations.
- ✓ APL is required to incur extra expenditure for import of the coal from Indonesia compared to what has been factored in the levelised tariff.
- ✓ Sourcing of coal from alternative international market does not, at this moment, appear to be a viable option compared to the Indonesian Market.

The Hon'ble Commission has directed the Committee so constituted to work out a compensation package. The compensation package to be called 'Compensatory Tariff' could be variable in nature commensurate with the hardship that APL is suffering on account of the unforeseen events leading to non-availability of coal linkage



and/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 CT should be revised or withdrawn.

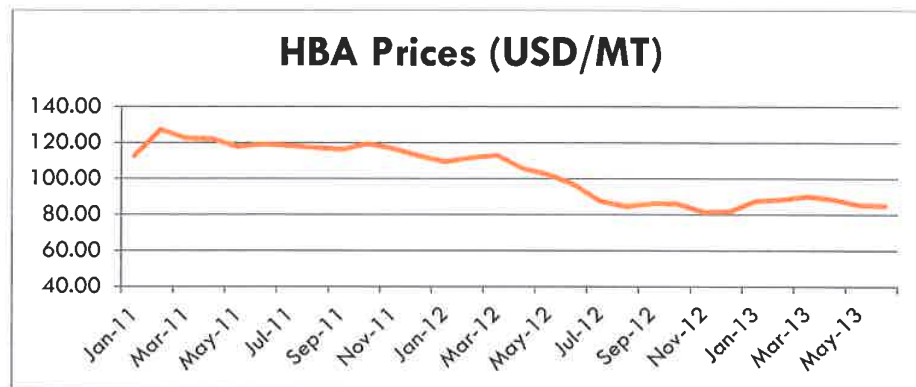
The Hon'ble Commission insisted on a pragmatic way to make the PPAs workable while ensuring supply of power to the consumers at competitive rates.

**b) Committee Observations**

Based on the deliberations at the Committee meetings, discussions with Finance Sub-Group, inputs and findings from various consultants, comments and views of the procurers and developers and under the guidance of Shri Deepak Parekh, it was discussed that if actual cost towards energy charges (including transmission losses and charges) incurred by the Company were paid on actuals, subject to a benchmark rate, it would mitigate the hardship suffered by APL on account of under recovery of fuel cost. This is based on the principle that fuel costs are dependent on various factors which are not in the control of the generators and should be passed on full to the procuring utilities, which are best placed to manage these risks. Such a mechanism would also be useful in the event of any reduction in coal prices (which may also reduce in the long term) as it would prevent the Company from availing any undue benefit.

This is also in line with one of the objectives of the National Electricity Policy 2005 i.e. the financial turnaround and commercial viability of the electricity sector. National Electricity Policy addresses the issues of recovery of cost of services to make the electricity sector sustainable, promotion of competition which ultimately benefits the consumers and protection of consumers' interests. The National Electricity Policy further recognizes the need for providing adequate return on investment so that the electricity sector is able to attract adequate investments.

In fact the Indonesian coal prices have reduced from about 125 USD/MT upto 80 USD/MT in last two years, which can be seen from the chart of HBA prices shown below. There are expectations in the market that the prices may reduce further with slowing down of Chinese demand for coal.



This Compensatory Tariff will enable generators to recover cost which in turn will enable APL to sustain its operations thus ensuring supply of contracted power to consumers.

Since the PPA is for a very long period of 25 years, it is very difficult for any company to assume the fuel price risk for such a long tenor. This has also been emphasized in the new Standard Bidding Documents (SBD). Forex component being an integral part of imported coal cost has also been factored in to arrive at the hardship faced by the Company in this case. The same is also in line with the mandate given to the Committee

to devise a variable compensation package commensurate with the hardship that the Company is suffering on account of the unforeseen events.



Forex rates have been volatile since the last 6 years as can be seen from the graph above. The compensation package would also take into account favourable/adverse forex movements in the formulation of Compensatory Tariff. In this case, any favourable movement in forex rate in future would bring relief to the procurers.

The Company also has a substantial under recovery of capacity related costs. The actual capacity charges of the Project have increased beyond quoted capacity charges under the PPA mainly on account of unprecedented and uncontrollable factors such as depreciation of INR, increase in interest rates, underutilization of capacity due to transmission constraints, MoEF imposition to installed FGD, etc. APL will have to undertake various cost reduction/efficiency improvement/cost optimization methods such as linkage swapping/rationalization, reduction in interest rate, sharing of profit beyond normative availability on merchant basis, etc. to reduce under recovery on capacity charge fronts and generate positive return on Equity invested.

Considering the above facts and situations it is recommended by the Committee that the actual energy costs (including transmission losses and charges) incurred by the Company are allowed to be paid on actuals, subject to benchmark rates. Accordingly, the methodology for implementation of such recommended mechanism is set out below:

**c) 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.

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| Particulars                            | Unit     | FY 12-13 (from 7 <sup>th</sup> Aug 2012) |
|--|----------|--|
| PPA sale                               | MUs      | 2712                                     |
| Total PPA Revenue                      | Rs. Cr.  | 631                                      |
| Quoted Capacity charge per unit        | Rs./unit | 1.155                                    |
| Net Realized Capacity charge per unit* | Rs./unit | 1.121                                    |
| Quoted Energy charge per unit          | Rs./unit | 1.190                                    |
| Total Fuel Cost                        | Rs. Cr.  | 655                                      |
| Transmission Cost                      | Rs. Cr.  | 179                                      |
| Capacity cost per unit                 | Rs./unit | 1.544                                    |
| Energy cost per unit                   | Rs./unit | 2.415                                    |
| Transmission Cost per unit             | Rs./unit | 0.661                                    |
| <b>Under-recovery (capacity)</b>       | Rs. Cr.  | 115                                      |
| <b>Under recovery (energy)</b>         | Rs. Cr.  | 511                                      |

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 Rs. 511Cr. for the Company. This loss however would be about Rs. 496 Cr. (Rs. 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 Rs. 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 Rs. 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.

**d) Committee Recommendations: Mechanism for determination of Compensatory Tariff for the period beyond 31<sup>st</sup> March 2013:**

**(i). Compensatory Tariff Mechanism**

On the basis of discussions and deliberations conducted by the Committee and the analysis as covered in this report, the Committee proposes the following formula for computation of Compensatory Tariff:

|  |   |  |   |   |
|--|---|--|---|---|
| Compensatory Tariff/Fuel Cost Adjustment Charge for a particular year (Rs. Cr.)# | = | Energy Costs at PPA defined delivery point ( Rs. 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(Rs. Cr. ) corresponding to units supplied during the year |
|--|---|--|---|---|

\*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 Gol/CIL, there shall not be any impact on Haryana Discoms.

**Methodology for recovery of Compensatory Tariff**

Compensatory Tariff to be recovered in the following three steps as under:

**1. Provisional Compensatory Tariff (PCT) to be charged in the monthly bill:**

For ease of understanding, the discussion of Provisional Compensatory Tariff (PCT) refers to two time periods- for FY13-14 and FY14-15 & onwards.

**For FY 13-14-** PCT per unit shall be calculated by APL within 7days after CERC order in this regard, on the basis of the principles/mechanism laid down by the Committee and recommended in this report. Difference between the provisional per unit energy charge so calculated and PPA energy charge for FY 13-14, will be referred as PCT for FY 13-14. The sharing of benefit on account of profit from Indonesian coal mining and sale of power (if any) above normative availability will be adjusted only during the annual true up exercise.

The recovery of CT beyond the cut-off date i.e. 31<sup>st</sup> March 2013 till the date of implementation of CERC order in this regard, would be reimbursed at the time of true up exercise for FY13-14. This is recommended with a view to enable power procurers to make payment without impacting their immediate cash flows.

**FY 14-15 & onwards:** For FY 14-15 and subsequent financial years, the Actual Compensatory Tariff (ACT) paid by the Procurer for the immediate previous year, shall be considered as PCT for the current year.

Illustratively, ACT paid for FY 13-14 determined after truing up and reconciliation as per Para 3 below will be the PCT for FY 14-15. Till the true up exercise is completed for the immediate previous year i.e. FY 13-14, the tariff payment for the current financial year i.e. FY 14-15 will continue as per the PCT of the previous year. The same methodology shall be applicable for subsequent financial years.

In order to devise a formula to adjust the tariff on regular basis The provisional tariff for particular year may be corrected/adjusted in case the landed coal prices varies by more than  $\pm 5\%$  as compared to landed prices considered in the computation of provisional tariff.

**2. Calculation of Actual Compensatory Tariff (ACT) at the end of the Particular Year:**

There may be certain differences in Actual energy charges and Provisional energy charges. Within 30 days from the end of a particular financial year, APL has to file a report with the respective discoms providing detailed calculation of actual energy charges incurred on the basis of principles/ mechanism laid down by the Committee. The report to be submitted must contain figures duly audited and authenticated by Company's statutory auditor/auditors of repute. The respective discoms will approve same in a time bound manner

**3. Truing up/ Reconciliation exercise:**

On the actual energy charges being approved by discoms, the CT may be trued up. The truing up of CT is to be done in a time bound manner (within 30 days). After the trued up CT is approved, the difference between ACT and PCT will be payable by Haryana discoms/ the Company to the Company/ Haryana discoms within 30 days from the date approval. In case the payment is not made as per the timeline specified in the approval, GUVNL/ the Company will pay carrying cost.

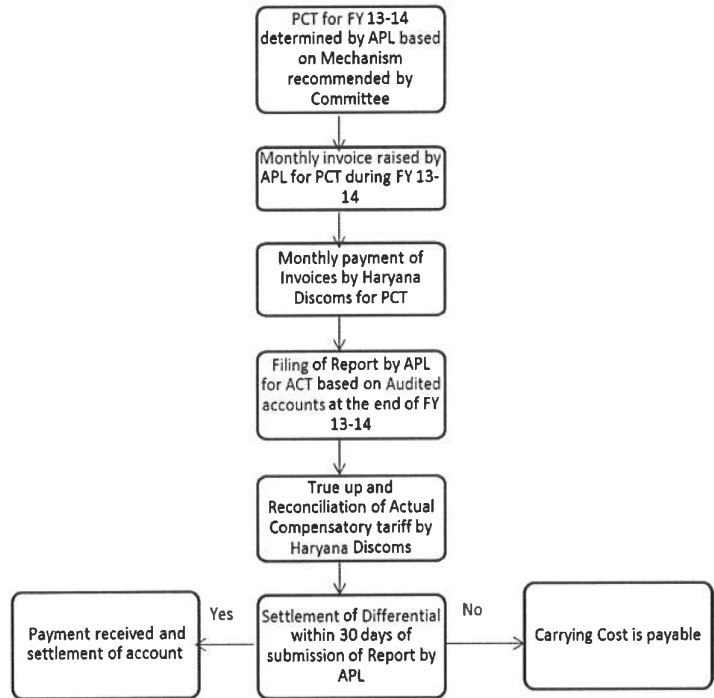
However, in place of the truing up/ reconciliation mechanism, some other indexed based formula to determine prevailing tariff may also be considered on a mutually agreed basis by the Procurers and the developers.

In case of any deviation from the principle laid down by the Committee or in case of any dispute in interpretation of the said principles, aggrieved party shall approach CERC for adjudication of dispute.

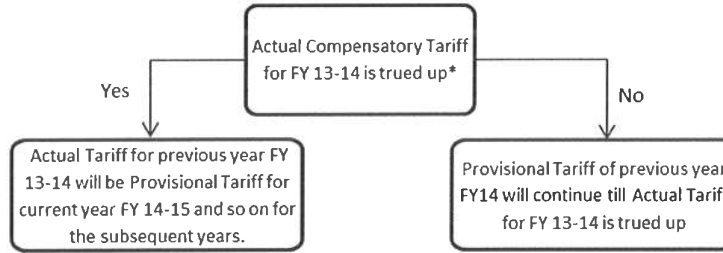
**(ii). Illustrative Process Flow diagram:**

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

(iii). Principles for Actual Cost determination:

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

|   | Particular   | Haryana PPA  |
|---|--|--|
| A | Cost of Coal (Rs. 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 (Rs. 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 (Rs. 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) (Rs. 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.             |
| <b>Landed Cost of fuel- Imported and Domestic Coal</b> |  |   |
| <b>IMPORTED COAL</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 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 Rs. 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

| <b>DOMESTIC COAL</b>                   |   |  |
|--|---|--|
|  | <b>Domestic Coal</b>  | <b>Remark</b>  |
| 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.<br>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 Rs. 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 7.5 B of this report.



## 8. OTHER CONCERNS

This chapter deals with the recommendations/other issues raised by CERC/procurers for calculating/recommending Compensatory Tariff. The impact of these suggestions/recommendations on Compensatory Tariff has been examined and the analysis and recommendations are as follows:

### 8.1 CERC Recommendations

The impact of CERC recommendations vide order dated 2<sup>nd</sup> April 2013 in the matter of Petition No. 155/MP/2012 on Compensatory Tariff has been detailed as under:

- 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 Plant should be factored to pass on the same in full to the beneficiaries in the Compensatory Tariff.

This said analysis was carried out by KPMG. There was no supply of coal from PT Mitra mines upto 31<sup>st</sup> March 2013 and hence there are no profits/losses to be considered. The findings of KPMG with respect to profit/losses for PT Lamindo mines on the subject from the effective date of Indonesian Regulations i.e. 23<sup>rd</sup> September 2011 till FY13 are as under:

| USD'000   | 23 <sup>rd</sup> Sept 2011-31 <sup>st</sup> Mar 2012 | 1 <sup>st</sup> Apr 2012-31 <sup>st</sup> Mar 2013 |
|---|--|--|
| Total Revenue                                       | 60310  | 85550  |
| Revenue from qty supplied to AEL                    | 20097  | 71988  |
| Revenue from qty supplied to Phase III and Phase IV | 2265   | 32395  |
| Total PAT   | 155  | -887   |
| Share of PAT for Phase III and IV at Indonesia      | 6  | -336   |

- ✓ Profits have been pro-rated for the supply made to Phase III and Phase IV PPAs
- ✓ No profit sharing so far since the company has made losses in Indonesian mines. KPMG also did the analysis for repatriation of dividend declared in Indonesia. For USD 100 declared as dividend in Indonesia, USD 74.17 would be available to Indian entity, as per existing tax structure and prevailing tax laws at various points in the structure.
- ✓ For calculation of dividend of USD 100 declared in Indonesia as above, payment/deduction of corporate tax in Indonesia and mandatory retention (as per Indonesian laws) is required to be done from the Profit earned. (currently corporate tax in Indonesia is levied at 25% and mandatory retention requirement is 20% of subscribed and paid up capital)
- ✓ Methodology followed for this calculation is given below:

Dividend Available = Profit Earned – (Less) Corporate Tax in Indonesia – (Less) Mandatory Retention

Repatriation of Dividend declared = Dividend declared – (Less) Taxes at various levels till it is available to Indian entity.

The Finance Sub-Group has considered the same in the determination of Compensatory Tariff and on the basis of KPMG's report, net profit earned by Indonesian companies is being factored in arriving at the Compensatory Tariff.

As per GUVNL's observations, for the purpose of adjustment of net profits 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. However, 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 Indonesian mines have incurred losses. Even if it is computed, it will be hypothetical/based on assumptions which would not give a realistic conclusion. Moreover, it appears from CSAs submitted by APL, that the coal was proposed to be sourced from third party mining companies where Adani Group has no equity stake. Hence, this suggestion is not practicable in APL's case.

B. The possibility of sharing the revenue due to sale of power beyond the target availability of APL to the third parties may be explored

Under the PPA, the Company has to sell all of the Available contracted capacity to the Procurer. This provision can be modified so that the right to avail contracted capacity above normative availability is relinquished by Procurer(s) and allowed to be sold to third parties, with equal sharing of excess realization over Energy Charges (including Compensatory Tariff). Though some members had some reservations, the Committee recommends that in such a case, 50% of the 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 realisations from the sale would be utilized towards reducing the hardship faced by the Company on the capacity cost front. CERC may take appropriate decision on the same. Sharing of excess realization over energy cost as discussed above is explained hereunder with an illustration:

|   | <b>Particulars</b>                         | <b>Units</b> |      | <b>Remarks</b>                                 |
|---|--|--------------|------|--|
| 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%          |

As set out above, payment of incentive is considered only if the availability is declared in excess of 85%. Further, the proceeds from sales to third party beyond target availability, in excess of energy charges have also been taken to be shared equally with the procurers.

In addition, if third party sales/incentives are continued for longer duration, such sales/incentives will enable the Company to generate sufficient revenue which would be adjusted from the capacity cost and this should bring relief to developer as they are already suffering losses.

- 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.

Mr. CP Singh, the Technical Consultant, has done detailed study on various technical parameters of the Plant including 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.

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 coal of 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 parameters suggested by Technical Consultant.

According to the studies conducted by Technical Consultant, following results were noted:

| Blended GCV Coal          | Station Heat Rate (kcal/kWh) | Aux. Loss | Generation (MW) | Blending Ratio (Melawan: Bunyu) by weight |
|---------------------------|------------------------------|-----------|-----------------|---|
| Design GCV (4500 kcal/kg) | 2354                         | 6.5%      | 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 per unit coal cost in all three scenarios above is consistent, however usage of low GCV coal is expected to adversely affect the performance of power plant in the long run causing extra cost. Therefore on the basis of the facts presented before Committee it is recommended to use blended coal to the extent to derive desired GCV of 4500 kcal/kg GCV  $\pm$ 5%, which is commercially and technically suitable for the plant.

## 8.2 Procurer's other Recommendations/ concerns

- A. Station heat rate of 2354 kcal/kWh

APL had considered Station Heat Rate (SHR) of 2150 kcal/kWh for Phase III power plant in the petition no. 1210 of 2012 before Gujarat State Regulatory Commission (GERC) for relief against "change in law".

APL represented that the SHR taken in the GERC order was based on a superior quality of coal having GCV of 5200 kcal/kg. It was clarified that low quality coal with GCV around the boiler design will result in lower fuel cost. Besides, the plant will not operate continuously at rated capacity and site operating conditions will differ from design operating conditions. APL clarified that it did not contest the SHR mentioned in the GERC order with a view to avoid unnecessary litigations since as it did not have significant impact on relief pertaining to the change in law.

The design heat rate (at design operating conditions) of the APL power plants (5\*660) is 2210 kcal/kWh. The same has been verified by technical consultant Mr. CP Singh. The design heat rate of a unit is based on the unit heat rate guaranteed by the Supplier at conditions of 100% MCR; Zero per cent make up, design coal and design cooling water temperature/back pressure. Any deviation in site operating parameter may result in change in performance of the Plant.

The operating parameters for SHR of 2150 kcal/unit and 2210 kcal/unit have been analyzed as follows:

| Parameter  | As per GERC Order | As per Tech Consultant report |
|--|-------------------|-------------------------------|
| SHR (kcal/unit)                                  | 2150              | 2210                          |
| HBA GCV (kcal/kg)                                | 5200              | 4500                          |
| HBA Price- assumed as on 30th June 2013 (\$/ton) | 64.78             | 51.06                         |
| Exchange Rate                                    | 59.70             | 59.70                         |
| Landed Cost (Rs/ton)                             | 5066.15           | 4210.68                       |
| Auxiliary Consumption                            | 6.50%             | 6.50%                         |
| Specific coal consumption (kg/unit)              | 0.4422            | 0.5252                        |
| Fuel Cost/unit                                   | 2.240             | 2.212*                        |

\*with use of blended coal, fuel cost per unit would further reduce

Based on the above table, it can be observed that the per unit fuel cost for SHR of 2210 kcal/unit is less than per unit fuel cost for SHR of 2150 kcal/unit. Therefore, designed Heat Rate of 2210 kcal/unit (as per EPC contract) and coal of average GCV of 4500 kcal/kg has been used with ideal site 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 and the same has been verified by Mr. C.P. Singh, technical consultant in his report. It may be mentioned here that with the proposed GCV of 4500 kcal/kWh, SHR of 2354 kcal/kWh is realistic and will give the optimum fuel cost.

Also, SHR of 2354 kcal/kWh is comparable with SHR approved by Regulatory Commissions for other coal based power projects of NTPC as well as State Gencos having similar design specifications.

In arriving at illustrative energy cost (as per annexure IV of the report) per unit for Phase III and Phase IV, station heat rate of 2354 kcal/kWh has been used as per the design parameters of OEM contractors, and as per CERC norms.

**Other Recommendations:**

The recommendations of the Gujarat discom vide its order GR No. APL-12-2013-280046-K and Haryana Discom vide its order CE/ HPPC/ SE (C& R)/ APL/SPL 1 are discussed below:

**B. Power producers may curtail their rate of return**

For the last two years, APL is facing hardship because of increase in imported coal price and it has incurred losses in the last two fiscals. The Company, on a standalone basis, has suffered a loss of Rs. 294 Cr in FY 11-12 and Rs. 1952 Cr in FY 12-13. This has significantly eroded the Networth of the company. If no relief is given to the company soon, the network will be completely eroded in the coming years and the project will be at risk of shutting down.

**Phase III:**

For Phase III project, there has been an increase in project cost of around Rs. 1771 Cr majorly on account of increase in EPC cost on account of adverse currency movement. The increase in project cost has already reduced the Return on equity for the Developer. Considering illustrative tariff for FY 13-14, the depreciation component is 49p/unit, interest on term loan component is 50 p/unit, operation and maintenance component is 22 p/unit, interest on Working Capital component is 8 p/unit and secondary

fuel component is 3p/unit. The total fixed cost (without hedging) is around Rs. 1.32 per unit (without ROE of 29p/unit) as against the Capacity charge of Rs. 1.00 per unit under PPA (for FY 13-14).

The levelised capacity charges (without hedging) on normative and actual basis approximate to Rs. 1.46/unit and Rs. 1.49/unit respectively.

The above calculations show that there is no room for reduction in Rate of return of Developer as there is currently no return being earned in the Project.

Phase IV:

For Phase IV project, there has been an increase in project cost of around Rs. 2877 Cr primarily on account of increase in EPC cost on account of adverse currency movement and FGD installation being mandated via MoEF directive. The increase in project cost has already reduced the Return on equity for the Developer. Considering first year of operation, the depreciation component is 45 p/unit, Interest on Term loan component is 82 p/unit, operation and maintenance component is 25 p/unit, interest on Working Capital component is 12 p/unit and secondary fuel component is 3 p/unit. The total fixed cost is around Rs. 1.67 per unit (without ROE of 28p/unit) as against the Capacity charge of Rs. 1.119 per unit under PPA (for FY 13-14).

Levelised capacity charge on normative and actual basis is Rs. 1.67/unit and Rs. 1.70/unit respectively.

The above calculations show that there is no room for reduction in Rate of return of Developer as there is currently no return being earned in the Project.

C. Banks/Financial Institutions may be asked to waive the interest/reduce the rate of interest to the maximum extent possible.

On the recommendation of the Committee, a meeting of major Lenders (Banks and Financial Institution) of the project was called on 17<sup>th</sup> July 2013 to discuss and take the views of the Lenders on reduction of rate of interest and other measures to mitigate the hardship faced by the company on account of continued losses.

Lenders appreciated the efforts made by the Committee to reduce the hardship faced by APL. They explained that the interest rate can be brought down only due to competitive considerations else it would be treated as restructuring of loans as per RBI stipulations. The projects will have a good case of interest rate reduction if the rating improves after the approval of CT. It was then discussed that extending the tenor would also attract RBI restructuring guidelines. Restructuring requires provisioning by Banks and it will result into higher burden. It was assured by all the lenders that all the efforts would be made to consider the measures as suggested by the Procurers as also Petitioners including interest rate reduction.

As discussed in the Lender's meeting dated 17<sup>th</sup> July 2013 and Committee meeting on 30<sup>th</sup> July 2013, the hardship is also suggested to be mitigated by extension of tenor of loans and providing moratorium, which is also recommended by the Committee as a part of this report. This issue will have to be taken up by the lenders, with the support of CERC, with RBI separately for special dispensation in terms of classification as Standard assets post changes in terms of the underlying loans to these projects.

Further, the credit rating for long term loan by banks may further deteriorate in the event of continuing losses by APL. The credit rating of the Company was CRISIL 'BBB' with stable outlook in June 2010. In June 2011, credit rating improved to CRISIL 'A-' with stable outlook and with increasing losses it deteriorated to

“BBB” with negative outlook. With the improvement in risk profile, the Company may be able to improve its credit rating and thereby seek reduction in interest rates.

Considering a reduction of 1% in the effective interest rate, reduces the capacity cost by 0.063 (Rs. /unit) for Phase III and Phase IV. It may be noted that since the debt profile of Phase III consists of 24% of Rupee Term Loan and 76% External Commercial Borrowing, it may be difficult for the Company to achieve the said reduction.

Reduction in interest rate should be adjusted from the capacity cost and it should bring relief to developer as it is already suffering losses.

D. GOI should reduce the import duty on Coal and other taxes etc.

Adani Power’s power plant is exempt from Royalty/duty on imported coal as it is located in SEZ. The coal price is taken on CIF basis and only port and handling charges at Mundra are further added along with handling losses.

It is suggested that procurers and seller jointly may continue to pursue all possible options with the concerned authorities for reduction in duties and taxes. The recommended mechanism for deriving Compensatory Tariff is comprehensive and variable in nature and if there is any reduction/removal of duty/taxes, benefits of the same will be embedded in methodology to derive Compensatory Tariff.

E. In case of APL, since the port infrastructure is also owned by the same Group, Port handling Charges in respect of Coal, may also be reduced by APL

The Port Company (APSEZ) is a listed entity with its own policies and therefore sharing of losses/reduction in port charges will be difficult due to corporate governance issues.

APL has a long term agreement with APSEZ for Port handling at Mundra. The port handling charges for FY 12-13 were Rs. 300 per ton with an escalation every year linked to WPI. Considering the hardship faced by APL on account of increase in energy charges, APSEZ has agreed to extend discount/ support of Rs. 20 per ton in the port charges.

Sacrifice of Rs. 20/ton in port handling charges by the Company has already been considered in arriving at Compensatory Tariff. Further reduction in port handling charges may not be possible as the port is an independent company and further discounts may result in corporate governance issues.

The Committee recommends the continuation of discount of Rs. 20 per ton to APL on port handling charges at Mundra for the period of Compensatory Tariff.

**Other Options:**

Apart from these, following views/ comments were made by Gujarat Government/ GUVNL vide letter no. MD/ 28 dated 20<sup>th</sup> May 2013 subsequent to the Committee meeting held on 11<sup>th</sup> May 2013. In the said letter, GUVNL has suggested the following 3 options to be considered by the Committee in the matter of determination of Compensatory Tariff in addition to the points already discussed above:

**First option:**

*The Committee should strongly recommend to the Ministry of Coal through Ministry of Power to immediately allocate coal blocks/ mines of adequate reserves with a tapering linkage for 3-4 years, pending long term allocation of mines or coal linkage. The generators may arrange for washing the coal to meet the design parameters of their plants.*

Committee appreciates the suggestion made by the procurer. However, due to the current policy framework where coal blocks are not allocated through a Govt. dispensation route to a private player, it may be difficult to have allocation of coal blocks/mines/tapering linkage to the developer.

Further it is suggested that procurers and developer jointly may continue to pursue all possible options with the concerned authorities for coal allocation. The methodology to derive Compensatory Tariff is comprehensive and variable in nature and it will include the benefits for procurers due to changes in coal costs arising from a change in fuel sources.

**Second Option:**

- a. *Compensatory Tariff should be taken after considering sacrifices by different stakeholders viz. power producer in curtailing rate of return, Banks/FIs in reducing/waiving interest rates and GOI in reducing import duties and other taxes on coal and Adani Port reducing port handling charges*

The same has been considered/ discussed above.

- b. *The investment in Coal mining companies should be transferred to power project companies and all returns of coal mining business should be adjusted in tariff.*

The Committee has appointed M/s KPMG as an independent Consultant for assessment of profit net of taxes, royalty, cess from Company's Indonesian operations accrued to the Indian investing Companies, to be adjusted against Compensatory Tariff.

Considering the findings of KPMG, the mechanism has been recommended in chapter 7 of this report to share actual profit from coal mining operation in Indonesia in proportion to the quantity consumed for energy supply under PPA (if any, in Phase III and Phase IV) duly adjusted with applicable tax structure.

- c. *The Compensatory Tariff arrived should be considered as cap and in order to discover competitive tariff afresh with full transparency and should allow for substitution of the extant generators with any other eligible party, quoting the lowest tariff and to take over the assets of the company i.e. similar to following Swiss Challenge methodology.*

Inviting fresh bids through competitive bidding and substitution of the existing generators may be a long drawn process. Moreover, results of the recent bids as discussed in the preceding chapters indicate that generation cost of other companies may be higher than the current tariffs of the Petitioner.

- d. *In case the competitive bidding does not materialize, then at the end of PPA term of 25 years, the generator shall pay back Compensatory Tariff alongwith carrying cost or transfer the project to the procurers without any residual value in good condition. During the 25 years, generator should bear the responsibility of sourcing affordable imported coal within the permissible price caps from various coal exporting countries.*

In the full pass through of variable cost mechanism option suggested being dynamic in nature, the proposed compensatory package seeks to provide relief to developers on one hand and the procurers will benefit on reduction of coal prices, on the other hand. Transfer of residual assets at the end of PPA

tenure without any residual value or paying back the Compensatory Tariff by the Generators may not be technically feasible or commercially viable solution in the long run. Also, the capacity charges in the PPA, which reflects the capital investment made by the Company, are not being altered to cover the under recovery.

### **Third Option**

The Procurers may supply coal to the generators for the contracted capacity based on OEM guaranteed SHR. The Procurers shall pay only the O&M cost to the Generators as per the CERC norms and service the debt component after reduction in the rate of interest by financial institutions.

This suggestion will leave no incentive for any developer to continue to operate the power project in efficient manner as no return on investment is proposed to be allowed for entire tenor of PPA. Besides, it will be against the principles laid down in the tariff policy of allowing reasonable returns.

Further in the Committee meeting dated 30<sup>th</sup> July 2013 the discussions were held for various points raised by Procurers. The discussion has been recorded in the Record Note and is a part of this report as per Annexure-II.

### **8.3 Change in Law**

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.

In case of Gujarat PPA, the effect of the change in law events has not been included in Compensatory Tariff related to energy charges as the same has been approved by GERC order dated 7<sup>th</sup> January 2013 in petition no 1210/2012 and reimbursed by Gujarat.

However, in case of Haryana PPA, the effect of the change in law events and the matter of restitution is under consideration between parties.

Following is the list of the change in law events with respect to Haryana PPA classified into three categories on the basis of its nature:

1. Change in Law affecting only energy charges
2. Change in Law affecting both capacity and energy charges- FGD
3. Change in Law not included in either Capacity Charges or Energy Charges in this report



**1. Change in Law affecting Energy Charges**

a. **List of change in law events included in energy charges:** The effect of the following listed events has already been factored in mechanism for deriving Compensatory Tariff under Haryana PPA under chapter 7B of this report:

- Royalty rate change from Rs. 55 + 5% of Basic Price to 14% of Basic Price
- Clean Energy Cess of Rs. 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

Therefore, no separate reimbursement is required to be allowed to the Company on account of above change in law events.

**2. Change in Law affecting both Capacity Charges & Energy**

Stipulations of FGD by MoEF are explained in the chronological order as under:

| Sr No | Event  | Date                           | Remarks  |
|-------|--|--------------------------------|--|
| 1     | Mundra Power Project- Phase I (2X330 MW) received Environmental Clearance                        | 13 <sup>th</sup> August 2007   | No requirement to install FGD  |
| 2     | RfP bid submission by APL for Haryana  | 24 <sup>th</sup> November 2007 |  |
| 3     | Letter of Intent issued to APL for Haryana   | 17 <sup>th</sup> July 2008     |  |
| 4     | PPA executed between Haryana Discoms and APL   | 7 <sup>th</sup> August 2008    |  |
| 5     | Mundra Power Project- Phase II & Phase III (2X330 MW & 2X660MW) received Environmental Clearance | 21 <sup>st</sup> October 2008  | No requirement to install FGD  |
| 6     | Mundra Power Project- Phase IV (3X660 MW) received ToR approval                                  | 18 <sup>th</sup> December 2008 | No requirement to install FGD (From same Phase power offered to UHBVNL & DHBVNL) |
| 7     | Mundra Power Project- Phase IV (3X660 MW) received Environmental Clearance                       | 20 <sup>th</sup> May 2010      | Received MoEF clearance subject to FGD installation along with other conditions  |

The installation of FGD was imposed as a condition in the EC, post execution of PPA attracting a huge additional capital cost. Further the operation of FGD also leads to increased auxiliary consumption.

Accordingly, FGD installation is having impacts on quoted tariff as under:

- Increase in Capacity Charges due to additional Capital Expenditure of around Rs. 614.7 Cr. as per CA certificate dated 31<sup>st</sup> March 2013.
- Increase in Energy Charges due to increase in Auxiliary Consumption.
- Additional Opex on account of installation of FGD

**Increase in Capacity Charges due to additional FGD Capital Expenditure:**

The additional increase in capital expenditure is Rs. 614.70 Cr. As per Article 13.2 (a) of the PPA, the impact of increase of capital cost of the project on tariff shall be governed by following formula:

*"For every cumulative increase/decrease of each Rs. 8,90,000,00 ( Rupees eight crore ninety lakh only) Rupees of the Contracted Capacity in the Capital Cost over the term of this Agreement, the increase/decrease in Quoted Capacity Charges shall be an amount equal to zero point two two seven (0.227%) percent of the Quoted Capacity Charges. Provided that the Seller provides to the Procurer documentary proof of such increase/decrease in Capital Cost for establishing the impact of such Change in Law. In case of Dispute, Article 17 shall apply.*

*It is clarified that the above mentioned compensation shall be payable to either Party, only with effect from the date on which the total increase/decrease exceeds amount of Rs. 8,90,000,00 ( Rupees eight crore ninety lakh only)"*

As per above formula, the increase in quoted Capacity Charge works out to be Rs. 0.1429 per kWh for FY 13-14. Calculation is give below:

|   |   |         |        |
|---|---|---------|--------|
| A | Net Contracted Capacity with Haryana Discoms  | MW      | 1424   |
| B | Gross Capacity of Phase IV at bus bar (net of Auxiliary Consumption @8.42% and Transmission Losses up to Haryana@3.6% ) | MW      | 1613   |
| C | Gross Capacity of Phase IV  | MW      | 1980   |
| D | % Share of Haryana Discoms from Phase IV (B/C)  | %       | 81.46% |
| E | Total Capex of FGD – As per CA certificate dated 31 <sup>st</sup> March 2013  | Rs. Cr. | 614.70 |
| F | Share of Haryana in FGD Capex (D*E)   | Rs. Cr. | 500.76 |
| G | % increase in Capacity Charges @ 0.227% per Rs. 8.9 Cr increase in Capex  | %       | 12.77% |
| H | Quoted Capacity Charges for FY 13-14  | Rs./kWh | 1.119  |
| I | Per unit increase in Capacity Charges for FY 13-14 due to capex in FGD (G*H)  | Rs./kWh | 0.1429 |
| J | Total Quoted Tariff of FY 13-14   | Rs./kWh | 3.264  |
| K | Quoted tariff of FY13-14 including additional capacity charges due to capex in FGD                                      | Rs./kWh | 3.407  |

**Increase in Energy Charges due to increase in Auxiliary Consumption:**

The impact of increase in auxiliary consumption due to FGD has already been factored in mechanism for deriving Compensatory Tariff for Haryana PPA under chapter 7B of this report.

Hence, no separate reimbursement is required to be allowed to the Company on account of this change in law event.

**Per unit charge on account of additional opex (including water cess)**

1. Additional Opex: Rs. 48 Cr.
2. Total generation assuming 80% availability and 8.42% of Auxiliary consumption: 12,707.49 MUs
3. Per unit impact of Additional Opex: Rs. 0.0378 per kWh ( $48 \times 10 / 12707.49$ )

The total impact of FGD for FY13-14 is summarized below: (in Rs. per kWh)

| Parameter   | Rs/unit       | Remarks  |
|---|---------------|--|
| increase in Capacity Charges for FY 13-14 due to capex in FGD     | 0.1429        | Included in Sub-section 'Change in Law affecting Capacity Charges' of this chapter |
| Increase in Quoted Tariff due to additional Auxiliary Consumption | 0.0           | Included in Compensatory Tariff in Energy Charges as calculated in Chapter 7B      |
| Impact of additional Opex due to FGD                              | 0.0378        | As calculated above  |
| <b>Total Impact on Tariff due to FGD (Rs./ kWh)</b>               | <b>0.1784</b> |  |

### 3. Change in Law not included in either Capacity Charges or Energy Charges

The effect of the following listed events has not been included in Compensatory Tariff related to energy charges in chapter 7B of this report:

- Customs Duty on Electricity exported out of SEZ to DTA.
- Green Energy Cess

Illustrative Calculation of the same is below:

| Particulars  | Rs./kWh      |
|--|--------------|
| Customs Duty on Electricity exported out of SEZ to DTA | 0.032        |
| Green Energy Cess                                      | 0.023        |
| <b>Total</b>   | <b>0.055</b> |

The Company has already requested Haryana Discoms about the change in law to seek restitution under PPA. The same has not been concluded till date which has resulted in increase in hardship on energy charges.

### Recommendations

- For item (1) events affecting Energy Charges, no separate restitution is to be done as the same is embedded in Compensatory Tariff calculation. On allowance of CT, change in law affecting energy charges will be reimbursed automatically.
- For item (2), events affecting both Capacity Charges and Energy Charges i.e. FGD, the effect on Energy Charge viz. increase in Auxiliary Consumption due to FGD is already embedded in calculation of CT, hence the same need not be paid separately. However as regards the events affecting Costs of Capacity charges viz. increase in capacity charges due to FGD and increase in O&M, the Committee suggests that the Hon'ble CERC may examine these aspects to pass suitable order.
- As regards events under item (3), the Committee suggests that the Hon'ble CERC may examine these aspects to pass suitable order.

**Committee Recommendations- in a Summary**

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 31<sup>st</sup> 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.

## ANNEXURES

### Annexure-I (A) APL Phase III: Chronology of Events

| Timeline  | Event   |
|---|---|
| 1 <sup>st</sup> February 2006                                     | GUVNL issued a public notice inviting proposals for supply of power on long term basis  |
| 13 <sup>th</sup> March 2006                                       | GERC approved the bidding documents   |
| 9 <sup>th</sup> September 2006                                    | AEL executed MOU with Coal Orbis Trading GMBH, Germany for supply of imported coal  |
| 14 <sup>th</sup> November 2006                                    | Letter from GMDC for supply of domestic coal from Morga-II coal mine  |
| 24 <sup>th</sup> November 2006                                    | GUVNL issued RfP documents .As per RfP, the seller was required to assume full responsibility to tie up the fuel linkage and indicate the progress of fuel arrangement  |
| 21 <sup>st</sup> December 2006                                    | AEL executes MOU with Kowa Company Ltd. Japan for supply of imported coal   |
| 4 <sup>th</sup> January 2007                                      | <ul style="list-style-type: none"> <li>• Consortium of AEL and Vishal Exports Overseas Ltd. (VEOL) submitted the bid and was one of the 7 bidders for the project.</li> <li>• They proposed to set up 1000 MW plant in Chhattisgarh</li> <li>• In the bid, for fuel arrangement- a copy of letter issued by GMDC for domestic coal dated 14<sup>th</sup> Nov 2006 and copy of MOUs with Coal Orbis Trading and Kowa Company Ltd was submitted.</li> <li>• Mundra was also proposed as an alternate site with same tariff</li> </ul> |
| 11 <sup>th</sup> January 2007                                     | The Consortium of AEL and Vishal Exports Overseas Ltd. (VEOL) was selected as successful bidder and LOI was issued.   |
| 2 <sup>nd</sup> February 2007                                     | PPA for supply of 1000 MW of power at the rate quoted in bid was signed between GUVNL and Adani Power Private Ltd. ( A SPV of the consortium)   |
| 12 <sup>th</sup> February 2007 and 20 <sup>th</sup> February 2007 | Company made a proposal to GUVNL for supply of power from its Mundra power plant  |
| 18 <sup>th</sup> April 2007                                       | Supplementary PPA was signed between Adani Power Private Ltd. and GUVNL for supply of 1000 MW power from Units 5 & 6 (Phase III) of Mundra Power plant instead of Chhattisgarh Power plant)   |
| 20 <sup>th</sup> December 2007                                    | GERC adopted the tariff under Section 63 of Electricity Act, 2003 and also approved the PPA under clause (b) of subsection (1) of Section 86 of Electricity Act.  |
| 5 <sup>th</sup> February 2008                                     | MOU with Kowa Company Ltd, Japan terminated as FSA was not executed   |
| 18 <sup>th</sup> March 2008                                       | MOU with Coal Orbis Trading GMBH, Germany terminated as FSA was not executed  |
| 24 <sup>th</sup> March 2008                                       | APL executed a FSA with AEL for purchase of coal with GCV of 5200 kcal/kg at price of USD 36/MT for Phase III   |
| 28 <sup>th</sup> December 2009                                    | <ul style="list-style-type: none"> <li>▪ The company could not enter into FSA with GMDC due to persistent difference between the APL, GMDC and GUVNL</li> <li>▪ On account of non-fulfilment of conditions subsequent as per PPA and due to non-materialisation of FSA for Phase III of the project, APL gave a termination notice dated 28<sup>th</sup> December 2009 to GUVNL for termination of the PPA.</li> </ul>  |

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| <b>Timeline</b>                  | <b>Event</b>   |
|----------------------------------|--|
| 26 <sup>th</sup> July 2010       | AEL entered into a consolidated CSA with APL which replaced the earlier CSA dated 8 <sup>th</sup> December 2006 (for Phase- I and II), CSA dated 24 <sup>th</sup> March 2008 (for Phase- III) and CSA dated 15 <sup>th</sup> April 2008 (for Phase- IV). The Consolidated CSA provided for supply of 10 MMT of coal 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  |
| 31 <sup>st</sup> August 2010     | GUVNL challenged the termination notice in GERC and an order was issued by GERC dated 31 <sup>st</sup> August 2010 to set aside the termination notice on the ground that the PPA is not dependent on the fuel supply by GMDC or any other particular source and also for the reason that the APL had a FSA with AEL   |
| 23 <sup>rd</sup> September, 2010 | <ul style="list-style-type: none"> <li>▪ Minister of Energy and Mineral Resources, Republic of Indonesia promulgated "Regulation of Ministry of Energy and Mineral Resources No.17 of 2010"</li> <li>▪ Accordingly, all permit holders of coal mines shall be obliged to sell coals by referring to the benchmark price either for domestic sales or exports, including to its affiliated business entities. Further, the existing direct sale contracts and term sales contracts had to be adjusted to the regulations within a period not later than 6 months and 12 months respectively.</li> <li>▪ AEL has written a letter to APL expressing its inability to perform its obligations under CSA dated 26<sup>th</sup> July 2010 w.e.f.24<sup>th</sup> September 2011</li> </ul> |
| 25 <sup>th</sup> July 2011       | APL informed GUVNL about the existence of force majeure events and sought urgent adjustment of tariff  |
| 20 <sup>th</sup> September 2011  | PT Samundera Perkassa addressed to Adani Global Pte Ltd. has conveyed that coal supply other than HBA prices will be violation of Indonesian Regulation and result in suspension of license and suitable amendment in price regulation is required   |
| February, 2012                   | Commercial Operation of Unit #5 & 6 as per the PPA   |
| 6 <sup>th</sup> February 2012    | APL has informed GUVNL that it was in the process of approaching the appropriate authority for seeking relief for force majeure and supply of power with a condition that whenever the revised tariff or the mechanism for revision in tariff is finalized by Appropriate Authority, will be applicable with a retrospective effect i.e. from SCOD   |
| 13 <sup>th</sup> February 2012   | GUVNL replied to APL letter dated 6 <sup>th</sup> February 2012 that it would take suitable view upon final decision of appropriate authority or Court   |
| 5 <sup>th</sup> July 2012        | <ul style="list-style-type: none"> <li>▪ APL approached CERC for evolving a mechanism for regulating including changing and/or revising tariff on account of frustration and/or of occurrence of Force Majeure and or change in law events under PPAs due to change in circumstances for allotment of domestic coal by GOI/CIL and enactment of new coal pricing regulation by Indonesian Government</li> <li>▪ However, the discoms had challenged CERC jurisdiction for the case</li> </ul>  |
| 16 <sup>th</sup> October 2012    | CERC upheld its jurisdiction to adjudicate the dispute since the Petitioner had entered into a composite scheme for generation and sale of electricity in more than one State and admitted the petition for hearing on merits  |
| 2 <sup>nd</sup> April 2013       | CERC issued order to form a committee to decide a compensatory tariff to be given to APL.  |

**Annexure-I (B): APL Phase IV: Chronology of Events**

| Timeline                       | Events  |
|--------------------------------|---|
| 25 <sup>th</sup> May 2006      | Haryana Power Generation Company Limited (HPGCL) issued RfQ to procure 2000 MW of power on long term basis in behalf of Haryana Discoms<br>Bidder was supposed to submit a letter from fuel supplier for the entire PPA at the time of submission of proposal   |
| 9 <sup>th</sup> September 2006 | MOU with Coal Orbis Trading GMBH, Germany   |
| 21 <sup>st</sup> December 2006 | MOU with Kowa Company Ltd Japan   |
| 4 <sup>th</sup> June 2007      | RfP was issued by HPGCL to qualified bidders and as per RfP: Bidders are required to indicate the progress of fuel arrangement through submission of one or more of the documents viz. linkage letter from fuel supplier, FSA, coal block allocation letter or in-principle approval for allocation of captive coal from Ministry of Coal.  |
| 24 <sup>th</sup> November 2007 | <ul style="list-style-type: none"> <li>▪ APL submitted bid for supply of 1425 MW of power from Units 7, 8 and 9 (Phase IV) of Mundra Power Project</li> <li>▪ APL indicated the representative coal as Imported/Indigenous</li> <li>▪ In the bid, APL submitted proof of fuel arrangement - copy of MOUs by AEL for supply of imported coal from Coal Orbis Trading GMBH Germany and Kowa Company Ltd Japan</li> <li>▪ As per APL, Fixed cost did not include HVDC charges which were included in energy charges</li> </ul> |
| 28 <sup>th</sup> January 2008  | APL made an application to Standing Linkage Committee (Long Term) (SLC{LT}) for long term coal linkage  |
| 5 <sup>th</sup> February 2008  | MOU with Kowa Company Ltd, Japan terminated as FSA was not executed   |
| 28 <sup>th</sup> January 2008  | APL made an application to Standing Linkage Committee (Long Term) (SLC{LT}) for long term coal linkage  |
| 5 <sup>th</sup> February 2008  | MOU with Kowa Company Ltd, Japan terminated as FSA was not executed   |
| 18 <sup>th</sup> March 2008    | MOU with Coal Orbis Trading GMBH, Germany terminated as FSA was not executed  |
| 15 <sup>th</sup> April 2008    | CSA with AEL for purchase of coal with GCV of 5200 kcal/kg at price of USD36/MT for Phase IV units of Mundra Power Project  |
| 17 <sup>th</sup> July 2008     | APL was declared successful bidder and LOI was issued   |
| 31 <sup>st</sup> July 2008     | HERC adopted the tariff under Section 63 of the Electricity Act   |
| 7 <sup>th</sup> August 2008    | Two separate PPAs were executed by APL and UBVNL and DHBVNL for supply of 712 MW of power to each from Phase IV of Mundra power project   |
| 12 <sup>th</sup> November 2008 | <ul style="list-style-type: none"> <li>▪ SLC (LT) in its meeting decided that coastal projects would have imported and domestic coal in ratio of 30:70.</li> <li>▪ For imported coal of 30%, the developer had to tie up sources directly. For 70% domestic coal, LOA will be issued by Coal India Ltd. (CIL).</li> <li>▪ SLC(LT) authorized issuance of LOA by Coal India Limited for capacity of 1336 MW for Phase IV of the project (70% of installed capacity of 1980 MW)</li> </ul>                                    |
| 5 <sup>th</sup> May 2009       | APL got LoA from Mahanadi Coal Field Ltd. for 6.409 MTPA which corresponds to   |

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| Timeline                        | Events   |
|---------------------------------|--|
|                                 | 70% of fuel requirement of Phase IV project  |
| 23 <sup>rd</sup> September 2009 | APL issued letter to Haryana Power Purchase Center( authorized representative of Haryana Discoms) that LoA for domestic coal has been received and for the balance APL proposes to use imported coal   |
| 14 <sup>th</sup> December 2009  | FSA executed between PT Adani Global (Singapore based subsidiary of AEL) and PT Dua Samudera Perkasa for supply of 10 MTPA of coal at price of USD30 – 35/MT depending upon GCV of coal to meet APL's requirements   |
| 26 <sup>th</sup> July 2010      | AEL entered into a consolidated CSA with APL which replaced the CSA dated 8 <sup>th</sup> December 2006 (for Phase- I and II), CSA dated 24 <sup>th</sup> March 2008 (for Phase- III) and CSA dated 15 <sup>th</sup> April 2008 (for Phase- IV). The Consolidated CSA provided for supply of 10 MMT of coal at CIF USD 36/ MT for a period of 15years from the scheduled commercial operation date of last unit of Phase IV of the project   |
| 23 <sup>rd</sup> September 2010 | <ul style="list-style-type: none"> <li>▪ Minister of Energy and Mineral Resources, Republic of Indonesia promulgated "Regulation of Ministry of Energy and Mineral Resources No.17 of 2010"</li> <li>▪ Accordingly, all permit holders of coal mines shall be obliged to sell coals by referring to the benchmark price either for domestic sales or exports, including to its affiliated business entities. Further, the existing direct sale contracts and term sales contracts had to be adjusted to the regulations within a period not later than 6 months and 12 months respectively.</li> <li>▪ AEL has written a letter to APL expressing its inability to perform its obligations under CSA dated 26<sup>th</sup> July 2010 w.e.f.24<sup>th</sup> September 2011</li> </ul> |
| 20 <sup>th</sup> September 2011 | PT Samudera Perkassa addressed to Adani Global Pte Ltd. has conveyed that coal supply other than HBA prices will be violation of Indonesian Regulation and result in suspension of license and suitable amendment in price regulation is required  |
| November, 2011                  | Commercial Operation of Unit # 7   |
| March, 2012                     | Commercial Operation of Unit # 8   |
| May, 2012                       | Commercial Operation of Unit # 9   |
| 25 <sup>th</sup> May 2012       | <ul style="list-style-type: none"> <li>▪ APL issued a letter to Haryana Power Purchase Centre notifying the occurrence of change in law and force majeure and seeking relief</li> <li>▪ Sought urgent revision of tariff to cover increased cost of generation to commence power supply</li> <li>▪ Haryana utilizes are stated to have not responded to APL's request</li> </ul>   |
| 9 <sup>th</sup> Jun 2012        | <ul style="list-style-type: none"> <li>▪ APL entered into a Coal Supply Agreement (CSA) with Mahanadi Coal Field Ltd. for 64.05 lakh Tonnes of coal for a period of 20 years.</li> <li>▪ As per Schedule VII of the CSA, supply of coal under CSA from domestic sources is not likely to exceed 80% of annual contracted quantity and balance 20% shall be sourced through import subject to confirmation by APL either to accept the supply through import or to surrender the required annual contracted quantity. APL has exercised its option to accept 20% of annual contracted quantity through import.</li> </ul>   |
| 5 <sup>th</sup> July 2012       | <p>APL approached CERC for evolving a mechanism for regulating including changing and/or revising tariff on account of frustration and/or of occurrence of Force Majeure and or change in law events under PPAs due to change in circumstances for allotment of domestic coal by GOI/CIL and enactment of new coal pricing regulation by Indonesian Government</p> <p>However, the discoms had challenged CERC jurisdiction for the case</p>   |



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| <b>Timeline</b>                | <b>Events</b>   |
|--------------------------------|---|
| 8 <sup>th</sup> September 2012 | First invoice raised subject to the petition filed before CERC and subsequently every invoice explicitly raised without prejudice to the rights of APL.   |
| 16 <sup>th</sup> October 2012  | CERC upheld its jurisdiction to adjudicate the dispute since the Petitioner had entered into a composite scheme for generation and sale of electricity in more than one State and admitted the petition for hearing on merits |
| 16 <sup>th</sup> January 2013  | Haryana Utilities had sought a review of CERC order dated 16 <sup>th</sup> October 2012 which CERC dismissed.   |
| 2 <sup>nd</sup> April 2013     | CERC issued order to form a committee to decide a compensatory tariff to be given to APL.   |

**Annexure-II: Minutes of Committee Meeting**

**MOM for Meeting held on 11<sup>th</sup> May 2013**

**Composition of the Committee:** The Committee was chaired by Mr. Deepak Parekh, who welcomed all the invitees and thanked them for attending the meeting. The composition of the Committee was thereafter formalised amongst the members. It was agreed that SBI Capital Markets Ltd. (SBICAP) will be acting as the independent financial analyst for this Committee. Representatives of Govt. of Haryana/ Haryana utility had invited Prof. Devi Singh, Director, IIM-Lucknow to attend this meeting. All the members agreed that he may be co-opted as a member of this Committee.

**Presentation by the Company:** After the finalization of the composition of the Committee, Mr. Gautam Adani, Chairman, Adani Power Ltd. (APL) and his team made a detailed presentation to the Committee outlining all the issues and concerns of both the PPAs with Haryana discoms (Phase IV of Mundra project) and Gujarat discoms (Phase III of Mundra project). Some of the important points raised by APL in their presentation are summarised as follows:

- Quoted levelised capacity charge and energy charge for Gujarat PPA is Rs. 1.00/kWh and Rs. 1.35/kWh respectively. Quoted levelised capacity charge and energy charge for Haryana PPA is Rs. 0.98/kWh and Rs. 1.96/kWh respectively.
- Phase III (Gujarat PPA) is currently being operated fully on imported coal as fuel whereas Phase IV (Haryana PPA) is operated by blending 70% of the domestic linkage coal with 30% of imported coal. Due to short-supply from Mahanadi Coalfields (MCL), the proportion of imported coal in Phase IV has at present increased up to 58%.
- Due to significant increase in international coal prices and on account of change in the Indonesian Regulations, the cost of imported coal used as fuel by the company has increased substantially.
- APL is facing under-recovery in energy charges under both aforesaid PPAs due to this increased cost of imported coal.
- APL also submitted that it is also not able to recover actual capacity cost at the quoted capacity charges under both aforesaid PPAs as the completed project cost is more than the estimated cost primarily due to adverse forex fluctuation and changes in environmental law in Phase IV.

**Key Issues discussed:**

- a. After the presentation, the Committee felt that a benchmarking study needs to be conducted for cost of power projects with similar capacity and technology. It was decided that the Financial Analyst will carry out this study for the projects in India based on publicly available sources. Further, the Committee opined that Financial Analyst shall also carry out a study on benchmarking fuel cost (by neutralising the transportation cost) of projects across the country with similar fuel source. The information related to this will be provided by the Procurer states.
- b. A view was expressed, as also suggested by the Govt. of Gujarat, that all the stakeholders should participate in implementing the solution proposed by CERC. The solution needs to include adjustment of profits made by developer from its captive coal mines in Indonesia.
- c. Based on the discussions held, it was decided that a reputed accounting agency will be appointed as independent auditor from one of the big four auditing firms operating in India for accounting due diligence of the Indonesian coal mines of APL.
- d. M/s Delloitte is the internal auditor for the Company. With the view of the members, it was decided to appoint M/s KPMG for this due diligence. This appointment will be facilitated by SBICAP and later on, the fees for the same will be reimbursed by the procurers.

- e. On the point regarding change in interest rate charged by various lenders, members of the Committee opined that the report of the Committee may mention that reduction in interest rate, from the current levels, by lenders may help in implementation of the solution proposed by CERC.
- f. The Financial Analysts would also carry out a separate sensitivity analysis in order to determine the impact of interest rate reduction on the tariff and the Company may negotiate with its lenders on a bilateral basis.
- g. Members of the Committee also mentioned that it needs to be examined if the CERC order requires the committee to consider changes in the capital/ fixed cost.
- h. Financial Analyst will also evaluate the scenario if the coal cost is made a pass through in the PPA.
- i. The Financial Analyst agreed to appoint a dedicated team for this assignment and start working on the financial due diligence along with the office of the Chair at the earliest and give the roadmap in the next committee meeting.
- j. It was also decided that SBICAP will also be carrying out the secretarial responsibilities of this Committee and will be reimbursed for its advisory services by the procurers in the ratio of their power off-take from the Mundra project.
- k. Given the complexity of the situation and in light of the fact that the solution will impact many stakeholders, some members expressed that there should be high level representation from the Ministry of Power, Govt. Of India in this committee. It was decided that a communication will be sent to the CERC by the chair in this regard.

The meeting concluded with the vote of thanks by the Chair and it was decided that next course of action will be conveyed to all the members shortly.

**MOM for Meeting held on 26<sup>th</sup> June 2013**

**Background** – As per the Hon'ble CERC order dated 02.04.2013 and 15.04.2013 in respect of the petition no. 155/MP/2012 and 159/MP/2012 filed by Petitioner M/s Adani Power Ltd. and M/s Coastal Gujarat Power Ltd, constitution of a committee was recommended to suggest "compensatory tariff". The composition of the two respective committees for each aforesaid Petition was formalised in 1st Committee Meeting held on 11th May 2013 comprising of Principal Secretary (Power), respective State Govt./Managing Director of respective Discoms and Principal Secretary (Power), respective Govt. / Managing Directors of respective Discoms, the Chairman of Adani Power Ltd., the Chairman of Coastal Gujarat Power Ltd., SBICAP as financial analyst, Prof. Devi Singh, Director, IIM-Lucknow (co-opted as member for providing necessary guidance to financial analyst as suggested by Haryana Discom) and Mr. Deepak Parekh as Chairman of the Committee. Second meeting for both the Committees was convened jointly on 26<sup>th</sup> June 2013 at HDFC office in Ramon House, Churchgate, Mumbai.

**Presentation by SBICAP:** The Committee was chaired by Mr. Deepak Parekh, who welcomed all the invitees and briefed them on agenda of the meeting. With kind permission from the Chairman, SBICAP made a presentation outlining the recap of the last meeting, progress made so far and way forward. It was mentioned in the meeting that Finance Sub-Group consisting of Chairman, Prof. Devi Singh and SBICAP has been carrying out the basic groundwork to achieve the Committee objectives. Major points covered during the presentation by SBICAP are as follows:

- A. CERC Order – Apart from determining the Compensatory Tariff, the Committee has been asked to explore further issues to reduce the burden faced by Procurers due to hike in tariff. Some of them are specifically mentioned in the order like -
1. 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 plant should be factored to pass on the same in full.
  2. Possibility of sharing the revenue due to sale of power beyond the target availability to third parties may be explored.
  3. Possibility of using coal with low GCV for generation of electricity without affecting the operational efficiency.

The Order further states that the Committee is also at liberty to suggest any further measure which could be practicable and commercially sensible to address the situation.

- B. Appointment of Consultants – In the first meeting, it was decided to appoint M/s KPMG as Independent Auditor to carry out accounting due diligence of Indonesian entities to bring clarity on point A-1 mentioned above. It was concurred in the meeting that only the profit corresponding to quantity of coal being supplied to power projects of APL and CGPL from the mines and resulting from coal price increase due to Indonesian regulation should be available for sharing. However, it was debated if the profit shared should be at Indonesia level or at repatriated level in India after appropriating taxes at different levels on notional basis. For the time being, KPMG has been asked to provide figures for both the scenarios.

Finance Sub-Group has appointed two more experts – Mr. C.P. Singh (Former Director, BHEL) as technical consultant and Mr. A.G. Karkhanis (Former ED - Law, IDBI) as legal consultant. They will provide assistance to the Finance Sub-Group on various issues including point A-2 and A-3 mentioned above. The members were informed about these appointments vide letter dated 24<sup>th</sup> May 2013. All these consultants have started their work and they are expected to submit their reports in some time.

- C. Other issues raised by Procurers – Gujarat and Haryana have suggested some more options through various communications to share the burden of tariff hike among all the stakeholders. All such issues were discussed in the meeting –

1. Procurers have suggested that the developers share the returns from merchant sale of balance power capacity. This situation is not applicable to CGPL. Since the balance power capacity is not a part of PPA, it was agreed in the meeting that the earnings from balance capacity of plant not tied up with Procurers will not be considered for sharing. With regard to sharing the earnings from sale of power beyond normative availability for the capacity contracted under PPA, it was reaffirmed in the meeting that the Procurers have right over such power generation under the PPA. To facilitate such sale, permission from Procurers will be required. However, it was decided to explore this option as mentioned in point A-2.
2. Procurers have suggested that all the stakeholders, including lenders, developers and government should also sacrifice/contribute to reduce the cost of generation. APL represented that its group company has already reduced the port handling charges. The Committee decided to acknowledge this reduction in the report as promoter's contribution.
3. The Committee also discussed other issues such as requesting governments for waiver of duties, exploring the possibility of domestic coal linkage, increase in capacity charge due to 'change in law' factors, impact of forex fluctuation on capacity charge, reduction of interest rate on loans as well as reduction in return made by promoters. Finance Sub-Group submitted that these issues are not directly related to CERC order. However, the members agreed that these points can be covered in the report as the Committee is also at liberty to suggest any further measure which could be practicable and commercially sensible.

D. Mundra – Mohindergarh transmission line - It was discussed in the last meeting that the HVDC transmission line of APL is currently under-utilised and an ISTS license will reduce the transmission cost. CERC has granted in principle approval for the same. Once the final approval for license is given, this would reduce the applicable transmission costs.

SBICAP ended the presentation with the discussion on the way forward. Finance Sub-Group will study the reports submitted by the independent consultants and prepare a compensatory package. This package will be discussed with the members before finalizing the report.

**Presentation by KPMG:** M/s KPMG was then invited by the Chairman to give presentation on process flow and timelines proposed. KPMG presented the scope of work and their understanding of the situation. Members were satisfied with the scope of work given to KPMG. It was also mentioned that most of the information has been received by KPMG and their report may be available by the end of the first week of July.

**Further points discussed:** Apart from the presentation made by SBICAP and KPMG, some additional points were also raised by other members and discussed in the meeting.

- The Committee discussed the coal supply mechanism approved by Cabinet Committee of Economic Affairs (CCEA) on 21st June 2013. To meet the shortfall in coal supply with respect to domestic linkage, import of coal has been allowed. Higher cost of coal will be considered for pass-through as per the modalities suggested by CERC. Ministry of Coal will be issuing suitable orders supplementing the New Coal Distribution Policy. Ministry of Power will issue appropriate advisory to enable appropriate commissions to decide pass-through of higher cost of imported coal. The Committee noted that the above decision of CCEA reinforces the Commission's order for granting compensatory tariff.
- APL mentioned that they had to install a Flue Gas Desulphurizer (FGD) in Phase IV due to MoEF stipulation after the Haryana bid which resulted into higher capital cost of the project, increased auxiliary losses and O&M cost. The members were of the view that the same may be addressed in the

'change in law' clause. With regard to impact of increase in capital cost on capacity charges, the Committee may quantify the impact for further decision by CERC.

- APL also mentioned that they are in discussion with government for optimization/swapping of coal linkage from Mundra plant to Tiroda plant in Maharashtra which will rationalize the freight cost and quality of coal supplied. They requested the members to allow the same and APL will continue to claim energy charges on notional usage of domestic coal at Mundra. This rationalization will enable APL to compensate its losses in capacity charges. The Procurers expressed their apprehension that the swapping may not be allowed by Gol/MoC. The Procurers stated that they shall have no objection if optimization/swapping of coal linkage is allowed by Gol/MoC.
- CGPL mentioned that they had assumed revenue from Certified Emission Reduction (CER) while bidding but they could not get registration under Clean Development Mechanism (CDM).
- Both the petitioners submitted that sharp depreciation in Rupee has resulted in significant increase in their capital cost and debt servicing liability. Recent movements in currency have made the situation worse.
- Members acknowledged the problems faced by both the Petitioners. Most of them were of the view that sacrifice/contribution would be required from all the stakeholders to reach an acceptable solution. All these losses incurred by Petitioners may be considered as their sacrifice in the entire scheme of things. At the same time, it was also agreed that the project should be viable for the promoters also for sustainability. It was also suggested to carry out an analysis of stress situation due to adverse foreign exchange regime and increased capital cost.
- CERC order has given liberty to the Committee to suggest any further measure which could be practicable and commercially sensible to address the situation. Maharashtra proposed the idea that the additional concerns raised by various parties may be covered in the report based on the same instruction.
  - Haryana suggested that different formulae can be derived to capture the understanding of the situation and then the Committee can deliberate for arriving at a decision to adopt the appropriate package for submission to CERC. One of the formulae could be computing fuel cost on cost plus basis and the difference in actual fuel cost and quoted energy tariff may be considered as gross Compensatory Tariff.

At the end, the minutes of the last meeting were adopted with due permission from all the members. It was then proposed by the Chairman that a communication may be sent to CERC for extension of timeline for submission of report as there have been delays on account of formation of Committee and appointment of various consultants. The meeting concluded with the vote of thanks by the chair.

## MOM for Meeting held on 11<sup>th</sup> July 2013

**Background** – As per the Hon'ble CERC order dated 02.04.2013 and 15.04.2013 in respect of the petition no. 155/MP/2012 and 159/MP/2012 filed by Petitioner M/s Adani Power Ltd. (APL) and M/s Coastal Gujarat Power Ltd (CGPL), constitution of a committee was recommended to suggest "compensatory tariff". The composition of the two respective committees for each aforesaid Petition was formalised in 1<sup>st</sup> Committee Meeting held on 11<sup>th</sup> May 2013. Second meeting for both the Committees was convened jointly on 26<sup>th</sup> June 2013 to discuss the progress made and way forward. Third meeting of the Committee was convened separately for APL on 11<sup>th</sup> July 2013 at Amadeus, NCPA, Nariman Point, Mumbai.

**Presentation by SBICAP:** The Committee was chaired by Mr. Deepak Parekh, who welcomed all the invitees and briefed them on agenda of the meeting as also informed that indicative workings have been done to arrive at compensatory tariff based on various points discussed in the last meeting held on 26<sup>th</sup> June 2013. Then Chairman requested SBICAP to make the presentation outlining the recap of the last meeting, broad workings of Compensatory Tariff and way forward. Major points covered during the presentation by SBICAP are as follows:

- A. Finalisation of Report of Consultants – As an Independent Auditor, M/s KPMG has carried out accounting due diligence of Indonesian entities to arrive at net Profit less Govt. taxes and cess etc. corresponding to the quantity of the coal being supplied to the plant. It has also determined the actual amount that may be repatriated against some dividend declared at Indonesian level. KPMG has submitted its draft report. Further, Mr. C.P. Singh (Former Director, BHEL) appointed as technical consultant and Mr. A.G. Karkhanis (Former ED - Law, IDBI) appointed as legal consultant; both have prepared their draft report on various technical and legal issues.
- B. Hardship/Financial Stress – It was mentioned that the hardship on fuel cost to be proposed for recovery has been worked out in two parts - i) Past losses with respect to coal on actual basis from Commencement of respective PPA up to cut-off date of 31<sup>st</sup> March 2013; and ii) Projected losses from 1<sup>st</sup> April 2013 onwards based on coal price assumptions/plant parameters, etc. Based on the audited financials submitted by APL for Phase III; past losses due to under-recovery of energy charges vis-à-vis quoted tariff on actual basis were about Rs. 57 Cr and Rs. 430 Cr for FY 2012 and FY 2013 respectively. Similarly for Phase IV, the under-recovery of energy charges was about Rs. 511 Cr for FY 2013 including transmission losses.
- C. Compensatory Tariff – The financial analyst has evaluated two scenarios based on – (i) the difference in bid reference price to current HBA indexed price; and (ii) the difference in quoted energy charge and actual/projected landed cost of coal arrived at based on current market conditions (i.e. "Fuel Price Adjustment"). It was discussed that later scenario would not only ensure that any advantage of reduction in coal prices will be passed on to Procurers, but it will also be sustainable mechanism on long term basis. With regards to "Fuel Price Adjustment", it was discussed that imported coal price should be linked to HBA price and the ocean freight could be capped to freight index or guidance as may be suggested by CERC. For Phase IV, domestic coal price may be considered as notified by MCL and transportation cost may be capped to prevailing railway transportation cost. The transmission tariff to be taken in phase IV should be based on CERC guidelines once the Mundra Mohindargarh transmission line gets ISTS license. Grant of ISTS license to transmission line may lead to reduction in transmission cost and may reduce effective tariff compensation. All the operating parameters like SHR/Auxiliary Consumption/losses should be considered on actual basis subject to cap of CERC norms. Any change in fuel price due to foreign currency fluctuation will also get covered in "Fuel Price Adjustment". The impact of FGD operations on auxiliary consumption will also be added in phase IV while working out the compensation.

- D. Burden Sharing – CERC in its order had suggested three more ways of sharing the burden of high fuel costs. Profit sharing from Indonesian entities has already been studied by KPMG. Since coal from mines owned by Adani Group may not be used in Phase IV due to low GCV, there would not be any adjustment in this regard in Haryana PPA. On possibility of sharing revenue due to sale of power beyond the target availability to the third parties/ merchant sales, it was highlighted that the same would need procurers consent. Further it was discussed that sharing of surplus after deducting actual energy cost should be decided on mutual basis. With respect to usage of low GCV coal for generation of electricity to reduce the fuel cost, technical consultant has provided the opinion. These arrangements would not result in any commercial gain due to design constraints of boiler deterioration of operation parameters while using lower grade coal.
- E. Other Issues – The procurers had suggested other ways of burden sharing among different stakeholders. Pertaining to reduction in port handling charges, it was discussed that already the same has been reduced which has an impact of about 1p/unit on tariff. With regards to reduction in interest rate by the lenders, it was presented that the company may seek rate reduction if the rating improves after a favourable compensatory package.

Further Discussions: After the presentation, the chairman explained to the committee that the developers are also making significant sacrifice in terms of under-recovery in capacity charges. To find a sustainable solution to this problem is in the interest of the energy sector at large. The procurers expressed their concerns with respect to impact of increase in tariff. They want to understand the principles of “Fuel Adjustment Mechanism” and it was decided that financial analyst would explain this mechanism to both the procurers including the illustrations for determining the compensatory tariff. The procurers also wanted to review the report to be submitted to CERC and the draft would be shared with them shortly. It was suggested by Procurers to discuss the possibility of reduction in interest rates with major lenders. In view of this request, it was decided to call upon meeting with selected major lenders of the projects on 17<sup>th</sup> July 2013.

The meeting concluded with the vote of thanks by the chair.



### MOM for Meeting held on 17<sup>th</sup> July 2013

**Background** – As per the Hon'ble CERC order dated 02.04.2013 and 15.04.2013 in respect of the petition no. 155/MP/2012 and 159/MP/2012 filed by Petitioner M/s Adani Power Ltd. (APL) and M/s Coastal Gujarat Power Ltd (CGPL), the two respective committees for each aforesaid Petition were formed in 1st Committee Meeting held on 11<sup>th</sup> May 2013 for arriving at "compensatory tariff". Second meeting for both the Committees was convened jointly on 26<sup>th</sup> June 2013 to discuss the progress made and way forward. Further third meeting of the Committee was convened separately for APL and CGPL on 11<sup>th</sup> July 2013 wherein it was decided to call upon joint meeting of major domestic lenders of APL & CGPL on 17<sup>th</sup> July 2013 to take their views on the possibility of reduction in rate of interest. In this respect, major domestic lenders for both the projects were invited for a meeting at Amadeus, NCPA, Nariman Point, Mumbai on 17<sup>th</sup> July 2013.

The Committee was chaired by Mr. Deepak Parekh, who welcomed all the invitees/major domestic lenders of both the projects and briefed them on scope of the committee as also agenda of the meeting. During the initial brief, Chairman mentioned that apart from determining the Compensatory Tariff, a few of the Procurers have suggested that all the stakeholders, including lenders, developers and government should sacrifice/contribute in all possible way to reduce the burden due to hike in tariff and explore possibilities like – reduction in interest rates, reduction in duties, reduction in equity returns apart from profit sharing from Indonesian mines and sale of power beyond normative availability. It was discussed that power sector as a whole is currently marred by various issues like non-availability of domestic coal, deteriorating financial health of Discoms, sudden depreciation in forex rates, etc. and Government has initiated slew of initiatives like Discoms restructuring, pass-through of imported coal cost on account of non-availability of domestic coal. It was also reiterated that both APL and CGPL are facing the hardship due to increase in coal cost as also from various other reasons like increase in project cost, rupee depreciation, non-availability of CER and are already into stress with little or no ROE and would continue to bleed if the amicable solution is not arrived at. It was also felt that if the situation is dragged further, all will suffer and even power deficit country would be starved for power from operational plants of APL/CGPL. After that, Chairman requested all the invitees to express their views on the above:

#### A. CGPL's/APL's request to Lenders –

1. CGPL informed that Rupee Term Loans (RTL) of about Rs. 6000 crore and Foreign Currency Loan of around USD 1.7 billion is outstanding as of date and their principle repayment has already commenced. Due to the hardship as mentioned above, CGPL is facing stressed situation. It was also mentioned that losses of about Rs. 400 crore are accumulating on a quarterly basis. CGPL requested all the lenders to provide some relief so that the project is viable in long term.
2. APL also informed that it has sanctioned commitment of about Rs. 5760 crore and Rs. 7490 crore from lenders in Phase III and Phase IV respectively. It was also mentioned that APL's group company has already reduced port handling charges by Rs. 20 per ton. Currently, the promoters are bringing the funds to pare the losses. It was then requested by APL to consider possible reduction in the interest rate.
3. Both APL/CGPL informed that the Compensatory tariff by way of increase in variable component would enable them to cut down on their losses. Any reduction in interest rate or elongation of loan tenor would improve the overall viability of both the projects. APL/CGPL also mentioned that currently the interest servicing is regular and repayments are also made on time.

B. Procurers' views – Gujarat mentioned that it is imperative for all to have access to supply of reliable and quality power and hence lenders should extend their support to reduce the burden on Discoms. It was also mentioned that Discoms are already facing problems and they face lot of problems in passing on the burden to the consumers. Haryana also expressed that all the stakeholders including lenders should sacrifice so as to reduce the burden faced by Procurers. Maharashtra then pronounced the

request for reduction in interest rate as also need to protect the consumer interest. Punjab also continued to mention that lenders need to support the project in order to keep up with plant operations.

C. Lenders' view – On hearing both Petitioner's/Respondent's views, request was made to all the lenders present to express their view on the possibility of reduction in rate of interest.

1. SBI (lead Bank for both APL/CGPL) appreciated the efforts made by the Committee to reduce the hardship faced by APL/CGPL. He explained that the interest rate can be brought down only due to competitive considerations else it is treated as restructuring of loans by RBI. The projects will have a good case of interest rate reduction if the rating improves after the approval of compensatory tariff. It was then discussed that extending the tenor would also attract RBI restructuring guidelines. Restructuring requires provisioning by Banks and it will result into higher burden. SBI also expressed that the current applicable interest rates are very competitive as both the groups are well placed in the market.
2. Canara Bank concurred with views expressed by SBI and mentioned that reduction in interest could be possible on improved rating due to compensatory package. It also expressed that the long term viability of the projects should be assessed.
3. HUDCO also mentioned that sympathetic view may be taken by the Committee for the hardship faced by APL/CGPL, however on reduction in interest they will examine the same. Possibility of rate reduction can also be considered on improvement in rating.
4. PNB, Vijaya Bank and UCO Bank expressed that current applicable rates are competitive and it is difficult to reduce the same at the moment. However if rating improves, this request may be dealt positively at the time of reset.
5. It was also suggested by SBICAP that RBI could be approached for considering forbearance/special dispensation on account of reduction in interest and extension tenor and hence to avoid restructuring of account.
6. It was assured by all the lenders that all the efforts would be made to consider the measures as suggested by the Procurer's as also Petitioners.

It was then deliberated among all the Committee members that lenders' support is required for the project in order to keep up with plant operations and debt service in future. In this view, it was requested to all the lenders to provide some relief to these projects. It was also highlighted that both the projects are operational (there is no construction risk), have long tail of PPA of 25 years and extension of existing loan tenor up to 15-20 years could be considered which is as also prevalent practice internationally. It was also discussed that in case of extension of tenor of loan, RBI could be requested to consider special dispensation in both the cases so as to avoid additional provisioning requirement due to restructuring of accounts. The chairman agreed that the similar recommendations may be made in the report to be submitted to CERC. Based on these recommendations, the banks may approach RBI to provide special dispensation to these projects.

It was then requested that all the Discoms could conclude their views on the calculations part in consultation with their respective senior management by next week. It was decided that next meeting could be called on 29<sup>th</sup>/30<sup>th</sup> July 2013 to conclude all the issues before submission of the final report to CERC. The meeting concluded with the vote of thanks by the chair.

**Record Note for Meeting held on 30<sup>th</sup> July 2013**

**Background** – As per the Hon'ble CERC order dated 02.04.2013 and 15.04.2013 in respect of the petition no. 155/MP/2012 and 159/MP/2012 filed by Petitioner M/s Adani Power Ltd. (APL) and M/s Coastal Gujarat Power Ltd (CGPL), constitution of a committee was recommended to suggest "compensatory tariff". The composition of the two respective committees for each aforesaid Petition was formalised in 1st Committee Meeting held on 11th May 2013. Second meeting for both the Committees was convened jointly on 26th June 2013 to discuss the progress made and way forward. Third meeting of the Committee was convened separately for APL on 11th July 2013 to discuss the methodology of arriving Compensatory tariff. Meeting with selected major lenders of both the projects was held on 17th July 2013 to take their views on the possibility of reduction in rate of interest. Fourth meeting of the Committee was convened on 30th July 2013 to discuss various pending points for finalisation of report at HDFC, Capital Court, Munirka, New Delhi.

**Presentation by SBICAP:** The Committee was chaired by Mr. Deepak Parekh, who welcomed all the invitees and briefed them on agenda of the meeting as also informed that draft report has been circulated along with illustrative workings to arrive at compensatory tariff based on discussions held in earlier meetings. Then Chairman requested SBICAP to make the presentation outlining the recap of the last meeting held on 11<sup>th</sup> July 2013 as also lenders' meeting held on 17<sup>th</sup> July 2013 and discussion held with Procurers on illustrative workings of compensatory tariff. Major points covered during the presentation by SBICAP are as follows:

- A. Hardship/Financial Stress – It was mentioned that the hardship on fuel cost to be proposed for recovery has been worked out in two parts - i) Past losses with respect to coal on actual basis from Commencement of respective PPAs up to cut-off date i.e. 31<sup>st</sup> March 2013 based on the audited financials of APL for Phase III and Phase IV separately; and ii) Projected losses from 1<sup>st</sup> April 2013 onwards based on assumptions for coal prices, plant parameters, etc.
- B. Fuel Price Adjustment Mechanism – It was discussed that as recommended mechanism, the difference between actual fuel cost and quoted energy tariff based upon certain agreed parameters will be treated as "Compensatory Tariff". Provisional compensatory tariff would be determined for FY 2014 based on the mechanism recommended by Committee and monthly invoice would be raised by APL. At the end of the year, based on audited accounts, APL would file the report for true-up/reconciliation of actual compensatory tariff. The final tariff for the preceding year would become the provisional tariff for current year and the reconciliation will happen at the end of year.
- C. Recap of Lenders' Meeting held on 17<sup>th</sup> July 2013 – Procurers have been advising to ask lenders of the project to provide some relief to the project. This relief/comfort would help in reducing the under recovery in capacity charge and improve the project viability. Considering this, a meeting was arranged with all the major lenders of both the projects. While the request was made to lenders on possibility of reduction in interest rate, they suggested that the interest rate can be brought down only due to competitive considerations else it is treated as restructuring of loans by RBI. Further it was mentioned by Lenders that projects will have a good case of interest rate reduction if the rating improves after the approval of compensatory tariff. It was also discussed that in case of extension of tenor of loan, RBI could be requested to consider special dispensation so as to avoid additional provisioning requirement due to restructuring of accounts. The Chairman agreed that the similar recommendations may be made in the report to be submitted to CERC. Based on these recommendations, the banks may approach RBI to provide special dispensation to these projects.

- D. Discussion with Procurers – Discussion were held by SBICAP with Procurers to explain the illustrative workings of compensatory tariff and various scenario analysis as per their requirement. Procurers have also conveyed their comments for consideration of the Committee.

Further Discussions: After the presentation, the discussions were held for various points raised by Procurers as under:

1. APL had considered Station Heat Rate (SHR) of 2150 kcal/kWh for Phase III power plant in the petition no. 1210 of 2012 before Gujarat State Regulatory Commission (GERC) for relief against “change in law”. In the illustrative calculation for energy cost for the present exercise, the heat rate is taken as per the design parameters of OEM contractors which is still lower than Normative SHR of CERC. Members have asked for an explanation of this anomaly.

SBICAP clarified that SHR for calculations is taken as 2354 kcal/kWh (design value of 2210 kcal/kWh and 6.5% allowance for site conditions as allowed as per CERC norms) which has been verified by Mr. C.P. Singh, technical consultant. With proposed coal GCV of 4500 kcal/kg, SHR of 2354 kcal/kWh is realistic and will give the optimum fuel cost. SBICAP also informed that while recommending SHR of 2354 kcal/kWh, they have compared the same with SHR approved by Regulatory Commissions for other coal based power stations of NTPC as well as state gencos. Further, compensatory tariff will be lower if the actual SHR is lower than this value with maximum allowable site adjustment factor.

APL represented that the SHR taken in GERC order was based on superior quality of coal having GCV of 5200 kcal/kg and at rated load and design conditions. However, the plant will not operate continuously at rated capacity and site operating conditions will differ from design conditions. It was later clarified that low quality coal with GCV around the boiler design will result in lower fuel cost. APL clarified that it did not contest the SHR mentioned in the GERC order with a view to avoid unnecessary litigations since it did not have significant impact on relief pertaining to the change in law.

2. Both Gujarat and Haryana mentioned that compensatory tariff may be considered from a prospective date only and not from retrospective date. APL clarified that before commencing supply under the PPA and filing the Petition, it had conveyed to the procurers that it will generate and supply power under the PPA with a condition that whenever the mechanism for revised tariff is finalised by Appropriate Authority, the same shall be applicable with retrospective effect. APL also clarified that it had communicated to the Procurers that it had commenced power supply under PPAs with Gujarat and Haryana only on the condition tariff revision will be made applicable from SCoD. APL petition also had explicit prayer to CERC to allow compensation for power supply w.e.f. SCoD. APL further clarified that if the same was not to be allowed, it would incur significant losses. It was then explained that the past hardship from commencement of supply under PPA has to be computed as per the guidance provided in CERC order.
3. Gujarat also suggested an alternate methodology for arriving at Net profit less Govt. taxes and cess from the coal mines in Indonesia. It suggested that the profit should be calculated based upon the difference between coal price notified by Indonesian government and the coal price considered at bid date. This method is difficult to implement as it is difficult to separate the increment from the overall profit/loss. Besides, as per the amended FSA of APL, the coal supplies were to come from third party mining company where Adani Group has no equity investment. KPMG would provide necessary explanatory details/justification on the methodology adopted with regards to apportionment of profits in their report and impracticability of considering option of price difference.

Additionally, the company is incurring losses at the Indonesian mines and it becomes impossible to bring any contribution in this situation.

4. With regards to sharing of revenue due to sale of power beyond the target availability to the third parties/ merchant sales, it was discussed that there is a possibility for the company to generate significant revenue from such third party sale provided they are allowed to sell electricity for longer duration and sufficient incentives are provided to the generator to ensure high level of plant availability by incurring extra expenditure on plant O&M and meet losses towards capacity charges.
5. On suggestion by Gujarat for fixing a ceiling on Compensatory tariff, it was discussed that such ceiling on Compensatory tariff will be addressed through merit order despatch operations as it will incorporate the prevailing market conditions.
6. Both the procurers were of the view that the transit losses of 0.8% taken for coal supply is on a higher side. It was explained that 0.8% transit losses are as per CERC norms and actual losses of generating companies are also in the same range. It was suggested by Procurers that transit loss figure may be verified from past records by SBICAP.
7. Gujarat also raised some concerns about truing up exercise after the end of every year. It suggested to devise a formula to adjust the tariff on regular basis. In view the suggestion of procurers, it was proposed that a further modification can be made in the proposed mechanism that the provisional tariff for particular year may be corrected/adjusted in case the landed coal prices varies by more than 5% as compared to landed prices considered in the computation of provisional tariff. Further, both the procurer and developer will also have the flexibility to adopt some formula later decided on mutually acceptable basis.
8. Haryana also suggested that Forex variation should not be considered for determination of compensatory tariff. It was explained that no FERV compensation is being considered by the Committee in Capacity Charges, despite the fact that its impact is significant. It was further explained in the committee that cushion available to absorb forex fluctuation has been consumed by change in coal prices and change in source of coal to the extent of shortfall of domestic coal. Besides, the RfP had no provision for bidding in both USD and Rupee simultaneously which is desirable in such cases of blending of domestic coal and imported coal. The principle of current compensation is based upon adjusting the entire cost of coal and that has been decided keeping in view the interest of the procurers since compensation is lowest in this option as compared to other options evaluated. Any favourable movement in any of the parameters will also result in reduction of this compensation.
9. Haryana also raised the issue regarding low GCV of coal supplied by MCL. It wanted the company to take up this matter with the coal supplier. As per the recent developments between CIL and NTPC, some clarity is expected on this issue also. However, APL submitted that all the advantages in terms of improvement in GCV that will accrue due to the new mechanism being evolved by CIL will be passed on to the Haryana Discoms.

The chair permitted to adopt the minutes of last two meetings (26<sup>th</sup> June and 11<sup>th</sup> July) which have already been circulated.

Both the procurers mentioned that their formal approval on Compensatory Tariff 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 by 15<sup>th</sup> August 2013. The meeting concluded with the vote of thanks by the chair.

Annexure-III: Recent results of Case I bids and tariff

| Bid type          | State      | Bidder                                | MW     | Fuel Type          | Levelised Tariff | Period  |
|-------------------|------------|---------------------------------------|--------|--------------------|------------------|---|
| Medium Term       | Tamil Nadu | JPL                                   | 200    | Captive Coal block | 4.91             | 1 <sup>st</sup> Mar 2012 - 30 <sup>th</sup> Sept 2017 |
|                   |            | AEL                                   | 200    | Blended            | 4.99             |   |
|                   |            | OPG                                   | 70     | Imported           | 5.99             |   |
| Medium Term       | Bihar      | AEL                                   | 200    | Blended Coal       | 4.41             | 1 <sup>st</sup> Mar 2012 - 30 <sup>th</sup> Sept 2017 |
|                   |            | Sterlite                              | 100    | Domestic Coal      | 4.95             |   |
|                   |            | JPL                                   | 200    | Captive Coal Block | 5.16             |   |
| Medium Term       | Kerala     | PTC India- Balco                      | 100    | Domestic Coal      | 4.506            | Mar'14- Mar'17  |
|                   |            | NVVN                                  | 300    | Domestic Coal      | 4.526            |   |
|                   |            | Jindal Power Ltd.                     | 300    | Captive Coal Block | 4.543            |   |
|                   |            | Tata Power Trading                    | 70     | Domestic Coal      | 4.61             |   |
|                   |            | KSK Mahanadi Power Company Ltd.       | 200    | Domestic Coal      | 5                |   |
|                   |            | KSK Wardha Power                      | 120    | Domestic Coal      | 5.356            |   |
|                   |            | Global Energy Pvt. Ltd.               | 25     | Domestic Coal      | 5.892            |   |
|                   |            | Coastal Energen                       | 150    | Imported           | 6.041            |   |
|                   |            | JSW Power Trading                     | 100    | Imported           | 6.477            |   |
|                   |            | JSW Power Trading                     | 200    | Imported           | 6.815            |   |
| Long Term         | AP         | GMR                                   | 200    | Domestic Coal      | 4.62             | 1 <sup>st</sup> Oct 2012 - 31 <sup>st</sup> Dec 2019  |
|                   |            | Abhijeet                              | 50     | Domestic Coal      | 4.974            |   |
|                   |            | Balco                                 | 100    | Domestic Coal      | 5.175            |   |
| Long Term         | UP         | NSL-Odisha                            | 300    | Domestic Coal      | 4.48             | 25 years  |
|                   |            | PTC (TRN/ACB)                         | 390    | Domestic Coal      | 4.886            | 25 years  |
|                   |            | Lanco Babandh                         | 423.9  | Domestic Coal      | 5.074            | 25 years  |
|                   |            | RKM Powergen                          | 350    | Domestic Coal      | 5.088            | 25 years  |
|                   |            | KSK Chhattisgarh                      | 1000   | Domestic Coal      | 5.443            | 25 years  |
|                   |            | PTC Moserbaer                         | 361    | Domestic Coal      | 5.73             | 25 years  |
|                   |            | Navyug-Krishnapatnam                  | 800    | Imported Coal      | 5.843            | 25 years  |
|                   |            | Indiabulls-Nasik                      | 1200   | Domestic Coal      | 5.97             | 25 years  |
|                   |            | PTC-DB Chhattisgarh                   | 203    | Domestic Coal      | 5.97             | 25 years  |
|                   |            | Jindal                                | 300    | Captive Coal Block | 6.115            | 25 years  |
|                   |            | Indiabulls-Amravati                   | 600    | Domestic Coal      | 6.3              | 25 years  |
|                   |            | Lanco-Amarkantak                      | 1072.5 | Domestic Coal      | 6.303            | 25 years  |
|                   |            | NCC                                   | 200    | Blended Coal       | 6.425            | 25 years  |
|                   |            | Lanco-Vidharbha                       | 454.2  | Domestic Coal      | 6.643            | 25 years  |
|                   |            | PTC (East Coast)                      | 300    | Blended            | 6.819            | 25 years  |
| PTC (DB Power MP) | 302        | Domestic Coal                         | 7.101  | 25 years           |                  |   |
| Long term         | Raj        | LBPL                                  | 100    | Domestic Coal      | 4.943            | 25 years  |
|                   |            | Athena Chhattisgarh Power Ltd         | 200    | Domestic Coal      | 5.143            | 25 years  |
|                   |            | SKS Power Generation Chhattisgarh Ltd | 100    | Domestic Coal      | 5.3              | 25 years  |
|                   |            | LVTP                                  | 100    | Domestic Coal      | 5.49             | 25 years  |
|                   |            | Anuppur Thermal Power                 | 200    | Domestic Coal      | 5.517            | 25 years  |

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| Bid type | State | Bidder                                    | MW  | Fuel Type          | Levelised Tariff | Period   |
|----------|-------|---|-----|--------------------|------------------|----------|
|          |       | Project                                   |     |                    |                  |          |
|          |       | KSK Mahanadi Power Project (Chhattisgarh) | 475 | Domestic Coal      | 5.572            | 25 years |
|          |       | Jindal Power Limited                      | 300 | Captive Coal Block | 6.038            | 25 years |
|          |       | LAPL                                      | 100 | Domestic Coal      | 7.11             | 25 years |

**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 Rs. 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<br>(6322<br>GAR) | Low CV<br>(3000<br>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               | Rs./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<br/>(At Generator Bus Bar)</b> | INR/kWh | <b>2.24</b>  |
| Quoted Energy Charges as per PPA for FY 13-14  | INR/kWh | 1.35         |
| <b>Per Unit Compensatory Tariff</b>  | INR/kWh | <b>0.89*</b> |
| Less: Likely share of Income from Merchant sale<br>above Normative Availability      | INR/kWh | 0.19         |
| Less: Expected profit from Indonesian Coal mining<br>(As per KPMG)                   | INR/kWh | 0.00         |
| <b>Likely net per unit Compensatory Tariff</b>                                       | INR/kWh | <b>0.71</b>  |

\*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.

#### **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 Rs. 0.61/unit and net compensation after adjustment of Share of Merchant Sales above Normative Availability for Contracted Capacity for PPA works out to Rs. 0.43/unit.

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**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 FGD           |
|------------------------------------|---------------------------------|--------------------|
| Station Heat Rate                  | kcal/unit                       | 2354               |
| Auxiliary Consumption              | %                               | 8.42%              |
| Transmission Loss                  | Gujarat Injection losses        | 1.57%              |
|                                    | Haryana Withdrawal losses       | 2.03%              |
|                                    | Total Losses as per CERC norms  | 3.60%              |
| Transmission Charges               | Gujarat Injection Charges       | Rs/MW/Month 94350  |
|                                    | Haryana Withdrawal Charges      | Rs/MW/Month 109350 |
|                                    | Total Charges as per CERC norms | Rs/MW/Month 203700 |
| 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<br/>(At Generator Bus Bar)</b> | <b>INR/kWh</b> | <b>2.31</b> |
|---|----------------|-------------|

|                      |  |         |      |
|----------------------|--|---------|------|
| 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> |
|---|----------------|-------------|

|   |         |       |
|---|---------|-------|
| Quoted Energy Charges as per PPA for FY 13-14 | INR/kWh | 2.145 |
|---|---------|-------|

|                                     |                |             |
|-------------------------------------|----------------|-------------|
| <b>Per Unit Compensatory Tariff</b> | <b>INR/kWh</b> | <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> | <b>INR/kWh</b> | <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.

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|   |         |      |
|---|---------|------|
| 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.

### **Annexure-V: Impact of Indonesian Regulations on Coal prices**

As a part of the Indonesian Government's efforts to stop transfer pricing abuses which have resulted in the loss of production royalties in recent years, government of Indonesia issued Regulation No.17 of 2010 entitled "Procedures to Determine the Benchmark Price for Mineral and Coal Sales". The Regulation provides that mineral and coal producers are obliged to sell minerals and coal based on a regulated benchmark price, whether for domestic or export sales. Determination of benchmark price Regulation provides that the benchmark price for minerals and coal will be determined by the Director General of Minerals and Coal (DGMC).

#### **Determination of Benchmark Price:**

The benchmark Coal price is expected to provide optimum price and help government in calculating potential State Revenue. The new regulations will also allow the Indonesian government to get the right amount of royalty and the taxable revenues from the sector will also move up to the correct levels. The benchmarking method will also stop the practice of transfer pricing of minerals at below market prices.

Different methods are being used to determine the benchmark price for different commodities. For coal, the DGMC determines separate benchmark prices for metallurgical coal, thermal coal and low rank coal monthly. No formal definition of low rank coal exists, however in the past; MEMR has referred to low rank coal as any coal with gross calorific value( ADB Basis i.e. Air Dry Basis) of less than 5100 kcal/kg. The benchmark price for thermal coal uses a formula that refers to the average coal prices based on local and international market indices. As a system government determines Coal Price Reference (Harga Batubara Acuan or HBA) by averaging the calorie value of coal in four coal price indexes, namely:

- Newcastle Export Coal Index (formerly known as the Barlow-Jonker index),
- Global Coal Newcastle Index,
- Platts Kalimantan
- Argus-Indonesia Coal Index (ICI)

The first two indices represent international price and the last two indexes represent local coal prices. Each coal category has a weight of 25%. The coal category is divided based on coal quality, which is set at 6322 kcal/kg (ARB i.e. As Received Basis), moisture content at 8% (ARB), sulphur content of 0.8% (ARB), and ash content at 15% (ARB).

After determining the Coal Price Reference (HBA), the benchmark coal price (HPB) is then determined. There will be 8 benchmark prices category, representing the quality of the coal, starting from 4200 up to 7000 kcal/kg.

For that price of coal other than 8 classes of HPB, prices are determined by interpolation approaches or determining HPB based on a certain formula.

Following is the chart of prices and an indication of trend of coal price index (HBA) for last 5 years:



Source: Declared by the Directorate of Mineral, Coal and Geothermal, Ministry of Energy and Mineral Resources, Republic of Indonesia, Coal Spot.com

It can be seen from above that the price level have come down from peak price of USD 123/ton in 2011 to around USD 85/ton now.

Following is the table describing benchmark pricing for basic coal brands in Indonesia taking HBA into consideration:

| Coal Band<br>(Basic Coal band) | GCV<br>(Gross<br>Received) | as | Total<br>Moisture<br>(Gross<br>as<br>received) | as | Total<br>Sulphur | Ash | May-<br>13(USD/ton) | June-13<br>(USD/ton) |
|--------------------------------|----------------------------|----|--|----|------------------|-----|---------------------|----------------------|
| Gunung Bayan I                 | 7,000                      |    | 10   |    | 1                | 15  | 91.13               | 91.13                |
| Prima Coal                     | 6,700                      |    | 12   |    | 0.6              | 5   | 91.30               | 90.83                |
| Pinang 6150                    | 6,200                      |    | 14.5   |    | 0.6              | 5.5 | 82.37               | 81.95                |
| Indominco IM East              | 5,700                      |    | 17.5   |    | 1.6              | 4.8 | 69.75               | 69.38                |
| Melawan Coal                   | 5,400                      |    | 22.5   |    | 0.4              | 5   | 67.00               | 66.67                |
| EnviroCoal                     | 5,000                      |    | 26   |    | 0.1              | 1.2 | 62.60               | 62.31                |
| Jorong J-1                     | 4,400                      |    | 32   |    | 0.3              | 4.2 | 50.44               | 50.20                |
| Eco Coal                       | 4,200                      |    | 35   |    | 0.2              | 3.9 | 45.98               | 45.76                |

Source: Declared by the Directorate of Mineral, Coal and Geothermal, Ministry of Energy and Mineral Resources, Republic of Indonesia, Coal Spot.com

#### Determination of Sale price

The benchmark price is set on the basis of the price paid for Coal at the point of Sale by way of FOB Vessel. Sales of coal can be made in the following manner:

- Free on Board (FOB) mother vessel or
- FOB barge basis.
- Sales can also be made to end users domestically or in the form of Cost Insurance Freight (CIF) or
- Cost and Freight (C&F).

For coal, sales are contemplated in the form of FOB mother vessel, FOB barge, within an island to an end user or on a CIF or CF basis. In calculating the sales price, holders of Production Operation IUPs for coal to be sold on FOB mother vessel must refer to the benchmark price. Again, for non-FOB mother vessel sales (including FOB barge sales), certain costs may be added or subtracted as approved by the DGMC.

Under the new sales price regime for coal, the production royalty for FOB mother vessel sales will effectively also be imposed on barge transportation and trans-shipment costs (as well as survey and insurance costs), which are not able to be subtracted from the selling price.

For sales in the barge, the reference price is reduced by barging and transshipment costs from barge to vessel. Government has recently issued a regulation (644.K/30/DJB/2013 dated 21<sup>st</sup> March 2013) to regulate or determine coal prices on FOB barge.

The coal price reference has been established to fulfill the requirement of mining law 04/2009 and ministerial decree No.17/2010. In addition to that, it aims to increase government revenue from royalties from coal producers.

***Benchmark Price for calculation of royalties:***

For coal sales made on FOB mother vessel basis, the Government will take the higher of the contractually-agreed price or the benchmark price for purpose of royalty calculation

For non-FOB mother vessel sales such as coal sales by way of FOB barge, the production royalties will be calculated using:

- the contracted sales price, if the contracted sales price is higher than the benchmark price, after adding or subtracting the adjustment amount (adjusted benchmark price); or
- the adjusted benchmark price, if the sales price is the same as or lower than the adjusted benchmark price.

***Exemptions from benchmark price:***

- Coal of certain types (including fine coal, reject coal and coal with certain impurities) for domestic use may be sold below the coal benchmark price, upon approval of the Government (DGMC).
- Coal to be used for certain purposes in the domestic market may be sold below the coal benchmark price, upon approval of the Govt.

The Indonesian Government will issue further regulations on the purposes that will be exempted. Regulation indicates that coal used for individual needs or for the development of underdeveloped or poorly developed regions will be exempted from the benchmark pricing requirements.

***Impact on existing coal contracts:***

All existing supply contracts (both Spot and term Contracts) with Indonesian mining firms will have to be brought in line with this new benchmark regulations by 22<sup>nd</sup> September 2011.

- Spot sale contracts must be adjusted by no later than six months after the effective date of Regulation No. 17 (that is, by 22<sup>nd</sup> March 2011).
- Term sales contracts must be adjusted by no later than 12 months after the effective date of Regulation No. 17 (that is, by 22<sup>nd</sup> September 2011).

# Appendix



Formation of a Committee in pursuance of Hon. CERC's Order dated 02.04.2013 in the matter of Petition No.155/MP/2012 filed by M/s.Adani Power Ltd and Hon. CERC's another order dated 15.04.2013 in the matter of Petition No.159/MP/2012 filed by M/s. Coastal Gujarat Power Ltd for obtaining recommendations of the Committee.

Govt of Gujarat  
G.R.No.APL-12-2013-280046-K  
Energy & Petrochemicals Department  
Sachivalaya, Gandhinagar.  
Dated the May 03, 2013.

Gujarat Urja Vikas Nigam Limited (GUVNL) signed a Power Purchase Agreement (PPA) with M/s.Adani Power Ltd. (APL) on 02.02.2007 for a contracted capacity of 1,000 MW of power at the levelised tariff of Rs.2.3495 per unit through the Competitive Bidding Process for purchase of power. Similarly, GUVNL also signed a PPA with M/s. Coastal Gujarat Power Ltd. (CGPL) on 22.04.2007, for supply of 1,805 MW of power, at a levelised tariff of Rs.2.26 per unit.

In view of the promulgation of Indonesian regulations about the pricing mechanism of coal and resultant financial implication of the same on the cost of generation of power, both the Developers i.e. M/s.APL and M/s.CGPL, filed Petitions, before the Hon. Central Electricity Regulatory Commission for evolving a mechanism regulating including changing and/ or revising tariff on account of frustration and/ or change in law events under the PPA.

Pursuant to the detailed hearings in the matter, Hon. CERC vide its order dated 02.04.2013 (M/s.APL) and another order dated 15.04.2013 (M/s.CGPL), have considered that Indonesian Regulations has financial implication on Generator, but it is not covered under the "Force Majeure" and "Change in Law" provisions of the PPA. However, Hon. CERC observed that in order to resolving the matter in a practical manner, "Compensatory Tariff" needs to be worked out by the Committee. Hon. CERC directed that the respective State Governments to constitute a Committee consisting of -

- (1) Principal Secretary (Power), Govt of Gujarat/ Managing Director of GUVNL
- (2) Principal Secretary (Power), Govt of Maharashtra/ Managing Director of Maharashtra State Electricity Distribution Company Ltd., Mumbai.
- (3) Principal Secretary (Power), Govt of Rajasthan/ MDs of Discoms, Jaipur/Ajmer/ Jodhpur, Rajasthan State.
- (4) Principal Secretary (Power), Govt of Punjab/ MD of Discom, Chandigarh.
- (5) Principal Secretary (Power), Govt of Haryana/ MDs of UHBVNL & DHBVNL, Haryana.

- (6) Chairman or his Nominee, M/s. Adani Power Ltd., Ahmedabad.
- (7) Nominee from M/s. Coastal Gujarat Power Ltd., Mundra, Dist.Kutch-Bhuj.
- (8) Independent Financial Analyst of repute
- (9) An Eminent Banker of the commensurate level.

Hon. CERC further directed that 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 both the Petitioners i.e. M/s.APL and M/s.CGPL, over and above the tariff in the PPAs.

As per the directives of Hon. CERC, the Committee so constituted has to submit its report to the Hon. CERC for consideration and for further directions.

The matter related to the directives of the Hon. CERC, in this regard, as mentioned above, was examined by a High level Committee. While considering the directives of the Hon. CERC, in this regard and also keeping in view the pros and cons of the Hon. CERC's directives, the Committee considered the present "Power Sector" scenario at national level and examining the overall public interest, the Committee unanimously viewed that for arriving at a conclusion, the following aspects need to be kept in view.

- (1) If the State Government / GUVNL doesn't accept the Hon. CERC directives and decide to file a Review Appeal before the Hon. CERC or file an Appeal before the Hon. Appellate Tribunal for Electricity, the final outcome will take a long time.
- (2) Meanwhile, there is all possibility that if the directives of Hon. CERC are not accepted then in that eventuality in view of non-viability, the Power Plants operated by M/s.APL and M/s.CGPL may become non-operational and ultimately be closed. In such an eventuality, and in that case even if GoG/ GUVNL can recover the penalty as per the clause of PPA for not providing power, the State Government/ GUVNL will have to go for Competitive Bidding for purchase of that much quantum of power, for ensuring uninterrupted supply of Power in the State.
- (3) The present installed capacity of the State is 18,270 MW out of which 4,172 MW is Gas based Generating Power Stations. Since the adequate Domestic Gas is not available, effectively the capacity remains idle. Thus, available capacity to meet the demand of the State, is almost 14,000 MW. Further, non-availability of power from both the Power Projects on imported Coal may lead to further reduction in the capacity by almost 2,805 MW. In that eventuality, in order to meet the continuous power supply to all the end consumers of the State, GUVNL will have to utilize Gas based Generating Capacity on spot RLNG

which is available at a price not less than US\$ 12 – 15 per MMBTU. The cost of generation of Power to run on for such RLNG would be in the range of Rs.7 – Rs.8/- unit. This will result into huge financial implication on the end consumers by way of payment of additional FPPPA or the State Government will have to provide that much subsidy to the Discoms.

- (4) It has been observed at the National level that there are some bottlenecks in availability of Domestic Coal Linkages / Coal from New Mines and allocation of New Coal Mines for Power Generation. Therefore, usage of Imported Coal will have to be increased. Hence, in order to ensure continuous supply of power to all the consumers in the State, the State Government/ GUVNL will have to generate power from Imported Coal based Power Stations. This will also lead to increase in cost of Power Generation.
- (5) The likely cost of generation of power from the upcoming Thermal Power Plants implemented by the State Government PSUs like GIPCL, BECL and GSECL would be in range of Rs.3.50 – to Rs.4.50 per unit.
- (6) If the State Government/ GUVNL do not accept the Hon. CERC's directives about forming a Committee for obtaining its recommendation for providing a Compensatory Tariff to the Power Developers for ensuing supply of power to the various segments across the State, GUVNL will have to invite fresh Competitive Bids, or the State's Gas based Power Plants will have to be run on costlier RLNG, as mentioned above. Further, the whole procedure for inviting fresh Competitive Bidding for tieing-up necessary power for the State may take a long time and the power to the State from the prospective Developers would be available only after 3 -4 years' time.
- (7) The order from Hon.CERC for forming a Committee to resolve the issue of mitigating hardships on account of Indonesian Coal Regulations and non-availability of Domestic Coal, is to be considered to maintain continuity in power supply to the consumers and to prevent power shortages.
- (8) Forming of a Committee for obtaining its suggestions about the "Compensatory Tariff" is not final, as based on the recommendation of such a Committee, Hon. CERC is to issue fresh and final directives and at that time, Government / GUVNL will have an option open to file an Appeal before the appropriate Authority i.e. Hon. Appellate Tribunal for Electricity.

Keeping in view the observations, as mentioned above, the High level Committee unanimously recommended to accept the directives of Hon. CERC and to go ahead with formation of a Committee, in pursuance of Hon. CERC's directives, subject to certain conditions.

The views of the High Level Committee, were carefully considered by the State Government and while deciding the matter, the State Government accorded utmost priority to ensure supply of power to the end consumers in the State,

### **RESOLUTION**

After careful consideration of the views of High Level committee, Govt is, therefore, pleased to resolve that in pursuance of Hon. CERC's directives, the Committee may be formed, subject to the following conditions, over and above the conditions outlined in the Hon.CERC's order. :-

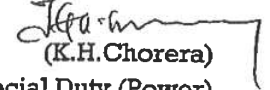
- (i) Managing Director, GUVNL would represent GoG/ GUVNL in the Committee.
- (ii) Participation in the Committee shall not bind GoG/ GUVNL to any finding/ recommendation of the Committee.
- (iii) GoG/ GUVNL will reserve its right to make an Appeal before the appropriate Authority i.e. Hon. Appellate Tribunal for Electricity, on the final order to be issued by Hon.CERC.
- (iv) GoG desires that the Committee will be chaired by Shri Deepak Parekh, Chairman, HDFC, or any other eminent Banker as per the consensus of the Committee.
- (v) Over and above, the Financial Analyst as suggested in Hon. CERC's directives, GUVNL may engage an Independent Analyst who may also analyze the entire aspects with facts and figures.
- (vi) Overall financial implication by way of providing "Compensatory Tariff" to the Power Developers shall have to be equally shared amongst the concerned. That is the Power Producers may curtail their Rate of Return, Financial Institutions/ Banks may be asked to waive the interest/ reduce the rate of interest to the maximum extent possible. GoI should reduce the Import Duty on Coal and other Taxes etc. In case of M/s.APL, since the Port Infrastructure is also owned by the same Group, Port Handling Charges in respect of Coal, may also be reduced by M/s.APL, so that implication of GoG/ GUVNL is minimized.
- (vii) The Committee may also suggest any other measure for overall reduction in the cost of Generation of Power.

Government has further decided that on behalf of GoG, Managing Director, Gujarat Urja Vikas Nigam Limited, shall act as a Nodal Officer, for the purpose, for both the Projects.

Notwithstanding any thing as contained in this GR, the State Govt/ GUVNL reserves its right to recourse to any further action, as deemed fit, at any point of time.

This issues with the concurrence of Finance Department vide its note dated 30.04.2013 in this Department's file of even number.

By order and in the name of Governor of Gujarat,

  
(K.H. Chorera)

Officer on Special Duty (Power)  
Energy & Petrochemicals Department

Copy forwarded with compliments to :

- (1) The Accountant General, O\O the A.G., Audit Bhavan, Ahmedabad/ Rajkot.
- (2) The Principal Secretary to H.E. the Governor of Gujarat, Raj Bhavan, Gandhinagar.
- (3) The Addl. Chief Secretary to Hon.CM, Hon.CMO, Sachivalaya, Gandhinagar.
- (4) The Secretary, Hon. Central Electricity Regulatory Commission, New Delhi.
- (5) The Secretary, Hon. Gujarat Electricity Regulatory Commission, Ahmedabad.
- (6) The PS to Hon.Minister (E&P), Sachivalaya, Gandhinagar.
- (7) The PS to Chief Secretary, O\O the C.S., Sachivalaya, Gandhinagar.
- (8) The Principal Secretary to Govt, Finance Department, Sachivalaya, Gandhinagar.
- (9) The Principal Secretary to Govt, Energy & Petrochemicals Dept, Sachivalaya, Gandhinagar.
- (10) The Principal Secretary (Power), Govt of Maharashtra, Mumbai.
- (11) The Principal Secretary (Power), Govt of Rajasthan, Mantralaya, Jaipur, Rajshthan.
- (12) The Principal Secretary (Power), Govt of Punjab, Secretariat, Chandigarh, Punjab.
- (13) The Principal Secretary to Govt (Power), State Secretariat, Chandigarh, Haryana.
- (14) The Managing Director of Maharashtra State Electricity Dist Company Ltd., Mumbai.
- (15) The Managing Director, Jaipur Vidyut Vidtran Nigam Ltd., Jaipur.
- (16) The Managing Director, Ajmer Vidyut Vidtran Nigam Ltd, Ajmer.
- (17) The Managing Director, Jodhpur Vidyut Vidtran Nigam Ltd. Jodhpur, Rajasthan.
- (18) The Managing Director, Gujarat Urja Vikas Nigam Limited, Vadodara.
- (19) The Managing Director, Uttar Haryana Bijli Vitran Nigam Ltd., Haryana.
- (20) The Managing Director, Dakshin Haryana Bijli Vitran Nigam Ltd., Haryana.
- (21) The Managing Director, Punjab State Power Corporation Ltd., Chandigarh, Punjab.
- (22) The Chairman, M/s.Adani Power Ltd., Ahmedabad.
- (23) The Managing Director, M/s.Coastal Gujarat Power Ltd., Mundra, Kutch-Bhuj.
- (24) The select file.

# Haryana Power Purchase Centre

(A Joint forum of UHBVNL & DHBVNL)  
2<sup>nd</sup> Floor, Shakti Bhawan, Sector-6, Panchkula-134108  
Fax: 0172-2586836, email: cehppc@gmail.com

From  
Chief Engineer  
HPPC, Panchkula

To  
The Secretary,  
CERC, New Delhi

Memo No: CE/HPPC/SE (C&R)/APL/SPL1

Dated: 08.05.2013

**Sub: Nominations on behalf of Haryana for the Committee in Adani Matter (155/MP/2012) and CGPL Matter (159/MP/2012) Vide Order Dated 2.4.2013 and 15.4.2013 respectively**

Refer CERC Order dated 2.4.2013 and 15.4.2013 in Adani and CGPL matter, it has been approved by 6<sup>th</sup> Cabinet Sub Committee on infrastructure of Haryana Government that Haryana will participate in the Committee ordered to be constituted by CERC without prejudice to rights and contentions of the Haryana Utilities on merits and further subject to the following conditions inter alia:

- Discoms will file a substantive appeal against CERC order before APTEL with the request that the proceedings in appeal be put on hold with liberty to either party to mention for hearing the appeal and with further liberty to Discoms to file an appeal against the CERC Order that may be passed pursuant to recommendations of the Committee.
- Power producer may curtail their rate of return.
- Financial Institutions/Banks may be asked to reduce the rate of interest to the maximum extent possible.
- GOI should reduce import duty on coal and other taxes etc.

The following members are hereby nominated for the same:

- I. Shri Ajit Mohan Sharan, IAS, Additional Chief Secretary (Power), Government of Haryana;
- II. Shri Devender Singh, IAS, Chairman and Managing Director, Discoms, Haryana

  
Chief Engineer  
HPPC, Panchkula

Cc:

1. M/s Adani Power Limited, Achar Raj, opposite Mayor Bungalow, Law Garden, Ahmedabad Gujarat- 380006, Fax: 079-25557176, 0172-4001623.
  2. Chairman & MD- Tata Power, M/s Costal Gujarat Power Limited, Bombay House, 24Homi Mody Street, Mumbai: 400001. Fax No: 022:66658877
  3. Principal Secretary to the Govt. of Gujarat, Energy & Petrochemicals Dept., Block No- 5, 5th Floor, New Sachivalay, Gandhinagar – 382010. Tele fax: (079) 23250771.
  4. SPS to ACS/Power for the kind information of ACS/Power, Govt of Haryana, please.
  5. SPS to CMD/Discoms for the kind information of CMD/Discoms. please.
-

**GUJARAT URJA VIKAS NIGAM LIMITED**

Managing Director

Raj Gopal IAS

No.GUVNL/COM/GM(Com)/23  
Date : 9<sup>th</sup> May 2013To  
As per the mailing list,**Sub: Meeting of the Committee pursuant to CERC's directive**

Sir/ Madam,

CERC vide their orders dated 02.04.2013 (Petition No – 155/MP/2012 - Adani Power Ltd.) & 15.04.2013 (Petition No – 159/MP/2012 - Coastal Gujarat Power Ltd) directed the Petitioners, Respondents and the respective State Governments to constitute a Committee.

In this regard, a meeting has been scheduled at the office of Shri. Deepak Parekh, Chairman, HDFC

The details of the meeting are as under:

Venue: Ramon House, 169, Backbay Reclamation, H T Parekh Marg,  
Churchgate, Mumbai - 40020Date: 11<sup>th</sup> May, 2013, Saturday

Time: 10:00 A.M

Kindly make it convenient to attend the said meeting.

Yours faithfully,

(Raj Gopal IAS)  
Managing Director

022 22160379

## Forwarded to:

1. Shri Deepak Parekh, Chairman, HDFC, Ramon House, 169, Backbay Reclamation, H T Parekh Marg, Churchgate, Mumbai - 40020 Fax: 022 22852336 →
2. The Secretary, Central Electricity Regulatory Commission, New Delhi, Fax: 011-23753920
3. The Principal Secretary, Energy & Petrochemicals Dept. Sachivalaya, Gandhinagar Fax 079 23250797
4. The Principal Secretary (Power), Govt. of Maharashtra, Mantralaya, Mumbai Fax: 022-26478672,
5. The Principal Secretary (Power), Govt. of Rajasthan, Mantralaya, Jaipur, Rajasthan, Fax: 0141 2227699 →
6. The Principal Secretary (Power), Govt. of Punjab, Secretariat, Chandigarh, Punjab, Fax: 0172-2748036
7. The Principal Secretary (Power), State Secretariat, Chandigarh, Haryana Fax: 0712 2727661, 23341518
8. The Managing Director, Maharashtra State Electricity Distribution Company Ltd, 5th Floor, Prakashgad, Bandhra (E), Mumbai - 400 051, Fax: 022-26580645 →
9. The Managing Director, Jaipur Vidyut Vitran Nigam Ltd, Jaipur, Vidhyut Bhavan, Janpath, Jaipur - 302005 (Rajasthan) Fax: 0141-2747015 →
10. The Managing Director, Jodhpur Vidyut Vitran Nigam Ltd, Jodhpur, New Power House, Industrial Area, Jodhpur - 342003, Rajasthan, Fax: 0291 - 2741870
11. The Managing Director, Uttar Haryana Bijli Vitran Nigam Ltd, Haryana, Shakti Sadan, Sector 6, Panchkula, Fax: 0172 - 3019100 →
12. The Managing Director, Dakshin Haryana Bijli Vitran Nigam Ltd, Haryana Fax: 0172 - 3019100 →
13. The Managing Director, Punjab State Power Corporation Ltd, The Mall, Patiala, Punjab - 147 001, Fax: 0175-2213199
14. The Managing Director, Ajmer Vidhyut Vitran Nigam Ltd, Hathi Bhata, City Power House Road, Ajmer - 305001, Rajasthan, Fax: 0145-2630636
15. Smt. Arundhati Bhattacharya, Managing Director & CEO, State Bank of India Capital Market Ltd, 202, Maker Tower "E", Cuffe Parade, Mumbai - 400 005, Fax No 022 2218 8332
16. The Chairman, Adani Power Ltd, Ahmedabad, Fax : 079 25557177
17. The Chairman, Coastal Gujarat Power Ltd & Managing Director, Tata Power Ltd. Fax 022 66658877 →



Ra. Gopal IAS

GUJARAT URJA VIKAS NIGAM LIMITED



Managing Director

No. MD/LS  
Dated. 20.05.2013

To  
Shri Deepak Parekh  
Chairman  
HDFC Bank  
Ramon House 169, Backbay Reclamation  
H/T Parekh Marg Churchgate  
MUMBAI 400 020

Fax: +91 (22) 22048834

**Sub: Comments/ Views of Government of Gujarat & GUVNL on  
Compensatory Tariff to CGPL and APL**

Sir

This has reference to the Committee's meeting held on 11.5.2013 at Ramon House, Mumbai pursuant to CERC's orders concerning CGPL and APL regarding compensatory tariff.

On behalf of the Government of Gujarat and GUVNL and without prejudice to the legal rights for challenging the outcome of the Committee Report or CERC's Order in Appellate Tribunal or Appellate Order I herewith submit the following at this stage which may kindly be placed on record for consideration of the committee

1. The committee is expected to deliberate only on the impact of the Indonesian notification on coal price. Escalation of capital expenditure and fixed cost because of forex rate fluctuations or otherwise is not part of the CERC's order and hence does not lie within the ambit of this committee.
2. The hardship for both the companies (generators) in supplying power as per the PPA rates has arisen apparently because of their inability in ensuring supply of coal at affordable rates as the notification of the Indonesian Government reportedly pushed the price of coal to unexpectedly high levels. The crux of the matter is making coal available at affordable rates. This is an extraordinary situation directly impacting two states, Haryana and Gujarat in case of APL and five states viz

Manarashtra, Gujarat, Rajasthan, Punjab and Haryana in case of CGPI. First and foremost, all options for ensuring affordable coal supply should be considered. This unprecedented and unexpected situation warrants special measures.

As the first option, the Committee should strongly recommend to the Ministry of Coal through the Ministry of Power, Government of India, to immediately allocate to both the companies domestic coal mines/ blocks of adequate reserves with a tapering linkage for 3-4 years, pending long term allocation of mines or coal linkage. The generators may arrange for washing this coal to meet the design specification/parameters of their plants.

3. Compensatory tariff should be taken only as a second option

- (i) As spelt out in the GoG, GR No. APL-12-2013-280046-K paragraph (vi), the burden of the compensatory tariff shall have to be equally shared by all the stakeholders concerned, whereby it is expected that power producer curtails the rate of return, financial institution /banks waive/reduce the interest, and the Govt reduces import duty and other taxes on coal, and Adani Ports should reduce port and handling charges. Any formula for working out a compensatory tariff shall have to capture this stipulation.
- (ii) The investment of the generators in the coal mining companies should be transferred to the power project companies and all returns of coal mining business should be adjusted in the tariff.
- (iii) The compensatory tariff thus arrived should be declared as a cap and in order to discover competitive tariff afresh with full transparency and equity the Ministry of Power should invite bids to obtain rates within the limits of the caps and should allow for substitution of the extant generator with any other eligible party, quoting the lowest hike in the tariff, to take over the assets of the companies and to continue to supply power to the contracted procurers. This process will be akin to following the Swiss Challenge methodology.
- (iv) In case the competitive bidding does not materialize, then at the end of the term of the PPA i.e. after 25 years, the generator should pay back the compensatory tariff paid by the procurers along with its carrying cost or else transfer the power project to procurers without any residual value in good condition. During the 25 years the generators should bear the responsibility for sourcing affordable imported coal within

the permissible price caps from various coal exporting countries

4. As a third option, the procurers may supply coal to the generators for the contracted capacity based on OEM guaranteed Station Heat Rate. The procurers shall only pay O&M cost to the generators as per CERC norms and service the debt component after the reduction in the rate of interest by the financial institutions

Yours faithfully



Raj Gopal

Forwarded to:

1. The Principal Secretary (Power), Govt. of Maharashtra, Mantralaya, Mumbai Fax: 022-26478672.
2. The Principal Secretary (Power), Govt. of Rajasthan Mantralaya, Jaipur Rajasthan Fax 0141 2227699
3. The Principal Secretary (Power), Govt. of Punjab Secretariat, Chandigarh, Punjab Fax: 0172-2748036
4. The Addl. Chief Secretary (Power), State Secretariat, Chandigarh, Haryana Fax: 0712 2727661, 23341518
5. The Managing Director, Maharashtra State Electricity Distribution Company Ltd, 5th Floor, Prakashgad, Bandhra (E), Mumbai - 400 051, Fax:022-26580645 Email: md@mahadiscom.in
6. The Managing Director, Jaipur Vidyut Vitran Nigam Ltd, Jaipur, Vidhyut Bhavan, Janpath Jaipur - 302005 (Rajasthan) Fax:0141-2747015 Email: cmd@jvvn.in
7. The Managing Director, Jodhpur Vidyut Vitran Nigam Ltd, Jodhpur, New Power House Industrial Area, Jodhpur - 342003, Rajasthan, Fax: 0291 - 2741870 Email: cmd\_jdvvn@yahoo.com
8. The Managing Director, Uttar Haryana Bijli Vitran Nigam Ltd, Haryana, Shakti Sadan Sector 6, Panchkula Fax: 0172 - 3019100 Email: cmduhdh@gmail.com
9. The Managing Director, Dakshin Haryana Bijli Vitran Nigam Ltd, Haryana Fax: 0172 - 3019100



## GUJARAT URJA VIKAS NIGAM LIMITED



Raj Gopal IAS

Managing Director

No.GUVNL/COM/GM(Com)/42  
Date :

To  
Shri Deepak Parekh  
Chairman  
HDFC Bank  
Ramon House, 169, Backbay Reclamation  
H T Parekh Marg, Churchgate  
MUMBAI 400 020.

Fax: +91 (22) 22048834

**Sub: Comments/ Views of Government of Gujarat & GUVNL on Draft report on Compensatory Tariff to M/s CGPL.**

Sir

This has reference to the e-mail dated 29<sup>th</sup> July 2013 from Vice President Project Advisory & Structured Finance, SBI Capital Markets Limited, forwarding draft report on Compensatory Tariff to M/s CGPL.

Without prejudice to the legal rights for challenging the outcome of the Committee Report or CERC's Order in Appellate Tribunal or Appellate Order, I herewith submit the following comments on the draft report to be placed on record for consideration of the committee:

1. *Para 1.3 - Summary of the CERC Order –*

The contentions of CGPL as well as procurers are narrated concerning 'Force Majeure' and 'Change in Law' under para 1.3.1 & 1.3.2. However, the procurer's contention regarding the regulatory power of the CERC under para 1.3.3 is not mentioned and needs to be included.

2. *Para 3 – Committee Proceedings –*

In the first Minutes of meeting dated 11.05.2013 at the para-2 it is mentioned that " ..... It was decided to appoint M/s KPMG for carrying out accounting and due diligence of Indonesian coal mines of APL." This typographic error needs to be corrected as CGPL instead of APL.

3. *Para 4.1 Compensatory Tariff*

The CERC's Order dated 15.04.2013 is very specific that the committee shall work out tariff compensation package to remove the hardships on account of promulgation of Indonesian Regulation. The technical parameters and assumptions as on bid date is stated at Para 7.3 Annexure – 3. However, the committee has proposed tariff compensation based on technical parameters suggested by the technical consultant that deviate from the technical parameters / assumptions as of the bid date. Further, it is to mention that CGPL cannot pass on any burden to the procurers on account of the subsequent changes in parameters. Moreover, it is to mention that the coal price worked out at Para 4.3 i.e. 29.15 USD / Tonne in place of original assumption at time of bid i.e. 34.90 USD / Tonne is on account of subsequent change in parameters. This input in the compensatory tariff is not relevant considering that CERC's recommendation for the blending of inferior coal to reduce cost of generation is not considered by the committee stating that by doing so, it would lead to increase in the cost of generation.

4. *Para 4.8 – Evaluation of the options –*

The fuel consumption has to be worked only for the actual units scheduled and not for the normative units for working out the Gross Compensatory Tariff.

5. *Para 4.9 – Illustrative calculation of compensatory tariff –*

The transportation loss of coal at item no. 7 is considered as 0.80 % whereas in the remark at item no. 12, it is mentioned that transportation loss is likely to be much lower, hence for calculation purpose it has been assumed as 0.20 %. It needs to be verified and confirmed that the compensatory tariff has been calculated considering the transportation loss of coal as 0.20%.

6. *Para 4.10 – Process for recovery of compensatory tariff and past losses –*

In the draft report it is mentioned that the procurer shall pay the differential cost between provisional claim and claim after true up. It is pertinent to mention that the procurers schedule the power under Merit Order protocol wherein decision is taken based on available data. In case of increase in the cost of power during true up exercise, it will lead to wrong decision by the procurer whereby the procurer would have lost the opportunity to schedule cheaper power. Therefore, the provisional tariff shall be the ceiling for trueup. Moreover, it is also relevant that the trueup should be

with reference to the FOB imported coal price and not with the other parameters, otherwise it may be possible that the inefficiency on account of other parameters may be passed on to the procurers. For the losses during past period, it is to mention that the compensatory tariff may be considered from prospective date only and not from retrospective date as it will put a huge financial burden on Distribution companies and even lead to a situation where Distribution companies may not be in a position to either recover the past dues and may find it difficult to pay the future regular bills also.

7. *Para 5.1 – Profit from Promoter's share holding in Indonesia mines –*

The draft report proposes profit from Indonesian mines to be equivalent to coal utilized by CGPL and that also equivalent to 30% equity share holding. It is pertinent to mention that M/s TATA group owns 30% equity in Indonesian mines which allows 30% equivalent right over the coal output (Production).

As per the CERC's order, net profit less Govt. taxes and cess from the coal mines in Indonesia on account of benchmark price due to Indonesian Regulation corresponding to the quantum of coal being supplied to Mundra UMPP should be factored in full to pass on the same to the beneficiaries in the compensatory tariff.

Therefore, it is necessary that entire profit on quantum of coal supplied to CGPL needs to be passed on to the beneficiaries as part of compensatory tariff and not limited to 30%. Moreover, CGPL / group company of TATA has to take the risk of increase in cost of mining etc., therefore the profit should be calculated with reference to the base price considered for bidding and price notified by Indonesian government from time to time after adjustment of applicable taxes and duties.

8. *Para 5.1.2 – Permitting sale for availability beyond 80% -*

The incentive is payable if the availability is declared in excess of 85%. In case CGPL is not declaring any availability to procurers above 80%, it has no right to claim any incentive from procurers as otherwise procurers are paying entire fixed cost on 80% availability. Further, in case CGPL is given consent by procurer to sell power to any third party, the sale proceeds in excess of energy charges have to be shared equally with the procurers. Moreover, CGPL shall not offer power to any third party below the rate at which power is offered to procurers including capacity charges at generator bus bar.

9. *Para 5.1.3 – Blending with lower GCV Coal*

As per the report, it is mentioned that presently the blending is not beneficial; however the indicative price shall also be worked out at which the blending becomes beneficial.

10. *Para 5.2.2 – Bank & Financial Institutions – (Waiver/reduction of interest)*

It is mentioned that the committee unanimously agreed that the foreign loans were contracted at fine rates and there was limited scope of reduction from this level. In this regard, GoG / GUVNL is of the view that bank shall also equally contribute towards mitigating hardships of the project by further reduction of interest rates. Moreover, the support from banks and financial institutions is required to improve the viability of the project which would improve the rating of the project.

11. *Para 5.2.4 – Fixing a ceiling for Gross Compensatory Tariff –*

It is very difficult to put a ceiling based on competitiveness of power procured from CGPL as it differs for each procurement and the dynamics changes with addition of new generation into the system of respective procurers. Further, it is also difficult to link it with historical coal price trend as it may lead to increase in imported coal price. Moreover, linking the tariff based on the quotes received in recent bids is also not correct as the terms and conditions of these bids would be different and it may not reflect the proper market conditions because of the hyped up issue of non availability of domestic coal and also because these projects are scheduled to be commissioned after 5 – 6 years. Therefore, the ceiling should be limited to a certain percentage of the compensatory tariff.

12. *Para 5.3.2 – Other hardships faced by CGPL –*

It is mentioned in the draft report that CGPL in its petition before CERC has represented that the RFP documents proposed for CDM benefit for the project and accordingly CDM benefit to the tune of Rs. 200 Crores per annum was envisaged but it was not actually available. In this regard it is to mention that RFP document has given an option to bidder either to consider or not to consider the CDM benefit while quoting the tariff. However, the bidder cannot raise any issue in this regard at this stage.

13. It should also be mentioned in the report explicitly that even though the report has been prepared in consultation with all stake holders, the report does not take away their right to make submissions in the matter before the CERC / any other legal forum.

**Email sent by Mr. Amit Dewan (UHBVNL) dated 30<sup>th</sup> July 2013**

**Compensatory Tariff in the case of M/s Adani Power**

The draft calculations have been received and as per which a **compensatory tariff of 61 paise per unit has been proposed**. The comments on the same are as under :

**1. Rate of Imported Coal**

The draft report considers the FOB price of imported coal as USD 78.76 per MT and the landed price of USD 99.41 per MT. **The utilities propose that the lowest rate for procurement of similar quality coal by the various Central Sector Generating Companies (CPSUs) like NTPC and the State Sector Generating Companies like HPGCL Haryana, further limited by the CERC indices, should be considered in the calculations.**

The HPGCL has recently invited tenders for imported coal and the landed rate of coal as per this tender comes to **89.17 USD per MT** (Annexure 1) i.e. 11 USD less than the rate taken in the draft report. **The impact of 11 USD per MT in the calculations of compensatory tariff made by the SBI Caps is about 14 paise per unit.**

**2. GCV of Domestic Coal**

As per the calculations, **M/s Adani Power 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 (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 can not 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. **The impact of this difference in GCV of coal is about 7 paise per unit**

**3. Transmission Charges**

The dedicated transmission line of M/s Adani Power from Mundra to Haryana has been granted the Inter State Transmission System (ISTS) status because of which it was expected that the State would get a benefit of 15 – 20 paise per unit in the transmission charges. However in the calculations the transmission charges have been taken as 45 paise instead of 48 paise indicated earlier. Thus only 3 paise benefit has been granted. **Thus further benefit of 15 paise per unit needs to be passed by the developer granted to Haryana.**

**4. Retrospective Claim of Compensatory Tariff**

In the draft report the loss to the M/s Adani Power from the date of SCOD to 31<sup>st</sup> March 2013 has been assessed at Rs. 496 crores in the case of Haryana and that is proposed to be compensated. **However the utilities submit that the compensatory tariff should be applicable on prospective basis from the date of acceptance of compensatory tariff by the State Government.**

**5. Foreign Exchange Rate Variation (FERV)**

Para No. 89 of the CERC order mentions “.....*Compensatory tariff over and above the tariff decided under the PPAs to mitigate the hard ship arising out of absence of full domestic coal linkage and the need to import coal at benchmark price on account of Indonesian Regulations.*” Thus clearly the CERC order does not intend to factor in the change in the variation of foreign exchange in the compensatory tariff calculations. The scope of compensatory tariff is limited to insufficient domestic coal availability and change in imported coal prices due to Indonesian Regulations. As such the depreciation in the Indian rupee against US dollar can not be passed on to the procurers. The price of a US dollar has increased by about 40% i.e. from Rs. 45 to Rs. 60 (from the time of bid to now) and **in case we discount this increase from the compensatory tariff calculations, there is further saving of about 33 paise per unit.**

6. The matter of sharing of revenue from additional sale has also to be deliberated as the entire benefit from additional sale should be passed on to the procurers. The generators should also be obliged to generate to the full capacity.

7. The Station Heat Rate has been mentioned by the APL as 2150 in a petition in the CERC whereas in the calculations the SHR has been taken as 2354. This has huge impact and should be taken as 2150 as contended by the APL in GERC.