

Cir. No.: 85/DIV/TRF/05

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June 05, 2015

To Members of IEEMA Transformer Division, SEBs, Utilities & Listed Purchasing organizations

Sub: Revision in PV clause of "Power Transformers"

IEEMA has been operating Price variation clauses for various electrical equipment including Transformers. Transformers PV clauses were evolved and made operational from June 2003 & subsequently revised in January 2009.

With the passage of time and over the last five years, it is observed by the Transformer industry due to revision in utility specifications with very high capitalization rates, changes in raw material cost and components etc., the current PVC formula for 'Power Transformer' do not give the correct variation. Hence there is a need of revision in the formulae. Also a new formula shall be developed for UHV segment i.e. 765kV & 1200kV and Reactors. It is also desired that prices of raw materials need to be closer to actual market prices and lag period for these raw material prices should be in line with contemporary manufacturing practices; for fair price variation.

The Transformer division of IEEMA has deliberated on this subject; collected costing data from major manufacturers for various types of Power Transformers and Reactors. They also arrived at appropriate changes in sources of various raw materials. Following Two Categories of PV clauses have been finalized for Power Transformers.

- 1) Transformers and Reactors of ratings **Above 10 MVA or voltage above 33 kV up to 400 kV**
- 2) Transformers and Reactors of ratings **Above 10 MVA and above 400 kV**

The salient features of the proposed PV clauses are as under.

- a) Fixed cost component has been reduced to 10
- b) Steel Plates 10mm (retail) price as published by Joint Plant Committee (JPC) will represent Iron & Steel portion in place of Wholesale Price Index Number (WPI) for Ferrous Metal. This will make way to publish monthly PV Circular within 4-5 days after completion of the month.
- c) CRGO LAMINATION price of appropriate Grade/s sourced from processing centres will be used.

All above changes are also made effective in respective PV clauses for Deemed Export contracts.

Proposed Draft revised PV clauses was circulated vide Cir. No. 52 dated 7th April 2015. Since, no adverse comments have been received; we are making operational these new PV clauses for Power Transformers w.e.f. 1st April 2015

We are publishing a separate monthly Price variation circular (Ref:IEEMA(PVC)/PWR_TRF/04/2015) applicable to only these two PV clauses. Circular for the month of April and May 2015 are attached along with new PV clauses.

Old PV clause for Power Transformers w.e.f. 1st January 2009 will be treated as discontinued after 1st April 2015.

We recommend incorporating this new PV clause of Power Transformer in all future tenders. We recommend following methodology to arrive at price variation for all the pending contracts having old IEEMA PV clause of Power Transformer (w.e.f. 1st January 2009)

1. Calculate 'P' from the date of tendering /base date of the contract as per old (w.e.f. January 2009) IEEMA PV clause of Power Transformer up to April 2015 i.e. considering prices published in monthly PV circular of April 2015 as per old PV clause of Power Transformer at the denominator
2. Treat the above calculated 'P' and 'P₀' and calculate final price variation using new (w.e.f. April 2015) IEEMA PV clause for Power Transformer from April 2015 i.e. considering prices published in monthly PV circular of April 2015 as per new PV clause of Power Transformer at the numerator; up to the date of delivery i.e. by considering appropriate prices as per new PV clause of Power Transformer.

Monthly PV circular for Transformer vide ref. IEEMA/PVC/TRF(R-1) which is currently being published will continue to be published to operate PV clauses for Distribution (BEE Star 3 & above and Non-BEE) and REC range Transformers w.e.f. January 2009

Deputy Director General

Encl.: New PV clauses of Power Transformers (wef. 1st April 2015) and monthly PV circular for April & May 2015

**PRICE VARIATION CLAUSE FOR POWER TRANSFORMERS AND REACTORS
 COMPLETE WITH ALL ACCESSORIES AND COMPONENTS
 of ratings above 10 MVA and voltage above 400 kV
 Of supplied against domestic contracts**

This price variation clause is applicable for 'Power Transformers', ratings above 10 MVA and voltage above 400 kV. The clause is to be used for domestic contracts. A separate price variation IEEMA/PVC/PWR TRF_ above 400 KV/DE/2015 has been evolved for above types of Transformers supplied against export/deemed export contracts under special imprest licensing scheme.

The price quoted/confirmed is based on the input cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices and index numbers, the price payable shall be subject to adjustment, up or down in accordance with the following formula:

$$P = \frac{P_0}{100} \left(10 + 18 \frac{C}{C_0} + 21 \frac{ES}{ES_0} + 10 \frac{IS}{IS_0} + 8 \frac{IM}{IM_0} + 23 \frac{TO}{TO_0} + \frac{W}{W_0} \right)$$

Wherein,

- P = Price payable as adjusted in accordance with the above formula.
- P₀ = Price quoted/confirmed.
- C₀ = Average LME settlement price of copper wire bars (refer notes)
 This price is as applicable for the month, **ONE** month prior to the date of tendering.
- ES₀ = Price of CRGO Electrical Steel Lamination (refer note)
 This price is as applicable on the 1st working day of the month, **ONE** months prior to the date of tendering.
- IS₀ = Average price of steel Plates 10 mm thick (refer notes)
 This price is as applicable on the 1st working day of the month, **ONE** month prior to the date of tendering.
- IM₀ = Price of Insulating Materials (refer notes)
 This price is as applicable on the 1st working day of the month, **ONE** months prior to the date of tendering.
- TO₀ = Price of Transformer Oil (refer notes)
 This price is as applicable on the 1st working day of the month, **ONE** month prior to the date of tendering.
- W₀ = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2001 = 100)
 This index number is as applicable on the first working day of the month, **THREE** months prior to the date of tendering.

IEEMA/PVC/PWR TRF_ above 400 KV 2015/1/3



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Effective from: 1st April 2015

For example, if date of tendering falls in June 2015, applicable prices of Copper Wire Bars (C₀), Transformer Oil (TO₀), Steel Plates 10 mm thick (IS₀), CRGO Electrical Steel Laminations (ES₀) and Insulating material (IM₀) should be as on 1st May 2015 and all India average consumer price index no. (W₀) should be for the month of 1st March 2015.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR TRF/_/_ **ONE** month prior to the date of tendering.

- C = Average LME settlement price of copper wire bars (refer notes)
 This price is as applicable for the month, **THREE** months prior to the date of delivery.
- ES = Price of CRGO Electrical Steel Lamination (refer note)
 This price is as applicable on the 1st working day for the month, **THREE** months prior to the date of delivery.
- IS = Average price of Steel Plates 10 mm thick (refer notes)
 This price is as applicable on the 1st working day of the month, **ONE** month prior to the date of delivery.
- IM = Price of Insulating Materials (refer notes)
 This price is as applicable on the 1st working day of the month, **THREE** months prior to the date of delivery.
- TO = Price of Transformer Oil (refer notes)
 This price is as applicable on the 1st working day of the month, **ONE** month prior to the date of delivery.
- W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2001 = 100)
 This index number is as applicable on the first working day of the month, **THREE** months prior to the date of delivery.

For example, if date of delivery in terms of clause given below falls in December 2015, applicable prices of Copper Wire Bars (C), Insulating material (IM), CRGO Electrical Steel Lamination (ES) should be as on 1st September 2015 and Transformer Oil (TO), Steel Plates 10 mm thick (IS) should be 1st November 2015 and all India average consumer price index no. (W) should be for the month of September 2015.

The date of delivery is the date on which the transformer is notified as being ready for inspection/despatch (in the absence of such notification, the date of manufacturer's despatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

IEEMA/PVC/PWR TRF_ above 400 KV 2015/2/3

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Notes: (a) All prices of raw materials are exclusive of modvatable excise/CV duty amount and exclusive of any other central, state or local taxes, octroi etc. transformers manufacturers import major raw materials like Copper, CRGO Steel Sheets and Plates etc. The landed cost of these imported raw materials includes applicable custom duty but exclusive of modvatable CVD.

(b) All prices are as on first working day of the month.

(c) The details of prices are as under:

1. The LME price of Copper Wire Bars (in Rs./MT) is the LME average settlement price of Copper Wire Bars converted into Indian Rupees with applicable average exchange rate of SBI of the month. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.
 2. The price of CRGO is the price of CRGO Electrical Steel Lamination in Rs./MT suitable for Transformers of rating above 10 MVA and above 400 kV
 3. Price of steel is the average retail price of steel plates 10 mm thick as published by Joint Plant Committee (JPC) in Rs./MT as on 1st working day of the month.
 4. The price of Insulating materials (in Rs./Kg) of pre-compressed pressboards of size 10 mm thick, 3200 mm x 4100 mm is the average C&F price in free currency per MT converted into Indian Rupees with applicable exchange rates prevailing as on 1st working day of the month as quoted by primary suppliers. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.
 5. The price of Transformer Oil (in Rs./K.Ltr) is the average price on ex-refinery basis as quoted by primary producers for supply in drums.
- (d) Some purchasers are purchasing oil immersed Transformers from manufacturers without first filling of oil. Oil for first filling is procured and filled by the purchasers. For such supplies PVC formula, excluding Oil will apply as under:

$$P = \frac{P_0}{92} \left(10 + 18 \frac{C}{C_0} + 21 \frac{ES}{ES_0} + 10 \frac{IS}{IS_0} + 10 \frac{IM}{IM_0} + 23 \frac{W}{W_0} \right)$$

Where description of P, P₀, C, ES, IS, IM, W etc. remains same as mentioned earlier.



 Deputy Director General

IEEMA/PVC/PWR TRF_ above 400 KV 2015/3/3

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Of supplied against domestic contracts

This price variation clause is applicable for 'Power Transformers', ratings above 10 MVA or voltage above 33 kV up to 400 kV. The clause is to be used for domestic contracts. A separate price variation IEEMA/PVC/PWR TRF_upto 400 KV/DE/2015 has been evolved for above types of Transformers supplied against export/deemed export contracts under special imprest licensing scheme.

The price quoted/confirmed is based on the input cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices and index numbers, the price payable shall be subject to adjustment, up or down in accordance with the following formula:

$$P = \frac{P_0}{100} \left(10 + 29 \frac{C}{C_0} + 27 \frac{ES}{ES_0} + 7 \frac{IS}{IS_0} + 5 \frac{IM}{IM_0} + 7 \frac{TO}{TO_0} + 15 \frac{W}{W_0} \right)$$

Wherein,

- P = Price payable as adjusted in accordance with the above formula.
- P_0 = Price quoted/confirmed.
- C_0 = Average LME settlement price of copper wire bars (refer notes)
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- ES_0 = Price of CRGO Electrical Steel Lamination (refer note)
This price is as applicable on the 1st working day of the month, **ONE** months prior to the date of tendering.
- IS_0 = Average price of steel Plates 10 mm thick (refer notes)
This price is as applicable on the 1st working day of the month, **ONE** month prior to the date of tendering.
- IM_0 = Price of Insulating Materials (refer notes)
This price is as applicable on the 1st working day of the month, **ONE** months prior to the date of tendering.
- TO_0 = Price of Transformer Oil (refer notes)
This price is as applicable on the 1st working day of the month, **ONE** month prior to the date of tendering.
- W_0 = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2001 = 100)
This index number is as applicable on the first working day of the month, **THREE** months prior to the date of tendering.

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For example, if date of tendering falls in June 2015, applicable prices of Copper Wire Bars (C₀), Transformer Oil (TO₀), Steel Plates 10 mm thick (IS₀), CRGO Electrical Steel Laminations (ES₀) and Insulating material (IM₀) should be as on 1st May 2015 and all India average consumer price index no. (W₀) should be for the month of 1st March 2015.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR_TRF/_/_ **ONE** month prior to the date of tendering.

- C = Average LME settlement price of copper wire bars (refer notes)
 This price is as applicable for the month, **TWO** months prior to the date of delivery.
- ES = Price of CRGO Electrical Steel Lamination (refer notes)
 This price is as applicable on the 1st working day for the month, **TWO** months prior to the date of delivery.
- IS = Average price of Steel Plates 10 mm thick (refer notes)
 This price is as applicable on the 1st working day of the month, **ONE** month prior to the date of delivery.
- IM = Price of Insulating Materials (refer notes)
 This price is as applicable on the 1st working day of the month, **TWO** months prior to the date of delivery.
- TO = Price of Transformer Oil (refer notes)
 This price is as applicable on the 1st working day of the month, **ONE** month prior to the date of delivery.
- W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2001 = 100)
 This index number is as applicable on the first working day of the month, **THREE** months prior to the date of delivery.

For example, if date of delivery in terms of clause given below falls in December 2015, applicable prices of Copper Wire Bars (C), Insulating material (IM), CRGO Electrical Steel Lamination (ES) should be as on 1st October 2015 and Transformer Oil (TO), Plates 10 mm thick (IS) should be 1st November 2015 and all India average consumer price index no. (W) should be for the month of September 2015.

The date of delivery is the date on which the transformer is notified as being ready for inspection/despatch (in the absence of such notification, the date of manufacturer's despatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

IEEMA/PVC/PWR TRF_upto 400 KV2015/2/3

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Notes: (a) All prices of raw materials are exclusive of modvatable excise/CV duty amount and exclusive of any other central, state or local taxes, octroi etc. transformers manufacturers import major raw materials like Copper, CRGO Steel Sheets and Plates etc. The landed cost of these imported raw materials includes applicable custom duty but exclusive of modvatable CVD.

(b) All prices are as on first working day of the month.

(c) The details of prices are as under:

1. The LME price of Copper Wire Bars (in Rs./MT) is the LME average settlement price of Copper Wire Bars converted into Indian Rupees with applicable average exchange rate of SBI of the month. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.
 2. The price of CRGO is the price of CRGO Electrical Steel Lamination in Rs./MT suitable for Transformers of rating above 10 MVA or voltage above 33 kV up to 400 kV
 3. Price of steel is the average retail price of steel plates 10 mm thick as published by Joint Plant Committee (JPC) in Rs./MT as on 1st working day of the month.
 4. The price of Insulating materials (in Rs./Kg) of pre-compressed pressboards of size 10 mm thick, 3200 mm x 4100 mm is the average C&F price in free currency per MT converted into Indian Rupees with applicable exchange rates prevailing as on 1st working day of the month as quoted by primary suppliers. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.
 5. The price of Transformer Oil (in Rs./K.Ltr) is the average price on ex-refinery basis as quoted by primary producers for supply in drums.
- (d) Some purchasers are purchasing oil immersed Transformers from manufacturers without first filling of oil. Oil for first filling is procured and filled by the purchasers. For such supplies PVC formula, excluding Oil will apply as under:

$$P = \frac{P_0}{93} \left(10 + 29 \frac{C}{C_0} + 27 \frac{ES}{ES_0} + 7 \frac{IS}{IS_0} + 5 \frac{IM}{IM_0} + 15 \frac{W}{W_0} \right)$$

Where description of P, P₀, C, ES, IS, IM, W etc. remains same as mentioned earlier.



 Deputy Director General

IEEMA/PVC/PWR TRF_upto 400 KV2015/3/3

**PRICE VARIATION CLAUSE FOR POWER TRANSFORMERS AND REACTORS
COMPLETE WITH ALL ACCESSORIES AND COMPONENTS
of ratings above 10 MVA or voltage above 33 kV up to 400 kV
supplied against export/deemed export contracts against duty free inputs
under special imprest licensing scheme**

This price variation clause is applicable for 'Power Transformers', ratings above 10 MVA or voltage above 33 kV up to 400 kV. The clause is to be used for export/deemed export contracts against duty free inputs under special imprest licensing scheme. A separate price variation IEEMA/PVC/PWR TRF_upto 400 KV/2015 has been evolved for above types of Transformers supplied against domestic contracts.

The price quoted/confirmed is based on the input cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices and index numbers, the price payable shall be subject to adjustment, up or down in accordance with the following formula:

$$P = \frac{P_0}{100} \left(10 + 29 \frac{C}{C_0} + 27 \frac{ES}{ES_0} + 7 \frac{IS}{IS_0} + 5 \frac{IM}{IM_0} + 7 \frac{TO}{TO_0} + 15 \frac{W}{W_0} \right)$$

Wherein,

- P** = Price payable as adjusted in accordance with the above formula.
- P₀** = Price quoted/confirmed.
- C₀** = Average LME settlement price of copper wire bars (refer notes)
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- ES₀** = Price of CRGO Electrical Steel Lamination (refer note)
This price is as applicable on the 1st working day of the month, **ONE** month prior to the date of tendering.
- IS₀** = Average price of steel Plates 10 mm thick (refer notes)
This price is as applicable on the 1st working day of the month, **ONE** month prior to the date of tendering.
- IM₀** = Price of Insulating Materials (refer notes)
This price is as applicable on the 1st working day of the month, **ONE** month prior to the date of tendering.
- TO₀** = Price of Transformer Oil (refer notes)
This price is as applicable on the 1st working day of the month, **ONE** month prior to the date of tendering.
- W₀** = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2001 = 100)
This index number is as applicable on the first working day of the month, **THREE** months prior to the date of tendering.

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For example, if date of tendering falls in June 2015, applicable prices of Copper Wire Bars (C₀), Transformer Oil (TO₀), Steel Plates 10 mm thick (IS₀), CRGO Electrical Steel Laminations (ES₀) and Insulating material (IM₀) should be as on 1st May 2015 and all India average consumer price index no. (W₀) should be for the month of 1st March 2015.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR TRF/DE/_/_ ONE month prior to the date of tendering.

- C = Average LME settlement price of copper wire bars (refer notes)
 This price is as applicable for the month, TWO months prior to the date of delivery.
- ES = Price of CRGO Electrical Steel Lamination (refer note)
 This price is as applicable on the 1st working day for the month, TWO months prior to the date of delivery.
- IS = Average price of Steel Plates 10 mm thick (refer notes)
 This price is as applicable on the 1st working day of the month, ONE month prior to the date of prior to the date of delivery.
- IM = Price of Insulating Materials (refer notes)
 This price is as applicable on the 1st working day of the month, TWO months prior to the date of delivery.
- TO = Price of Transformer Oil (refer notes)
 This price is as applicable on the 1st working day of the month, ONE month prior to the date of delivery.
- W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2001 = 100)
 This index number is as applicable on the first working day of the month, THREE months prior to the date of delivery.

For example, if date of delivery in terms of clause given below falls in December 2015, applicable prices of Copper Wire Bars (C), Insulating material (IM), CRGO Electrical Steel Lamination (ES) should be as on 1st October 2015 and Transformer Oil (TO), Plates 10 mm thick (IS) should be 1st November 2015 and all India average consumer price index no. (W) should be for the month of September 2015.

The date of delivery is the date on which the transformer is notified as being ready for inspection/despatch (in the absence of such notification, the date of manufacturer's despatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

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Notes: (a) All prices of raw materials are exclusive of modvatable excise/CV duty amount and exclusive of any other central, state or local taxes, octroi etc. In deemed export contract under special imprest licence, the basic inputs like Copper, CRGO steel lamination and Insulating pressboards etc, are imported duty free. While modvatable CVD is already excluded, the customs duty is also removed from basic prices.

(b) All prices are as on first working day of the month.

(c) The details of prices are as under:

1. The LME price of Copper Wire Bars (in Rs./MT) is the LME average settlement price of Copper Wire Bars converted into Indian Rupees with applicable average exchange rate of SBI of the month. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.
 2. The price of CRGO is the price of CRGO Electrical Steel Lamination in Rs./MT suitable for Transformers of rating above 10 MVA or voltage above 33 kV up to 400 kV
 3. Price of steel is the average retail price of steel plates 10 mm thick as published by Joint Plant Committee (JPC) in Rs./MT as on 1st working day of the month.
 4. The price of Insulating materials (in Rs./Kg) of pre-compressed pressboards of size 10 mm thick, 3200 mm x 4100 mm is the average C&F price in free currency per MT converted into Indian Rupees with applicable exchange rates prevailing as on 1st working day of the month as quoted by primary suppliers. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.
 5. The price of Transformer Oil (in Rs./K.Ltr) is the average price on ex-refinery basis as quoted by primary producers for supply in drums.
- (d) Some purchasers are purchasing oil immersed Transformers from manufacturers without first filling of oil. Oil for first filling is procured and filled by the purchasers. For such supplies PVC formula, excluding Oil will apply as under:

$$P = \frac{P_0}{93} \left(10 + 29 \frac{C}{C_0} + 27 \frac{ES}{ES_0} + 7 \frac{IS}{IS_0} + 5 \frac{IM}{IM_0} + 15 \frac{W}{W_0} \right)$$

Where description of P, P₀, C, ES, IS, IM, W etc. remains same as mentioned earlier.



 Deputy Director General

IEEMA/PVC/PWR TRF_upto 400 KV2015/DE/3/3

IEEMA/PVC/PWR TRF_ above 400 KV/DE/2015

Effective from: 1st April 2015

**PRICE VARIATION CLAUSE FOR POWER TRANSFORMERS AND REACTORS
COMPLETE WITH ALL ACCESSORIES AND COMPONENTS
of ratings above 10 MVA and voltage above 400 kV
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The price quoted/confirmed is based on the input cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices and index numbers, the price payable shall be subject to adjustment, up or down in accordance with the following formula:

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Wherein,

- P = Price payable as adjusted in accordance with the above formula.
- P₀ = Price quoted/confirmed.
- C₀ = Average LME settlement price of copper wire bars (refer notes)
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- ES₀ = Price of CRGO Electrical Steel Lamination (refer note)
This price is as applicable on the 1st working day of the month, **ONE** months prior to the date of tendering.
- IS₀ = Average price of steel Plates 10 mm thick (refer notes)
This price is as applicable on the 1st working day of the month, **ONE** month prior to the date of tendering.
- IM₀ = Price of Insulating Materials (refer notes)
This price is as applicable on the 1st working day of the month, **ONE** months prior to the date of tendering.
- TO₀ = Price of Transformer Oil (refer notes)
This price is as applicable on the 1st working day of the month, **ONE** month prior to the date of tendering.
- W₀ = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2001 = 100)
This index number is as applicable on the first working day of the month, **THREE** months prior to the date of tendering.

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Effective from: 1st April 2015

For example, if date of tendering falls in June 2015, applicable prices of Copper Wire Bars (C_0), Transformer Oil (TO_0), Steel Plates 10 mm thick (IS_0), CRGO Electrical Steel Laminations (ES_0) and Insulating material (IM_0) should be as on 1st May 2015 and all India average consumer price index no. (W_0) should be for the month of 1st March 2015.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR TRF/DE/_/_ ONE month prior to the date of tendering.

- C = Average LME settlement price of copper wire bars (refer notes)
This price is as applicable for the month, THREE months prior to the date of delivery.
- ES = Price of CRGO Electrical Steel Lamination (refer note)
This price is as applicable on the 1st working day for the month, THREE months prior to the date of delivery.
- IS = Average price of Steel Plates 10 mm thick (refer notes)
This price is as applicable on the 1st working day of the month, ONE month prior to the date of delivery.
- IM = Price of Insulating Materials (refer notes)
This price is as applicable on the 1st working day of the month, THREE months prior to the date of delivery.
- TO = Price of Transformer Oil (refer notes)
This price is as applicable on the 1st working day of the month, ONE month prior to the date of delivery.
- W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2001 = 100)
This index number is as applicable on the first working day of the month, THREE months prior to the date of delivery.

For example, if date of delivery in terms of clause given below falls in December 2015, applicable prices of Copper Wire Bars (C), Insulating material (IM), CRGO Electrical Steel Lamination (ES) should be as on 1st September 2015 and Transformer Oil (TO), Steel Plates 10 mm thick (IS) should be 1st November 2015 and all India average consumer price index no. (W) should be for the month of September 2015.

The date of delivery is the date on which the transformer is notified as being ready for inspection/despatch (in the absence of such notification, the date of manufacturer's despatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

IEEMA/PVC/PWR TRF_ above 400 KV 2015/DE/2/3

IEEMA/PVC/PWR TRF_ above 400 KV/DE/2015**Effective from: 1st April 2015**

Notes: (a) All prices of raw materials are exclusive of modvatable excise/CV duty amount and exclusive of any other central, state or local taxes, octroi etc. In deemed export contract under special imprest licence, the basic inputs like Copper, CRGO steel lamination and Insulating pressboards etc, are imported duty free. While modvatable CVD is already excluded, the customs duty is also removed from basic prices.

(b) All prices are as on first working day of the month.

(c) The details of prices are as under:

1. The LME price of Copper Wire Bars (in Rs./MT) is the LME average settlement price of Copper Wire Bars converted into Indian Rupees with applicable average exchange rate of SBI of the month. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.
 2. The price of CRGO is the price of CRGO Electrical Steel Lamination in Rs./MT suitable for Transformers of rating above 10 MVA and above 400 kV
 3. Price of steel is the average retail price of steel plates 10 mm thick as published by Joint Plant Committee (JPC) in Rs./MT as on 1st working day of the month.
 4. The price of Insulating materials (in Rs./Kg) of pre-compressed pressboards of size 10 mm thick, 3200 mm x 4100 mm is the average C&F price in free currency per MT converted into Indian Rupees with applicable exchange rates prevailing as on 1st working day of the month as quoted by primary suppliers. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.
 5. The price of Transformer Oil (in Rs./K.Ltr) is the average price on ex-refinery basis as quoted by primary producers for supply in drums.
- (d) Some purchasers are purchasing oil immersed Transformers from manufacturers without first filling of oil. Oil for first filling is procured and filled by the purchasers. For such supplies PVC formula, excluding Oil will apply as under:

$$P = \frac{P_0}{92} \left(10 + 18 \frac{C}{C_0} + 21 \frac{ES}{ES_0} + 10 \frac{IS}{IS_0} + 10 \frac{IM}{IM_0} + 23 \frac{W}{W_0} \right)$$

Where description of P, P₀, C, ES, IS, IM, W etc. remains same as mentioned earlier.



Deputy Director General

IEEMA/PVC/PWR TRF_ above 400 KV 2015/DE/3/3