

**THE TATA POWER COMPANY LIMITED****Commodity Price Risk Management Policy****Objective and Scope of the Policy**

This Risk Management Policy establishes guidelines for The Tata Power Company Limited (hereinafter referred to as "Company") to manage its risks associated with commodity imports (presently only Coal) from international markets. This policy describes how the Company defines, measures and mitigates its exposures and assigns responsibilities for managing Company's risk management program.

Company's Risk function identifies potential risks and suggests mitigation. In line with the overall objective of the Company, it is necessary to identify its material exposures based on commodity imports from international markets and to manage those exposures with appropriate derivative instruments. The objective of this policy is to ensure protection from risk arising out of adverse and volatile movement in commodity prices by proper monitoring of the exposures and taking timely actions to keep risks to acceptable levels.

Hence the prime objective of hedging activity is protection and risk limitation and not Profit making.

The Commodity Price Risk Management (CPRM) Policy covers the following,

- A. Commodity Price Exposure
- B. Authorized Commodity Product, Underlying Index, Volume, Tenure, Instruments
- C. Risk Management Organizational Structure
- D. Delegation of Authority
- E. Guidelines for Reporting, Review and Control
- F. General Guidelines
- G. List of approved Brokers & Bankers

**A. Commodity Price Exposure**

- 1) The Company has setup 6,534 MW coal based thermal power generation capacities at various location's. Out of 6,534 MW coal based capacity, 5,356 MW is owned and operated by its subsidiaries for which commodity price risk would be managed by the commodity risk management committees of respective companies. The remaining 1,178 MW comprises of 750 MW (Unit 5 and Unit 8) located at Trombay and 428 MW located at Jojobera. Being a coastal power plant, Trombay (750 MW) requires ~ 2.5 MMT of International Coal (Adaro 4800 - 5000 Kcal/Kg GAR) per annum to meet its current power purchase obligations. The Company is sourcing its requirement of coal for Trombay at Indonesian HBA linked floating price. The Jojobera plant (428 MW) requires ~ 2.2 MMT of Domestic coal (3600 - 3800 Kcal/Kg GAR) per annum to meet its current power purchase obligations.
- 2) On the revenue side, the Company has already entered in to Power Purchase Agreement (PPA) with State utilities for both Trombay and Jojobera where in the coal price would be recovered from the tariff based on actual cost. The tenure of PPA for Trombay is about to expire in 2018 post which it is uncertain if the PPA would be based on a variable tariff with certain cap on escalation or a variable tariff which allows for recovery of full fuel cost (without any cap) based on actual prices.
- 3) Primary objective of the Commodity Price Risk Management Policy would be to minimize the risk of coal price volatility on the cost of generation to protect the prospective procurers from tariff shock caused by such volatility and to minimize risk of coal price volatility on the Company finances especially related to Trombay coal requirement.
- 4) The liquidity in coal market is lower as compared to forex and other commodities due to which the hedging instruments with longer tenure are scarcely available and also priced steeply. In such a scenario, it would be better to restrict the tenure of hedging instruments to 3 years.
- 5) Any commodity hedging shall be carried out only after verifying
  - (i) That there is an exposure which impacts the company finances and / or the cost of generation
  - (ii) The exposure shall be computed and presented in a pre-agreed format to the Commodity Price Risk Management Committee (defined Sec C.2).

- (iii) That appropriate approvals from respective Electricity Regulatory Commissions are in place for hedging of coal for the capacity tied up under regulatory mechanism with distribution utilities.

**B. Authorized Commodity Product, Underlying Index, Volume, Tenure, Instruments**

- 1) Thermal Coal - Underlying Index: Australian (Newcastle), South African (API4) and Indonesian (Sub-bituminous) contracts shall be accepted for purpose of derivative transactions considering trading liquidity across the forward curve and their correlation to the HBA linked Coal price from Indonesia. Commodity Risk Management Committee (as defined in Section C.2) will have ability to induct any other contracts proven to have the necessary liquidity and correlation to HBA index.
- 2) Hedge Volume: To be decided by Commodity Risk Management Committee (defined Section C.2).
- 3) Hedge Tenure: Company to hedge for a maximum period of three years.
- 4) Instruments: The products that can be entered by the Company are
  - (i) Commodity Forward, Futures and Swap transactions
  - (ii) Commodity Option transactions including both buying and/or selling of commodity options transactions and combination thereof including Cost Reduction Structures
  - (iii) Any other commodity derivatives, as approved by Committee. In any case, use of "proprietary" or "structured" products is prohibited.

**C. Commodity Risk Management Organization Structure**

- 1) The Board of Directors of the Company is the owner of this policy. No changes can be made herein without the consent of the Board of Directors.
- 2) The Company will have a Commodity Risk Management Committee (CRMC) composed of :
  - (i) COO & Executive Director, Tata Power
  - (ii) Chief Financial Officer, Tata Power
  - (iii) Financial Controller, Tata Power
  - (iv) Chief – Corporate Treasury, Tata Power
  - (v) Head – Coal Procurement Group, Tata Power

The Business / Station heads and respective Chief Financial Officer will be included in invitees for all CRMC meetings. Head - Coal Procurement Group will act as a convener for the CRMC meetings.

- 3) The CRMC will have following authority/responsibility and oversight with respect to management of the Company's Commodity exposure,
  - (i) constant monitoring of commodity price exposures
  - (ii) implementation and monitoring of adherence to CPRM policy
  - (iii) strategy for hedging in relation to volume, tenure and choice of the hedging instruments
  - (iv) approval/ratification of any deviations in transactions vis-a-vis the policy
  - (v) establishing MIS, documentation and internal control mechanisms
  - (vi) selection of Counter parties
  - (vii) To appoint consultants to help the committee to validate the policy and processes
  - (viii) approval and recommendation to Board for modification of Company's CPRM Policy
- 4) Authority and responsibility of CFO - Mumbai Operations,
  - (i) Approval for commodity transactions jointly with COO & Executive Director, Tata Power.
  - (ii) Ensure reporting of outstanding positions and limits to CRMC including MTM of transactions
  - (iii) Provide requisite Certification to Counterparties ensuring them (a) a guideline for conducting the transactions (b) institutionalized the arrangements for a periodical review of operations and (c) annual audit of transactions to verify compliance with the regulations are in place.
- 5) Activities of Front Office (*Coal Procurement Group and Corporate Treasury*)
  - (i) Execution of Commodity hedging transactions in compliance with Risk Management Policy
  - (ii) Generation of reports on commodity transactions reporting to CRMC
  - (iii) Evaluate hedging strategies for presentation in the Commodity Risk Management Committee meetings

- (iv) Providing appropriate information to Back office for recording of Commodity Hedging Transactions in the books of the company
- 6) Activities of Back Office (*CFO - Mumbai Operations*)
  - (i) Verification of all commodity hedging transactions with the counterparty independently once confirmation of deals comes from Front office
  - (ii) Recording Commodity Hedging Transactions in books of Tata Power, maintained by CFO - Mumbai Operations
  - (iii) Settlement of commodity derivative transactions through commodity hedging account
  - (iv) Receipt and cross-checking of counterparties' monthly statement of trades and MTM
  - (v) Certification for commodity derivative transactions annually by statutory auditor as prescribed under RBI regulations amended from time to time
  - (vi) Providing Standard Settlement Instructions of counterparties

**D. Authorised Person / Delegation of Authority:**

A committee constituting of COO & Executive Director, Tata Power; Chief Financial Officer, Tata Power and Chief - Corporate Treasury, Tata Power are authorised, based on the recommendation of the commodity risk management committee, to approve the additions/deletions of the banks as hedge providers, and any change in the authorised signatories for carrying out the derivative transactions to hedge coal price exposure.

**E. Guidelines for Reporting, Accounting, Review and Control**

- 1) The Company shall follow General Accounting Policies & Principles as per Indian Accounting Standards; deviations while accounting for Derivative transactions in its books of accounts, if any, need to be approved by its Board.
- 2) CRMC would be presented with hedging status of all exposures on a quarterly basis by CFO - Mumbai Operations
- 3) CRMC would provide stop-loss levels while approving the hedging proposals.
- 4) MIS and Reporting to the Audit Committee, Board, RMC

At end of each quarter, MIS will be prepared and reported to Audit Committee of the Board showing:

- (i) The Hedging status, hedging effectiveness & Commodity exposures as at end of the quarter.
- (ii) Any specific variations / deviations from the approved policy.
- (iii) Current views/strategy being considered by CRMC in dealing with the exposures.
- 5) Internal Audit of Commodity Hedging transactions shall be included in the scope of the Internal Audit Program approved by the Audit Committee of the Board.
- 6) The "Commodity Price Risk Management Policy" shall be reviewed as may be required to ensure that it remains consistent with the overall objectives of the Company. The Policy may be reviewed and updated if market conditions dictate subject to and approval by the Audit Committee / Board, however, it shall be reviewed atleast once in every three years.

**F. General Guidelines:**

- 1) All transactions will be carried out in accordance with the Reserve Bank of India Bank Regulations, International Swap and Derivatives Association, Inc. ("ISDA") Master Agreement, Schedules to the Master Agreement, Credit Support Annex and confirmation. (Collectively, the "ISDA Agreement") and any other applicable statutes.
- 2) All risks arising from derivatives exposures should be analyzed and documented at transaction level prior to entering into each deal.
- 3) The Company shall engage with reputed counterparties who have sufficient commodities market standing and creditworthiness. All counterparties shall submit the following for purpose of approval by CRMC
  - Brief Profile of counterparty including strengths in commodity markets
  - External Credit Rating
  - Risk Management infrastructure
  - Name and contact details of dealing personnel
  - Name and contact details of Back Office
- 4) All transactions shall be confirmed in form of an enforceable written Contract.
- 5) All transactions shall be governed by Law as applicable to the country of Execution or as may be mutually agreed.

**G. List of Approved Brokers / Bankers / Exchanges**

- (i) Societe Generale
- (ii) BNP Paribas
- (iii) Standard Chartered Bank
- (iv) Macquarie Bank
- (v) Mitsubishi Corporation
- (vi) Barclays Bank PLC
- (vii) Deutsche Bank AG
- (viii) Bank of America
- (ix) Goldman Sachs
- (x) Citi Bank
- (xi) J P Morgan
- (xii) The Hongkong and Shanghai Banking Corporation Limited
- (xiii) Engie Global Markets (GDF Suez Energy)
- (xiv) EDF Trading
- (xv) E.ON Energy Trading
- (xvi) Chicago Mercantile Exchange
- (xvii) Inter-Continental Exchange
- (xviii) SGX