



Indian Electrical & Electronics Manufacturer's Association
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Cir. No.: 06/DIV/Insulator/05

15 June 2022

To All members of Insulator Division

To all State Electricity Boards, Utilities and Other purchasing organizations

Sub: Revised price variation clauses for Composite Insulator for Railway and Transmission

IEEMA Insulator division has decided to revise earlier applicable Price Variation clauses for Composite Insulator which are effective from January 2013; with change in cost composition and considering changes in technology as well as manufacturing practices. During detail discussion committee members felt the need to have separate Price Variation clauses for Railways and Transmission due to differences in cost composition and raw materials used.

With the help of committee members IEEMA arrived at the draft Price Variation Clauses for the **Composite Insulators for Railway and for Transmission and circulated vide cir no 16/DIV/Insulator/05 dated 31 Mar 2022.**

After incorporating changes suggested by the industry stakeholders on the **Composite Insulators for Railway and Composite Insulators for Transmission** PV formulae; we are making all these Price Variation formulae operational from 1st April 2022.

We have enclosed PV clauses applicable **Composite Insulators for Railway and Composite Insulators for Transmission** which are effective from 1st April 2022.

Although, these PV clauses are made effective from 1st April 2022, practically they can be incorporated in all the current new tenders/contracts starting from 1st May 2022.

We request and recommend all the users & stakeholders including Utilities, PSUs etc. to incorporate these PV formulae in all the new tenders/contracts henceforth.

For pending contracts, for the date of delivery on and after 1st June 2022 as given below, to arrive at the final price variation, we recommend using the following two stage method, which is a standard institutionalized methodology adopted by IEEMA for change over in all IEEMA PV clauses. Applicability of this two stage method is recommended as under:

1. Calculate price variation 'P' from applicable prices/indices as per your base date / date of tendering up to Apr 22 i.e. considering all prices/indices published in PV circular of Apr 22 at numerator place; using applicable IEEMA PV clauses of Composite Insulators effective from January 2013
2. Treat the above calculated 'P' as 'P₀' and calculate final price variation considering all prices / indices published in PV circular of Apr 22 applicable for revised PV clauses of Composite Insulator effective from 1st April 2022 as base prices/indices (at the denominator place) up to the applicable prices/indices as per the date of delivery; applicable as per revised relevant PV clause of Composite Insulator effective from 1st April 2022.

Please find enclosed a sample two stage calculation showing month references for selecting the price/indices as per above method.

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Sample calculation showing month references for two stage method

For Composite Insulators for TRANSMISSION --- Two stage method if delivery period falls on or after 1st June 2022

For e.g. date of tendering - January 2022			Date of delivery - December 2022		
STEP I			STEP II		
	Jan-22	Apr-22		Apr-22	Dec-22
Prices/ Indices	Month applicable for Date of Tendering as per old PV formula	Month applicable for Date of Delivery (FIXED)	Prices/ Indices	Month applicable for Date of Tendering (FIXED)	Month applicable for Date of Delivery as per new PV formula
Fix			Fix		
Zn	Dec-21	Apr-22	Zn	Apr-22	Nov-22
Al	Dec-21	Apr-22	Al	Apr-22	Nov-22
I	Oct-21	Feb-22	I	Feb-22	Oct-22
R	Oct-21	Feb-22	R	Apr-22	Nov-22
F	Oct-21	Feb-22	F	Feb-22	Oct-22
FP	Oct-21	Feb-22	HSD	Feb-22	Oct-22
FE	Dec-21	Apr-22	FE	Apr-22	Nov-22
W	Oct-21	Feb-22	W	Feb-22	Oct-22

For Composite Insulators for RAILWAY --- Two stage method if delivery period falls on or after 1st June 2022

For e.g. date of tendering - January 2022			Date of delivery - December 2022		
STEP I			STEP II		
	Jan-22	Apr-22		Apr-22	Dec-22
Prices/ Indices	Month applicable for Date of Tendering as per old PV formula	Month applicable for Date of Delivery (FIXED)	Prices/ Indices	Month applicable for Date of Tendering (FIXED)	Month applicable for Date of Delivery as per new PV formula
Fix			Fix		
Zn	Dec-21	Apr-22	Zn	Apr-22	Nov-22
Al	Dec-21	Apr-22		--	--
I	Oct-21	Feb-22	I	Feb-22	Oct-22
R	Oct-21	Feb-22	R	Apr-22	Nov-22
F	Oct-21	Feb-22	F	Feb-22	Oct-22
FP	Oct-21	Feb-22	HSD	Feb-22	Oct-22
FE	Dec-21	Apr-22		--	--
W	Oct-21	Feb-22	W	Feb-22	Oct-22

In step I calculation,

Prices/indices to be taken from circular ref IEEMA(PVC)/Comp Insu of applicable month as per old PV formulae wef Jan 2013

In step II calculation,

Prices/indices to be taken from circular ref IEEMA(PVC)/Comp Insu (R-1) for applicable month as per new PV formulae wef Apr 2022

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IEEMA/PVC/Comp Insu/Transmission/2022

Effective from 1st April 2022

PRICE VARIATION CLAUSE FOR COMPOSITE INSULATORS FOR TRANSMISSION

The price quoted/confirmed is based on the cost of raw material and labour cost as on the date of quotation and the same is deemed to be related to the prices of raw material 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 index numbers, the price payable shall be subject to adjustment up or down in accordance with the following formula:

$$P = \frac{P_0}{100} \left(10 + 3 \frac{Zn}{Zn_0} + 9 \frac{Al}{Al_0} + 9 \frac{I}{I_0} + 45 \frac{R}{R_0} + 8 \frac{F}{F_0} + 3 \frac{HSD}{HSD_0} + 3 \frac{FE}{FE_0} + 10 \frac{W}{W_0} \right)$$

Wherein,

P = Price payable as adjusted in accordance with the above formula.

P₀ = Price quoted/confirmed.

Zn₀ = Price of electrolytic high grade zinc (refer notes)
This price is as applicable for the month, **ONE** month prior to the date of tendering.

Al₀ = LME CSP Average of Aluminium (refer notes)
This price is as applicable for the month, **ONE** month prior to the date of tendering.

I₀ = Wholesale Price Index number for Steel Forging (Base : 2011-12 = 100) (refer notes)
This index number is as applicable for the month, **TWO** months prior to the date of tendering.

R₀ = Price of Silicone Rubber (refer notes)
This price is as applicable for the month, **ONE** month prior to the date of tendering.

F₀ = Wholesale Price Index number for Fibre Glass & Glass sheet (Base: 2011-12 = 100)
This index number is as applicable for the month, **TWO** months prior to the date of tendering.

HSD₀ = Wholesale price index number for HSD (Base: 2011-12=100) (refer notes)
This index number is as applicable for the month, **TWO** months prior to the date of tendering.

FE₀ = IEEMA's Banker's selling rate of exchange between foreign currencies prevailing as on first working day (refer notes)
This exchange rate is as applicable **ONE** month prior to the date of tendering

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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: 2016 = 100)
 This index number is as applicable for the month **TWO** months prior to the date of tendering.

For example, if date of tendering falls in June 2022, the applicable Prices of Zinc (Zn_0), Aluminium (Al_0), Silicone Rubber (R_0), rate of exchange (FE_0) to be considered for the month of May 2022 whereas wholesale price index numbers for Steel Forging (I_0), Fibre Glass & Glass Sheet (F_0), HSD (HSD_0) and all India average consumer price index number (W_0) to be considered for the month of April 2022.

The above indices are as published by IEEMA vide IEEMA circular reference IEEMA(PVC)/COMP_INSU (R-1)/_/_ **ONE** month prior to the date of tendering.

Zn = Price of electrolytic high grade zinc (refer notes)
 This price is as applicable for the month, **ONE** month prior to the date of delivery.

Al = LME CSP Average of Aluminium (refer notes)
 This price is as applicable for the month, **ONE** month prior to the date of delivery.

I = Wholesale Price Index number for Steel Forging (Base : 2011-12 = 100) (refer notes)
 This index number is as applicable for the month, **TWO** months prior to the date of delivery.

R = Price of Silicone Rubber (refer notes)
 This price is as applicable for the month, **ONE** month prior to the date of delivery.

F = Wholesale Price Index number for Fibre Glass & Glass sheet (Base: 2011-12 = 100) (refer notes)
 This index number is as applicable for the month, **TWO** months prior to the date of delivery.

HSD = Wholesale price index number for HSD (Base: 2011-12=100) (refer notes)
 This index number is as applicable for the month, **TWO** months prior to the date of delivery.

FE = IEEMA's Banker's selling rate of exchange between foreign currencies prevailing as on first working day (refer notes)
 This exchange rate is as applicable **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: 2016 = 100) (refer notes)
 This index number is as applicable for the month **TWO** months prior to the date of delivery.

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For example, if date of delivery falls in December 2022, the applicable Prices of Zinc (Zn), Aluminium (Al), Silicone Rubber (R) and Rate of exchange (FE) to be considered for the month of November 2022 whereas price of wholesale price index numbers for Steel Forging (I), Fibre Glass & Glass Sheet (F), HSD (HSD) and all India average consumer price index number (W) to be considered for the month of October 2022.

The "date of delivery" is the date on which the Composite Insulator for transmission 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.

Notes:

(a) All prices of raw materials are exclusive of GST and exclusive of any other central, state or local taxes.

(b) The details of the prices considered are as under:

1. Price of LME average Cash SELLER Settlement price of Primary Aluminium in US\$ per MT as published by London Metal Bulletin (LME) including Premium for Aluminium Ingot in US\$ per MT is converted in Indian Rs./MT using exchange rate
2. The price of Electrolytic high grade zinc (in Rs/MT) is ex-works price quoted by a primary producer.
3. Price of Silicone Rubber in Rs./Kg is the average price as quoted by supplier for their standard grade
4. The wholesale price index numbers for 'Steel Forging, 'Fiber Glass & Glass sheet' and 'HSD' are as published by the Office of Economic Advisor, Ministry of Industry, Govt. of India, New Delhi with base 2011-12 = 100.
5. The exchange rates in Indian Rs. would be for the following currencies only.
 1) US Dollars 2) pound Sterling 3) Japanese Yen 4) Euro

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IEEMA/PVC/Comp Insu/Railway/2022

Effective from 1st April 2022

PRICE VARIATION CLAUSE FOR COMPOSITE INSULATORS FOR RAILWAY

The price quoted/confirmed is based on the cost of raw material and labour cost as on the date of quotation and the same is deemed to be related to the prices of raw material 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 index numbers, the price payable shall be subject to adjustment up or down in accordance with the following formula:

$$P = \frac{P_0}{100} \left(10 + 3 \frac{Zn}{Zn_0} + 25 \frac{I}{I_0} + 40 \frac{R}{R_0} + 8 \frac{F}{F_0} + 4 \frac{HSD}{HSD_0} + 10 \frac{W}{W_0} \right)$$

Wherein,

P = Price payable as adjusted in accordance with the above formula.

P₀ = Price quoted/confirmed.

Zn₀ = Price of electrolytic high grade zinc (refer notes)

This price is as applicable for the month, **ONE** month prior to the date of tendering.

I₀ = Wholesale Price Index number for Casting (Base : 2011-12 = 100) (refer notes)

This index number is as applicable for the month, **TWO** months prior to the date of tendering.

R₀ = Price of Silicone Rubber (refer notes)

This price is as applicable for the month, **ONE** month prior to the date of tendering.

F₀ = Wholesale Price Index number for Fibre Glass & Glass sheet (Base: 2011-12 = 100) (refer notes)

This index number is as applicable for the month, **TWO** months prior to the date of tendering.

HSD₀ = Wholesale price index number for HSD (Base: 2011-12=100) (refer notes)

This index number is as applicable for the month, **TWO** months 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: 2016 = 100)

This index number is as applicable for the month **TWO** months prior to the date of tendering.

For example, if date of tendering falls in June 2022, the applicable Prices of Zinc (Zn₀), Silicone Rubber (R₀) to be considered for the month of May 2022 whereas wholesale price index numbers for Casting (I₀), Fibre Glass & Glass Sheet (F₀), HSD (HSD₀) and all India average consumer price index number (W₀) to be considered for the month of April 2022.

The above indices are as published by IEEMA vide IEEMA circular reference IEEMA(PVC)/COMP_INSU (R-1)/_/ **ONE** month prior to the date of tendering.

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- Zn** = Price of electrolytic high grade zinc (refer notes)
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- I** = Wholesale Price Index number for Casting (Base : 2011-12 = 100) (refer notes)
 This index number is as applicable for the month, **TWO** months prior to the date of delivery.
- R** = Price of Silicone Rubber (refer notes)
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- F** = Wholesale Price Index number for Fibre Glass & Glass sheet (Base: 2011-12 = 100) (refer notes)
 This index number is as applicable for the month, **TWO** months prior to the date of delivery.
- HSD** = Wholesale price index number for HSD (Base: 2011-12=100) (refer notes)
 This index number is as applicable for the month, **TWO** months 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: 2016 = 100).
 This index number is as applicable for the month **TWO** months prior to the date of delivery.

For example, if date of delivery falls in December 2022, the applicable Prices of Zinc (Zn) and Silicone Rubber (R) to be considered for the month of November 2022 whereas wholesale price index numbers for Casting (I), Fibre Glass & Glass Sheet (F), HSD (HSD) and all India average consumer price index number (W) to be considered for the month of October 2022.

The "date of delivery" is the date on which the Composite Insulator for railway 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.

Notes:

- a) All prices of raw materials are exclusive of GST and exclusive of any other central, state or local taxes.
- b) The details of the prices considered are as under:
 1. The price of Electrolytic high grade zinc (in Rs/MT) is ex-works price quoted by a primary producer.
 2. Price of Silicone Rubber in Rs./Kg is the average price as quoted by supplier for their standard grade
 3. The wholesale price index numbers for 'Casting', 'Fiber Glass & Glass sheet' and 'HSD' are as published by the Office of Economic Advisor, Ministry of Industry, Govt. of India, New Delhi with base 2011-12 = 100.

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