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I. INTRODUCTION

Energy Efficiency Services Limited (EESL), a Joint Venture of NTPC Limited, PFC, REC and POWERGRID was set up in 2009, to facilitate implementation of energy efficiency projects.

EESL clients are mainly Government agencies both at the centre and the state. These include Distribution companies as well as local municipal bodies apart from other government departments / institutions such as Railways and PSUs. The business models are Capex spend by EESL, Trading and Consultancy. In the case of Capex model, EESL deploys capital and recovers in the form of annuity from the clients over a period of time, during which EESL may maintain the assets built (as in case of Street Lights). EESL also has a branch office in London. Further, EESL has a subsidiary in the UK with further step down subsidiaries in the UK/Ireland. In addition, EESL is also looking for business overseas. However, as of now there are no imports directly by the company for any of its business verticals.

Being a relatively new organization with large upfront deployment of funds, EESL seeks low cost funds from various agencies. The Green space in which EESL operates is attractive to the global multilateral lending agencies such as the World Bank, ADB, AFD, KfW etc. The loans from these sources provide long tenor funds. The borrowings are a mix of Fixed and Floating coupons and in both US Dollar and Euro. As on 31st March 2019, the total Borrowings of EESL were Rs. 3495 Crores of which Rs. 1289 crores i.e. 37% were in foreign currency comprising of US$ 118 Million and Euro 61 Million. The sanctioned loan from offshore sources is US$ 200 Million and Euro 300 Million as on date. Loans of US$ 500 Million from ADB is in the process of getting finalised, increasing the Foreign exchange exposure.

Thus while the revenues of the company are almost completely in Indian Rupees, a major portion of financing is in Foreign Currency exposing the company to foreign currency and interest rate fluctuation risk on both capital and current account.

Regulatory Guidelines:

There are no regulatory guidelines as in the case of Power Sector regarding managing foreign currency risk. Any gain or loss is to be completely absorbed by the company itself. The company is however, bound by all the Comprehensive Guidelines on Derivatives issued by the Reserve Bank of India as amended from time to time. These guidelines specify the broad principles for undertaking derivative transactions, instruments permitted to be used and the suitability and appropriateness of the policies to be followed by Authorised Banks in derivatives transactions with the customers. Additionally, the provisions of Foreign Exchange Management Act (FEMA) and other RBI & Government notifications are also applicable to such transactions.

As per the Comprehensive Guidelines, issued on April 20, 2007 (as amended upto November 2, 2011para 8.3.5 (k) and RBI/FMRD/2016-17/31 FMRD Master Direction No. 1/2016-17

“Banks are required to obtain Board Resolution from the corporate which wants to deal in structured derivative products, that states the following:
i. The corporate has in place a Risk Management Policy approved by its Board which contains the following:

- Guidelines on risk identification, measurement and control
- Guidelines and procedures to be followed with respect to revaluation and monitoring of positions
- Designation of officials authorized to undertake transactions and limits per transaction assigned to them and a requirement that the assignment of limits to an official would be on per transaction basis
- Accounting policy and disclosure norms to be followed in respect of derivative transactions
- A requirement to disclose the MTM valuations appropriately
- A requirement to ensure separation of duties between front, middle and back office
- Mechanism regarding reporting of data to the Board including financial position of transaction etc

ii. The corporate has laid down clear guidelines for conducting the transactions and institutionalised the arrangements for a periodical review of operations and annual audit of transactions to verify compliance with the regulations.”

Therefore this policy, incorporating the requisite provisions based on the Comprehensive Guidelines, is being formulated to achieve the following objectives:

1. To reduce the exchange/ interest variation/ fluctuation risk.
2. To keep the total debt servicing cost of foreign currency loans in rupee terms comparable to the cost of servicing rupee debt.
3. To ascertain the INR value of the committed foreign currency payments/receivables with optimal hedging strategy.
4. To ensure hedging in a planned manner within this Policy Framework.
5. Setup Mechanisms to ensure there is no deviation from the implemented policy framework.
II. RISK RECOGNITION

EESL is exposed to the followings risks on its foreign exchange borrowings and trade related flows. Risk shall be recognized separately for Capital and Current account transactions:

- **Capital Account Transactions:**
  - Currency conversion risk on un-hedged amounts as on the date of repayment of principal and on interest payment dates.
  - Interest rate risk on floating rate borrowings.
  - INR MIFOR volatility impact on hedging cost of open positions.
  - Long tenor of forex borrowing and limitation to enter into INR swaps/derivatives beyond 10 years due to absence of vibrant liquid market for the same
  - Reinstatement of hedging cost on account of roll over where derivative hedge is undertaken for partial tenor of underlying loan.
  - Currency conversion risk on unhedged inward and outward remittances on account of project based import/export of goods & services of capital nature.

- **Current Account Transactions**
  - Currency conversion risk on unhedged inward and outward remittances on account of project based import and export of goods & services of revenue nature. This shall also include payable and receivable due beyond a period of 1 year, based on the nature of the transactions.
III. RISK INVOLVED IN DERIVATIVE TRANSACTIONS

The risks while undertaking a derivative transaction and the ways to manage these risks are summarized below:

i. **Credit Risk**: Credit risk is managed by fixing counterparty limits if required, depending upon the frequency and size of transaction in relation to credit worthiness of counterparty and ensuring that transactions are within the counterparty limits.

ii. **Market Risk**: This risk is managed by monitoring the Marked to Market value of the derivative deals and taking any corrective action if required.

iii. **Legal Risk**: This risk is managed by following appropriate and accurate documentation.

The policy accepts that hedging is reducing risk and not at reducing costs or increasing income. Accordingly, appropriateness of a hedging decision is to be judged on the basis of conformance to the risk management policy and not by actual cost saving compared to unhedged exposure.
EESL may use any or a combination of the following derivative products that are permitted by the Reserve Bank of India to hedge the risks through foreign currency derivatives:

- **Foreign Currency-INR Derivatives:**
  - (i) Foreign Currency Forwards
    - Illustration: Company X has an outward payment 3 months later. Current USDINR spot rate is Rs.65/$ and hedging premium is Re.0.75 for 3 months. The company decides to book a forward contract with its bank to lock the exchange rate at Rs.65.75/$. Hence 3 months later the payment will be converted at the rate of Rs.65.75/$, irrespective of the prevailing exchange rate.
  - (ii) Foreign Currency-INR Swaps including but not limited to POS and COS
    - Company may choose to hedge only exchange rate risk on interest payments and principle repayments by way of principle only swap and/or hedge interest rate by moving from floating coupon to fixed coupon or vice versa by way of Coupon only swap and/or hedge both coupon and payments by way of full currency swap. Based on discounting factors derived from Zero coupon curve, future cash flows are ascertained and accordingly the pricing is calculated.
  - (iii) Foreign Currency-INR Options including but not limited to Cost Reduction Structures
    - Illustration: Company X has an outstanding borrowing of USD 1 Million. The company to reduce its exchange risk on every repayment decides to hedge the payments with a call option (Right to buy) with a strike price of Rs.65/$. Company pays an option premium for this right. Hence at every due date, payment shall be converted at the rate Rs.65/ irrespective of prevailing exchange rate.

- **Cross Currency Derivatives:**
  - **Interest Rate Swaps/Coupon Swaps:** An agreement between two parties (known as counterparties) where one stream of future interest payments is exchanged for another currency (other than INR), based on a specified principal amount. Interest rate swaps often exchange a fixed payment for a floating payment that is linked to an interest rate (most often the LIBOR). A company will typically use interest rate swaps to limit or manage exposure to fluctuations in interest rates, or to obtain a marginally lower interest rate than it would have been able to get without the swap.
- **Cross Currency Swap:** An agreement between two parties to exchange interest payments and principal on loans denominated in two different currencies. In a cross currency swap, a loan's interest payments and principal in one currency would be exchanged for an equally valued loan and interest payments in a different currency.

- **Cross Currency Option including but not limited to Cost Reduction Structures:** A currency option is a contract where the purchaser of the option has the right but not the obligation to either purchase (call option) or sell (put option) and the seller (or writer) of the option agrees to sell (call option) or purchase (put option) an agreed amount of a specified currency at a price agreed in advance and denominated in another currency (known as the strike price) on a specified date (European option) or by an agreed date (American option) in the future.

- **Interest Rate Cap or Collar:** An interest rate cap is an interest rate option in which payments are made when the reference rate exceeds the strike rate. Analogously, an interest rate floor is an interest rate option in which payments are made when the reference rate falls below the strike rate.

- **Forward Rate Agreement (FRA):** A Forward Rate Agreement is a financial contract between two parties to exchange interest payments for a “notional principal” amount on a settlement date, for a specified period from start date to maturity date. Accordingly, on the settlement date, cash payments based on contract (fixed) and the settlement rate are made by the parties to one another. The settlement rate is the agreed bench-mark/ reference rate prevailing on the settlement date.
V. PERMISSIBLE BENCHMARKS

EESL shall follow permitted benchmarks (both in FCY and INR) as prescribed by RBI from time to time. At present it may follow any of the benchmarks mentioned below for deal purposes as per Reuters, Bloomberg or any other standard acceptable information provider:

i. Exchange rate (like RBI Reference Rate)

ii. INR Forward Premiums

iii. Mumbai Interbank Forward Rate (MIFOR)

iv. International benchmarks like London Interbank Offered Rate (LIBOR): Respective LIBOR of borrowed currency.

v. Interest Rate Swap (IRS): Respective IRS rates of borrowed currency.
VI. RISK MANAGEMENT & HEDGING STRATEGY

EESL is exposed to foreign currency fluctuation risk on both current and capital account transactions. In addition to long term foreign currency borrowings, EESL may also have payments and receivables on account of project based imports and exports respectively.

Hence the risk management strategy shall be separate for current and capital account transactions.

The broad guidelines which shall be applicable to both set of transactions which are as follows:

i. EESL’s derivative policy for Foreign Exchange Risk Management shall be restricted to hedging the exchange and interest risks of the underlying foreign exchange assets & liabilities.

ii. The hedging transactions will be undertaken with approved counterparties only. There will be Board approved limits for each counterparty.

iii. No ‘Stand Alone’ transactions will be initiated. If a hedge becomes naked in part or full owing to shrinking of the portfolio, it may be discontinued at first instance, if such difference is of permanent nature.

iv. The notional principal amount of the derivative should not exceed the outstanding amount of the underlying loan.

v. The maturity of the derivative should not exceed the remaining maturity of the underlying loan.

vi. Responsibilities of transaction, follow-up, reporting, monitoring and management roles are to be defined through clear functional demarcations.

vii. The policy will be updated in a timely manner to comply with requirements of the Reserve Bank of India in this regard.

viii. EESL shall enter into derivative transactions with a counterparty with which it has signed the ISDA Master Agreement. Counterparty limits can be set by linking MTM of outstanding derivative transactions with the Net Worth of the counterparty (at group level) as on the Balance Sheet date.
PART I- CURRENT ACCOUNT

EESL has exposure to foreign exchange fluctuation risk on account of its foreign currency trade receivable and payable. Company takes up overseas energy efficiency projects, which garner revenues in foreign currency. It may also import raw material and finished products. At present, the imports and exports are intermittent depending on project requirement. Hence the company may not have a recurring inflow and outflow on account of these transactions.

Current Account shall also encompass exposures of revenue nature and due over a period of more than one year. For example: Company bags an export contract whose revenue stream is spread over next 3 years, with scheduled monthly inflows. In such case revenue due over the entire 3 years shall be part of current account hedging and not just amount due within 12 months.

Similar will be the case for imports, payable of revenue nature due over 1 year shall form part of current account transactions.

Such exposures shall be hedged as and when they arise. The time frame of export receivables and import payables may be different; therefore, these transactions may not be netted off for hedging purposes. The forward hedging mechanism shall work on “Gross Basis”. This means that inflows and outflows shall be hedged separately. However, the policy allows the management to park its export proceeds (to the extent of unhedged export receivables) in EEFC to pay-off any near term liability. The hedging mechanism for Part I shall be as follows:

i. **Benchmarking:** This is a concept to set the target rate for hedging of receivable and payable. This helps to take hedging decisions in a logical and methodical manner. Benchmarks for exports and imports shall be as follows:

   - **Exports:** The benchmark rate for foreign currency revenues shall be RBI reference rate on the date of award of the contract. Since there might be a time gap between submission of bids and award of the tender, it is prudent to monitor risk from the date of award of tender.

   - **Imports:** Since the imports are based on International Competitive Bidding process, the exchange rate risk is generally borne by the bidder. Hence for benchmarking purposes, imports to that extent shall be excluded from the purview of risk management. Imports *where exchange fluctuation risk is borne by EESL* shall be benchmarked at the prevailing RBI reference rate on the day of Bid Acceptance.

   - In both cases the Benchmark rate will include the Forward Premium upto the maturity of the underlying contract. This is important as this shall be the Zero Risk Hedging rate. It is the rate at which exposure would have been hedged at the time of inception of risk without taking any market risk.

   - Benchmark rate for each contract shall be documented by the treasury for reference purposes. This is helpful at the time of hedging as separate benchmarks will help in selecting which contract can be hedged as per prevailing hedging rates.
ii. Amount and Tenor:

- **Amount:** Since export receivables are of non-recurring nature and also of limited quantum, the amount to be hedged shall be decided based on the tenor of the underlying exposure and is at the discretion of the risk management committee.

- **Tenor:** Tenor of hedge shall be at the discretion of the committee. Depending on the underlying exposure’s tenor, committee may choose to hedge complete or partial tenor.

iii. Cancellation and Re-Booking: RBI allows canceling and re-booking forward contracts on confirmed underlying exposures. The contracts may be cancelled/rolled-over in case the tenor of the underlying exposure gets extended and/or it becomes invalid.

iv. Monitoring of Exposures: Exchange risk on Export receivable and Import payable shall be monitored on a regular basis to hedge at optimum levels with respect to respective benchmark. Amount to be hedged, as mentioned in point (ii) shall be at the discretion of the risk management committee. Committee may choose to keep the exposures open incase prevailing hedging rates are in favor compared to benchmark rates. In such scenario exposures shall be monitored and reviewed on a regular basis based on market analysis.

In case a derivative contract runs a negative Marked to market value post execution, committee can review the prevailing market scenario and may choose to Unwind the derivative contract subject to RBI regulations of "Cancellation and Rebooking of Derivative” contracts as per RBI circularRBI/FMRD/2016-17/31 FMRD Master Direction No. 1/2016-17

v. Pricing of Hedging Instrument: To ensure competitive pricing of hedging instruments, the Company will obtain indicative prices from approved counterparties or pricing systems such as Reuters and/or Bloomberg which provide pricing data.

vi. Reporting: An MIS shall be maintained to record all the transactions for reporting purposes. MIS shall contain the following details:

- Confirmed Inflows
- Confirmed Outflows
- Derivative Contracts
- Net Inflow/Outflow
- Mark to Market of Unhedged Positions
- Mark to Market of Outstanding Forwards
PART II- CAPITAL ACCOUNT

To reduce the project finance costs, EESL has availed overseas funding to finance the implementation of the outstanding projects. The company has availed loans from multilateral agencies from Europe and Asia to enjoy low cost borrowing.

While the company benefits from low finance cost, it also gets exposed to market risk on account of both foreign currency and Libor fluctuation risk. With door-to-door maturity ranging from 7 years to 20 years, the sensitivity on cash flows is further enhanced due to uncertainty on account of long tenor.

The basic objective of hedging is to reduce the exchange/ interest fluctuation risk and try to keep the total debt servicing cost of foreign currency loans, comparable to the cost of servicing a rupee debt. Therefore, it is prudent to hedge outstanding loans, for which the hedging guidance is laid down as follows:

i. **Benchmarking:** This process is important to ascertain the effective cost of the loan and thereby establishing a target rate to reduce the risk of wide fluctuations in interest yields on the overall cost of borrowing. With an effective benchmark, company can take hedging decisions in a guided manner.

   Benchmark for hedging the loan term foreign currency borrowing shall be:

   - **All Inclusive Hedging Cost:** The foreign currency loans shall be benchmarked at the prevailing all inclusive cost of loan on a fully hedged basis for a tenor of 5 years, at the time of draw down of the loan. The benchmark shall include the hedging premium and bank margins. For example: EESL draws down a loan to on 1st Jan. Coupon rate of the loan including Libor is 4% and the swap cost for 5yrs is 4%. So, all inclusive cost is 8% pa. Hence this installment will be benchmarked at 8% pa. At the end of 5 years, the benchmark will be revised, on the basis of prevailing hedging cost for next 5 years.

   Benchmark rate for every loan shall be documented separately. This is useful as drawdown dates may be different and the hedging cost at the time of each drawdown may have moved upwards or downwards. Hence from hedging perspective each line of credit needs to be looked at separately.

ii. **Hedging Amount and Tenor:**

   - **Amount:** The foreign currency borrowings of company have a long tenor and are therefore vulnerable to large revaluation gains/losses. This may also have an adverse effect on Net Worth of the company. Therefore, it is imperative to keep an appropriate mechanism to minimize the adverse impact on net worth and profitability of the company on account of foreign exchange and interest rate variations.

   Initially for the period of 1 year from the date of approval of this policy, Forex Risk Management Committee (FRMC) shall decide the hedging amount and
tenure. As EESL has significant open exposure and therefore stipulating any minimum limit may lead to liquidity crunch or significant increase in borrowing cost at this point of time. The same will be review by EESL board after of one year and on or before 30.09.2020.

For this purpose, Risk Management Committee may refer to point (iii.): Monitoring Mechanism in this section for analyzing and monitoring the risk and exposure.

- **Tenor**: It shall be based on the underlying loan which is being hedged. Hedging will be limited for a period up to 10 years from the date of the hedge, or the balance life of the loan, whichever is earlier. The reason for limiting hedging to 10 years is that, at present, there is very little liquidity in the INR currency swap market for maturities in excess of 10 years and the Company may not get firm/competitive quotes. However, the tenor to be hedged shall be at the discretion of the risk management committee. Committee may choose to hedge for a shorter duration as well depending on the cost of hedging and foreign currency and interest rate market outlook.

- **Instruments**: Committee may choose any of the RBI permitted hedging instrument or to use a combination of hedging instruments depending on the costing and market outlook, as mentioned at Point IV. For example, incase of an adverse interest rate cycle, committee may hedge coupon by way COS but hedge principal by way of forward contracts.
  The committee may also choose to hedge only partial risk. For example, it may be decided on undertaking only Coupon Swap on the underlying loan as exchange rate scenario might seem stable.

  - **Partial Hedging Implications**: The partial tenor swaps will continue to be exposed to MIFOR risk at the time of settlement. E.g. In the case of a full swap (currency plus coupon), the exchange rate and interest rate risk will be hedged during the entire tenor of swap. On maturity, the partial tenor swap will be cash settled based on the prevailing market rates and a new swap will be entered into for the residual period. In this process, there will be no exchange rate implication due to cancellation and re-booking at the same reference rate, but the hedging cost for residual tenor will be applicable as per the prevailing market rates.

### iii. Monitoring Mechanism

Monitoring of long term borrowing is important as risk is spread over a longer tenor and opportunity to hedge may arise anytime during that period. Hence for this purpose company may choose any of the two tools mentioned below:

a. **Internal Rate of Return (IRR) Approach**: This method not only highlights risk of overshooting the interest cost but also the savings earned by keeping the exposures unhedged. It provides the effective cost of loan since inception by factoring the past
payments at extant rates and future payments to be incurred at the hedging rate. This helps to assess the savings incurred by keeping the loan unhedged. For example: A loan was drawn in 2014 for a period of 10 years and kept unhedged. Remaining tenor for the loan is another 7 years and benchmark for this loan was set at 8% pa. Now, the current hedging cost is around 8.5%pa. Hence committee may choose to keep the loan unhedged as it isn’t within the benchmark rate. However, IRR value comes at 7%, which factors in the hedging premium saved over the period of 3 years, exchange rate at which instalments were paid and hedging cost of future cash-flows. Hence this shows that company has already saved 1% from the benchmark by keeping it unhedged and can initiate the hedging now.

Based on this parameter, risk committee may decide to hedge the loans or maintain status quo. During committee meetings, IRR for each line of credit may be evaluated. Based on this analysis committee may choose to hedge its outstanding borrowings as per the following table:

<table>
<thead>
<tr>
<th>Positive movement with respect to benchmark</th>
<th>Negative movement with respect to benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Movement in IRR</td>
<td>% Movement in IRR</td>
</tr>
<tr>
<td>% Movement in IRR</td>
<td>Cumulative % to hedge of total outstanding exposure</td>
</tr>
<tr>
<td>2%</td>
<td>30%</td>
</tr>
<tr>
<td>4%</td>
<td>65%</td>
</tr>
<tr>
<td>6%</td>
<td>100%</td>
</tr>
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</table>

b. **Net Worth Linked Stop Loss**: The other tool to track the unhedged positions can be the exchange rate loss on revaluation of loans as a percentage of net worth. In case the negative exchange loss on revaluation breaches 20% of the last reported Net Worth, the committee will meet and analyse the market situation to assess if any hedging needs to be done on urgent basis.

The risk monitoring mechanism as mentioned in point a & b above are meant to act as a guidance to FRMC to take any hedging decision if required.

iv. **MTM reporting**:

- Hedged Positions - MTM of outstanding derivative deals to be reported to the Board of Directors/Forex Risk Management Committee on a quarterly basis.

- Un-hedged borrowings:
  - Cost of fully hedging the borrowings to be reported to Forex Risk Management Committee on monthly basis
  - MTM with respect to benchmark to be reported to Forex Risk Management Committee on a monthly basis and to the Board of Directors on a quarterly basis.
v. **Pricing of Hedging Instrument**: To ensure competitive pricing of hedging instruments, the Company will obtain indicative prices from approved counterparties or pricing systems such as Reuters and/or Bloomberg which provide pricing data.

vi. **Formal Documentation**: The Company shall ensure that hedge documentation is in place and duly approved by the Forex Risk Management Committee. The documentation shall include the following:

a) Objective of the hedge and the strategy for accomplishing the objective.

b) Nature of the risk being hedged

c) Derivative hedging instrument

d) Hedged item

e) Compliance with this policy and RBI norms.
VII. EXCHANGE RISK MANAGEMENT FRAMEWORK

A Two tier framework for Exchange Risk Management would be put in place:

1. Forex Risk Management Committee
2. Treasury Section
   a. Dealing Section (Front Office)
   b. Monitoring & Support Section (Back office)

1. FOREX RISK MANAGEMENT COMMITTEE

A Forex Risk Management Committee shall be constituted as a Sub-Committee of below board, comprising of the following members:

- Managing Director
- Director (Finance)/Chief Finance Officer
- Four Executive of Addl. General Manager & Above level

QUORUM: The quorum of the Committee shall be one member from Managing Director/ Director (Finance)/Chief Finance Officer and two member from Executive of Addl. General Manager & above level.

a. The Committee shall meet at least once in a quarter to assess the long term market outlook and hedging strategy. The roles and responsibilities of the FRMC shall be:
   - Review and recommend to Board of Directors for approval of the Forex Risk Management Policy and any changes therein
   b. Review the exceptions, if any, to the net open position limit
   c. Authorize the suitable official to decide:
      i. Person/s who can sign the ISDA and similar agreements
      ii. Person/s authorized to take foreign currency transactions
      iii. Counterparty forex limits
      iv. Change in the portfolio loss limit
   d. Ensure that adequate resources are available to treasury in terms of manpower, technology etc.
   e. Guide the treasury in decisions about currencies and risks to be hedged, hedging strategy.
   f. Review risk management operations once in a quarter.
   g. Recommend changes in open position limit.
   h. Approve any new product/instrument to be used by treasury

2. Treasury Section: The Treasury team is responsible for the overall performance of the treasury operations. It will be responsible for achieving the benchmark rates, and is authorized to take necessary actions within the parameters laid down by FRMC. Timely
flow of dealing activities from front office to back office, and flow of exposure MIS from back office to management is a crucial element of risk management. An overview of the front office and back office functions is given below:

a. **Dealing Section (Front Office):**
   i. Formulation and execution of hedging strategies based on guidelines given by FRMC.
   ii. Undertake all hedging functions.
   iii. Achievement of benchmark rates within the set limits on open positions
   iv. Execution of trades whenever any stop loss or take profit is reached.
   v. Track regulatory changes and updates.

b. **Monitoring & Support Section (Back Office):**
   i. Ensure compliance with the policy requirement. Any exceptions to the policy will be reported to the FRMC immediately.
   ii. Prepare MIS reports and circulate them appropriately.
   iii. Responsible for independent confirmation, marking-to-market, hedge documentation and settlement of deals with counterparties of the deals executed by the front office.
   iv. Act as link between the Front Office and the respective departments/units for follow up on exposures.

The back office functions needs to be performed separately and independently of the front office.
VIII. AUTHORIZED REPRESENTATIVE

Front Office Representative

An officer/s not below the rank of Senior Manager (Finance) shall be designated as the “Authorized Representative/s” and approved by the FRMC to

a) Enter into Permitted Derivative Transactions either in writing or verbally (whether over the telephone or otherwise);

b) Amend, terminate and cancel any such Transactions (as mentioned above): sign, transact and deal with the Authorized Dealer/s and Banks on behalf of the Company.

c) Convene the meeting of FRMC, as and when required.

All transactions and deals must be approved by the Director (Finance)/Chief Finance Officer.

Bank Office Representative

Further, an officer/s not below the rank of Addl. General Manager (Finance) shall be designated as the “Authorized Representative/s” and approved by the FRMC to

a) Negotiate, enter into or sign for and on behalf of the Company, the ISDA (International Swaps & Derivatives Association Inc.) Master Agreement, any amendment thereto, agreements and any and all documentation in connection with the ISDA Master Agreement including for the purposes of providing collateral and any other agreement(s) including the Security Documents, Credit Support Document, lien, deeds, papers and all other ancillary documents thereunder on behalf of the Company and no further internal approval will be required from the Company to enter into such agreements/documents with the Bank and any other agreement incidental thereto;

b) Sign and execute any contract/confirmation/amendment/termination/cancellation (as mentioned above) from time to time entered into between the Company and the Bank;

c) Provide certificate or any other document or information sought by the Bank and to take all further steps or action which the Company may have to do for availing or entering into any derivative transaction offered by the Bank;

d) And to file all compliance reports, returns and any other documents with the Reserve Bank of India or any other statutory/regulatory Authority as may be required from time to time.

e) Receive intimation/information/periodical Marked to Market (MTM) reports, etc.

The FRMC shall assign responsibilities to the officers in such a way that there is clear separation and identification of duties.
IX. AUTHORITY TO UNDERTAKE/ TERMINATE DERIVATIVE TRANSACTIONS

The following is the derivative transaction undertaking authority structure

<table>
<thead>
<tr>
<th>Notional Principal of the Derivative per transaction</th>
<th>To be approved by</th>
<th>To be reported to</th>
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<tbody>
<tr>
<td>Up to &amp; including USD 50 Million</td>
<td>Director (Finance)/Chief Finance Officer</td>
<td>Managing Director</td>
</tr>
<tr>
<td>Above USD 50 Million</td>
<td>Managing Director</td>
<td>Risk Management Committee</td>
</tr>
</tbody>
</table>
**X. VALUATION OF DERIVATIVES**

Valuation of the derivative contracts outstanding are to be made on a quarterly basis and reported to the Board of Directors/Forex Risk Management Committee. Valuation may be called for on a more frequent basis by Board of Directors/Forex Risk Management Committee for close monitoring of the outstanding derivative contracts.

The Company may obtain the valuation from one of the following parties:

i. Counterparty with whom derivative structure has been undertaken

ii. Two other AD Category-1 Banks

iii. Pricing systems such as Reuters and/or Bloomberg which provide pricing data.

There is a possibility that Unwinding value and Marked to Market value may be marginally different at the time of termination of a contract before maturity due to lack of liquidity in long term pricing.
XI. ACCOUNTING & AUDIT

The accounting policy and disclosure norms adopted in relation to transactions for foreign exchange management shall be guided by the relevant mandatory Accounting Standards. Accounting for the effects of changes in foreign exchange rates and hedging costs for all hedging instruments shall be treated in accordance with the IND Accounting Standards as mentioned below:

- IND AS 21: The Effects of Changes in Foreign Exchange Rates
- IND AS 23: Borrowing Costs
- IND AS 109: Financial Instruments

Internal Audit:
Internal Audit of all foreign exchange transactions and open positions shall be conducted on a half-yearly basis. The audit shall include verification of confirmation by the counterparty in case of entering into/unwinding or termination of any derivative transaction. Further the auditor shall verify any exchange or settlement of interest/principle along with confirmation from the counterparty.
ANNEXURE I

Following is the list of Outstanding Sanctioned loans

<table>
<thead>
<tr>
<th>Lender</th>
<th>Currency</th>
<th>Amount</th>
<th>Maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td>KFW, Germany</td>
<td>EUR</td>
<td>50,000,000</td>
<td>Jun 2026</td>
</tr>
<tr>
<td>AFD, France</td>
<td>EUR</td>
<td>50,000,000</td>
<td>Apr 2030</td>
</tr>
<tr>
<td>ADB</td>
<td>USD</td>
<td>200,000,000</td>
<td>Sep 2036</td>
</tr>
<tr>
<td>KFW (II), Germany</td>
<td>EUR</td>
<td>200,000,000</td>
<td>Dec 2028</td>
</tr>
<tr>
<td>IBRD</td>
<td>USD</td>
<td>220,000,000</td>
<td>Nov 2036</td>
</tr>
</tbody>
</table>
ANNEXURE II

A. Brief definitions of key terms/phrases used in the Policy

i. Counterparty

Counterparty is the other party that participates in a financial transaction. Every transaction must have counterparty in order for the transaction to go through. More specifically, every buyer of an asset must be paired up with a seller that is willing to sell and vice versa. In the context of this policy, it would mean the counterparty bank with which company has signed the ISDA for entering into derivative contracts.

ii. Derivative & derivative contracts

It’s a contract whose price is derived from one or more underlying assets. The derivative itself is merely a contract between two or more parties. Its value is determined by fluctuations in the underlying asset. The most common underlying assets include stocks, bonds, commodities, currencies, interest rates and market indexes. Most derivatives are characterized by high leverage. Futures contracts, forward contracts, options and swaps are the most common types of derivatives.

iii. LIBOR

London Interbank Offered Rate. It is an interest rate at which banks can borrow funds, in marketable size, from other banks in the London interbank market. The LIBOR is fixed on a daily basis by the British Bankers' Association. The LIBOR is derived from a filtered average of the world's most creditworthy banks' interbank deposit rates for larger loans with maturities between overnight and one full year.

iv. MIFOR

Mumbai Interbank Forward Offer Rate. It is a rate that Indian banks and other derivative market participants used as a benchmark for setting prices on forward rate agreements and interest rate derivatives. MIFOR was a mix of the London Interbank Offer Rate (LIBOR) and a forward premium derived from Indian Forex markets.

v. AD Category-1 Banks

The dealers authorized by Reserve Bank of India
vi. **Marked to Market (MTM)**

It is the current value of an asset or liability or any financial instrument on the most current market parameters. It is calculated on mid level of Bid/Ask price of the market quoted benchmark used to arrive at MTM value.

vii. **Benchmarking**

A standard against which the performance/cost/returns of a specific security/instrument can be measured. In the context of this policy, it would mean the approved benchmark against which all hedging decisions shall be taken.

viii. **Unwinding**

This means closing out the current outstanding positions. In the context of this policy, it would mean cancelling the derivative contracts on cash basis, at the prevailing market rates.

ix. **ISDA Master Agreement**

A standard agreement used in over-the-counter derivatives transactions. The ISDA Master Agreement, published by the International Swaps and Derivatives Association (ISDA), is a document that outlines the terms applied to a derivatives transaction between two parties. Once the two parties agree to the standard terms, they do not have to renegotiate each time a new transaction is entered into.

x. **Re-instatement**

This is relevant for hedging contracts which cover only partial tenor of underlying exposure. Eg. INR derivatives are quoted only upto 10 years. Company may enter into 10 year swap contracts for full value of FX loan maturing in more than 10 years. On completion of 10th year, the swap contract for the unpaid value of loan will have to be cancelled at the prevailing market rates and new swap contract for residual period and value of loan shall be entered into. Since both cancellation and new contract will be done on common spot reference, there will be no exchange rate implication but the hedging cost will change for new contract depending upon the MIFOR levels prevailing on that date. This process is called Re-instatement or Roll over of derivative contracts.
B. Definitions of permissible derivative instruments under this policy:

i. **Interest Rate Swap / Coupon Swap**
   An agreement between two parties (known as counterparties) where one stream of future interest payments is exchanged for another based on a specified principal amount. Interest rate swaps often exchange a fixed payment for a floating payment that is linked to an interest rate (most often the LIBOR). A company will typically use interest rate swaps to limit or manage exposure to fluctuations in interest rates, or to obtain a marginally lower interest rate than it would have been able to get without the swap.

ii. **Cross Currency Swap**
   An agreement between two parties to exchange interest payments and principal on loans denominated in two different currencies. In a cross currency swap, a loan's interest payments and principal in one currency would be exchanged for an equally valued loan and interest payments in a different currency.

iii. **Currency Option**
    A currency option is a contract where the purchaser of the option has the right but not the obligation to either purchase (call option) or sell (put option) and the seller (or writer) of the option agrees to sell (call option) or purchase (put option) an agreed amount of a specified currency at a price agreed in advance and denominated in another currency (known as the strike price) on a specified date (European option) or by an agreed date (American option) in the future.

iv. **Interest Rate Caps and Floors (Purchase)**
    An interest rate cap is an interest rate option in which payments are made when the reference rate exceeds the strike rate. Analogously, an interest rate floor is an interest rate option in which payments are made when the reference rate falls below the strike rate.

v. **Forward Rate Agreement (FRA)**
    A Forward Rate Agreement is a financial contract between two parties to exchange interest payments for a “notional principal” amount on a settlement date, for a specified period from start date to maturity date. Accordingly, on the settlement date, cash payments based on contract (fixed) and the settlement rate are made by the parties to one another. The settlement rate is the agreed bench-mark/ reference rate prevailing on the settlement date.
vi. **Principal only Swap (POS)**

A **Principal only Swap** for hedging purpose would typically entail a corporate moving from principal amount one currency into another currency. A Principal only Swap for hedging purpose could be done if the corporate wants to insulate itself from any currency fluctuation on the principal repayment front.

For Instance, a corporate has a foreign currency loan with a bullet repayment after 5 years. With a view to protect itself from any currency fluctuations on the principal front, it could enter into a POS wherein corporate would receive the foreign currency loan amount. In return, corporate would pay an equivalent amount in the local currency, i.e. INR. By entering into a POS transaction, corporate effectively has converted the liability from a foreign currency to the local unit, by paying or receiving the swap points (cost of swap).

vii. **Forward Contracts**

A foreign exchange forward is an over-the-counter contract under which a purchaser agrees to buy from the seller, and the seller agrees to sell to the purchaser, a specified amount of a specified currency on a specified date in the future - beyond the spot settlement date - at a known price denominated in another currency (known as the forward price) that is specified at the time the contract is entered into.