

ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION  
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Expensive Power Supply Scheme

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Proceedings No. APERC/Secy/ 22 /2012-13

Dated: 03-01-2013.

Read the following:

1. CGM (Comml)/SE(C)/ DE(C) /ADE(C)/D.No. 3028/12 Dated 22-12-2012.
2. CGM (Comml)/SE(C)/ DE(C) /ADE(C)/D.No. 2789/12 Dated 01-12-2012.
3. Proceedings No. APERC/Secy/ 16 /2012-13 Dated 01-11-2012.
4. Proceedings No. APERC/Secy/ 18 /2012-13 Dated 24-11-2012.
5. Proceedings No. APERC/Secy/ 19 /2012-13 Dated 19-12-2012.
6. Proceedings No. APERC/Secy/ 20 /2012-13 Dated 22-12-2012.
7. Proceedings No. APERC/Secy/ 21 /2012-13 Dated 24-12-2012.
8. Tariff Order FY 2012-13.

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The APCPDCL on behalf of all the four DISCOMs submitted a proposal vide letter cited in reference (1) and (2), seeking approval for supply of expensive power to willing consumers over and above the Permitted Demand Limit (PDL) and the Permitted Consumption Limit (PCL) specified in the R&C Order dated 01-11-2012. The purchase of power by DISCOMs under this scheme and supply of such power will be outside the scope of the Tariff Order and is for making available alternate expensive power supply over and above the PDL upto CMD of respective consumers.

2. The Commission has examined the proposals of the DISCOMs in detail. Considering the acute power shortage in the State and to mitigate the power shortage problems to the extent possible, the Commission decided to consult the consumers and stake holders. The Commission uploaded a draft "Expensive Power Supply Scheme (EPSS)" on 24-12-2012 in their website to elicit comments /suggestions by 31-12-2012 from interested consumers/stakeholders.

3. The Commission also conducted a meeting on 02-01-2013, with APPCC, DISCOMs and FAPCCI and discussed about the comments/suggestions made by stakeholders. Considering the comments/suggestions, the Commission has decided to accord approval for the "Expensive Power Supply Scheme (EPSS)".



4. Accordingly, further to the Restriction and Control Measures order letter dated 02-11-2012, the Commission hereby accords approval for an “Expensive Power Supply Scheme (EPSS)” based on procurement of expensive power using RLNG from state IPPs as indicated hereunder.

**5. EXPENSIVE POWER SUPPLY SCHEME (EPSS)**

**1). SALIENT FEATURES OF THE SCHEME:**

- a. The Expensive power will be supplied to consumers who opt to avail power under “Expensive Power Supply Scheme” (EPSS) by entering into an agreement with the DISCOMs as per the terms and conditions prescribed in the scheme.
- b. The DISCOMs will issue a paper notification seeking applications from consumers who desire, under the scheme, to avail Expensive power over and above the Permitted Demand Limit (PDL) prescribed under the R & C measures order in force at the relevant period of time.
- c. The HT /LT consumers who desire to avail power on round-the-clock basis, under this “Expensive Power Supply Scheme” (EPSS) will submit applications to the respective DISCOMs duly indicating the quantum of demand and Load Factor (LF) for drawal of energy required by them. The Load Factor to be specified by the consumer shall not be less than 60%.
- d. Such consumers will sign an agreement on Rs.100 non-judicial stamp paper with respective DISCOMs for the quantum of power to be availed by them under the scheme. The agreement will have to be signed before the commencement of drawal of power under the scheme.
- e. The DISCOMs shall procure RLNG based power from the gas-based IPPs in the State, and supply the same to the consumers participating in the scheme on “No profit-no loss basis”.



- f. In case, the procurement is less than the total requirement, the available power will be distributed proportionately amongst all the participating consumers on pro-rata basis.
- g. In case of an unforeseen contingency like any generator using RLNG going out of service, the participating consumers shall follow the directions issued by SLDC to manage such contingencies.
- h. The distribution licensees will make best efforts to provide power as per the agreements during this period to the participating consumers, the actual extent of supply being subject to constraints like grid management, transmission congestion and power availability.
- i. The scheme will cover the Consumers who are fed through (a) Dedicated Feeders (b) Express Feeders and (c) feeders which are not subjected to Load Relief (LR) by DISCOMs.
- j. Tariff for energy supplied under the scheme will be computed based on adjustment for the losses approved in Tariff Order at the respective supply voltage level.
- k. For billing and energy balancing, 1 kWh energy allocated to participating consumer shall be treated as being equal to 1 kVAh energy drawn by the consumer.
- l. Tariff for energy supplied under the scheme will be based on the actual Generation cost (fixed cost and variable cost) utilizing RLNG, working capital cost incurred by the DISCOMs and grossing up with voltage wise losses up to the supply voltage.
- m. HT/LT consumers opting for the scheme shall pay the Tariff for energy supplied under the scheme for the quantum of expensive power covered by agreement on "Take or Pay" basis.
- n. A co-ordination committee will be constituted under the Chairmanship of APPCC with representatives of the four DISCOMs, APPCC, FAPCCI, FAPSIA and one representative of A.P. Spinning Mills





Association. The committee will oversee the implementation of the scheme.

- o. The DISCOMs shall procure expensive power from the following gas based IPPs only, available in the State. 1) GVK Extension - 220 MW 2) Gautami - 464 MW, 3) Vemagiri - 370 MW and 4) Konaseema - 444.08 MW.

[These gas based stations are having low Station Heat Rate (SHR) i.e., 1850 k.Cal/kWh, compared to other gas based IPP stations having high station heat rate and can generate power by using RLNG with reduced variable cost]

- p. RLNG allocations to an IPP for this purpose will be done upto the PLF limit only.

II). COMPUTATION OF PROCUREMENT COST OF EXPENSIVE POWER FROM IPPs:

Power will be procured under the scheme from gas-based IPPs within the State, who will generate the requisite power utilising RLNG made available by the Government for this purpose. The Capacity charge will be computed monthly as per Article 5.2 (b) at 80% PLF initially and at the end of tariff year adjusted pursuant to Article 5.2(c) in case the PLF is less than 80% for the tariff year, based on respective long term PPAs entered between the IPPs and DISCOMs.

The procurement of RLNG based expensive power shall be done on the basis of payment of variable cost and fixed cost (capacity charge), since excess capacity charge, if any, paid as per Article 5.2(b) will be adjusted at the end of tariff year as per Article 5.2(c).

III). COMPUTATION OF POWER SUPPLY COST TO CONSUMERS UNDER THE SCHEME:

The quantum of required power procurement ("p" MW) shall be computed based on the power required by all participating consumers and grossing up the same with respective supply voltage losses.



The procurement costs including variable cost and other relevant costs (working capital costs) together with the fixed cost, shall be passed on to participating consumers.

The per unit cost of expensive power supply will be done in two stages

- (i) The per unit cost will be modified by incorporating the working capital cost as per the following example:

#### ILLUSTRATIVE EXAMPLE

- a. The per unit cost of Expensive power procured = Rs. 9.00/unit.
- b. Quantum of power procured = 'p' MW.
- c. Quantum of Energy purchased (MU) 'Q' = p (MW) x No. of hours in the month/1000.
- d. Total expensive Power cost (in Rs. Crs.) = p (MW) x No. of hours in a month x (Rs. 9.00/unit) x 1000/ 1,00,00,000.
- e. Expensive Power Purchase Cost (EPPC) in Rs./unit (at interface point) 'R' = {[Total expensive Power cost (in Rs.Crs.) + Working capital Cost (in Rs. Crs.)] x 10 } /Q (MU).

- (ii) The unit cost of expensive power calculated as above will be modified based on the loss percentages of the respective voltages specified in the tariff order as per the following example:

#### ILLUSTRATIVE EXAMPLE - (132 kV and above)

To arrive at Expensive Power Supply Cost (EPSC) of 132 kV and above voltage (EHT) consumers, the 'R' (EPPC at interface point) will be grossed up with EHT voltage loss as indicated below.

$$\text{EPSC at EHT 'S'} = R \times 100 / (100 - \% \text{ of Transmission Losses}).$$

#### ILLUSTRATIVE EXAMPLE - (33 kV)

To arrive at Expensive Power Supply Cost (EPSC) of 33 kV voltage consumers, 'S' will be grossed up with 33 kV voltage loss as indicated below.

$$\text{EPSC at 33 kV 'T'} = S \times 100 / (100 - \% \text{ of 33 kV loss}).$$



#### ILLUSTRATIVE EXAMPLE - (11 kV)

To arrive at Expensive Power Supply Cost (EPSC) of 11 kV voltage consumers, 'T' will be grossed up with 11 kV voltage loss as indicated below.

$$\text{EPSC at 11 kV 'U'} = T \times 100 / (100 - \% \text{ of 11 kV loss}).$$

#### IV). BILLING PROCEDURE:

The billing of the Expensive Power Supply Cost (EPSC) shall be on monthly basis by way of energy charges and demand charges shown separately taking into account the Permitted Consumption Limit (PCL) and Permitted Demand Limit (PDL) specified in the R & C order in force.

The DISCOMs shall prepare provisional bill based on the consumer meter reading and final settlement will be done based on energy billing settlement done by Energy Billing Center (EBC) of SLDC.

#### PROCEDURE FOR ISSUING PROVISIONAL BILLS

##### (A). DEMAND CHARGES

The DISCOMs will issue monthly bills consisting of two parts i.e., Permitted Demand Limit (PDL) component and Expensive Power Demand (EPD) component to the participating consumers calculating the same for Peak and Off-peak periods separately based on respective PDL's as per the R & C order.

- Permitted Demand Limit (PDL) = As approved in R & C Orders.
- Expensive Power Demand (EPD) = Additional Demand (over PDL) contracted in kVA (limited to Demand cut imposed)
- The RMD upto (PDL + EPD) will be billed at normal demand charges as per the Tariff Order.
- The RMD above (PDL + EPD) will be billed at applicable penal charges as per R & C Order.





(B). ENERGY CHARGES

The energy billing will be done based on the Permitted Consumption Limit (PCL) specified for Peak and Off-peak periods separately in the R&C order. The energy billing shall be done as mentioned below:

- Permitted Consumption Limit (PCL) = As approved in R & C Order in force.
- Expensive Power Consumption Limit (EPCL)  
= Expensive Power Demand (EPD) x LF (as specified by the consumer in the agreement) x No. of Hrs. from the date of supply till the billing date.
- The consumption upto EPCL will be charged at EPSC rate for both peak and off peak periods.
- The consumption above EPCL upto (EPCL + PCL) will be charged at normal energy charges as per Tariff Order for both peak and off peak periods.
- The consumption above (EPCL + PCL) will be billed at applicable penal charges as per R & C order in force.

PROCEDURE FOR FINAL BILL SETTLEMENT

- The Energy Billing Center (EBC), based on the actual energy supplied by the IPPs, shall allocate energy on pro-rata basis with respect to contracted capacity under EPSS to all participating consumers taking losses into consideration.
- The DISCOMs shall calculate the difference between the quantum of energy provisionally billed by DISCOMs under EPSS and allocated energy by EBC and issue revised bills accordingly for payment / adjustment in the succeeding monthly bill.
- Consequential changes in billing of energy quantum at normal tariff rates and at R & C penal rates, if any, will be carried out based on the correction indicated in the above para based on the allocation of energy by EBC.



- The cost of un-utilised energy computed at the differential rate between contracted price (Expensive Power Cost) and average realization rate (Rs per unit) of the DISCOMs as per the tariff order, will be passed on to the participating consumers on pro-rata basis based on the contracted capacity.
- Costs on account of transportation of gas and shipping charges due to gas supply shortage, shall be born by all the participating consumers based on the energy allocated by EBC.

V). SCHEDULED CONSUMERS and THIRD PARTY CONSUMERS WHO AVAIL EPSS:

In case of scheduled consumers i.e., where supply is availed from both DISCOMs and open access and in the case of third-party consumers, such Energy will be considered first in preference over EPCL energy and DISCOM energy.

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|----|-----------------|---|-------------------------------------|
| a. | First priority  | - | Third party and open access energy. |
| b. | Second priority | - | EPSC Energy                         |
| c. | Third priority  | - | DISCOM energy (upto PCL).           |

This order is signed by the Commission on this 3<sup>rd</sup> of January, 2013.

(BY ORDER OF THE COMMISSION)



  
SECRETARY

**SECRETARY**  
A.P. Electricity Regulatory Commission  
Hyderabad.