



Indian Electrical & Electronics Manufacturer's Association
 501, Kakad Chambers P +91 22 2493 0532
 132, Dr. A. B. Road, Worli, F +91 22 2493 2705
 Mumbai 400 018 E mumbai@ieema.org
 India W www.ieema.org

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**To All members of Insulator Division
 To all State Electricity Boards, Utilities and Other purchasing organizations**

Sub: Correction in revised price variation clauses for Composite Insulator for Railway and Transmission

Recently IEEMA had circulated revised price variation clauses for Composite Insulator for Railway and Composite Insulator for Transmission effective from Apr 2022 vide circular no. 06/DIV/Insulator/05 dated 15 June 2022. IEEMA had also published relevant prices for Apr 22.

After circulation we noted IEEMA received suggestions from few stakeholders on the raw material and lag period for Steel and Silicon Rubber. We had reviewed the suggestions and incorporated the same

We are now attaching the updated PV formulae after correcting the price and month references for Steel and Silicon Rubber. We have also corrected the relevant price variation circular of Composite Insulator for Apr 22.

Earlier published revised price variation clauses for Composite Insulator for Railway and Composite Insulator for Transmission effective from Apr 2022 vide circular no. 06/DIV/Insulator/05 dated 15 June 2022 and relevant published prices stands obsolete.

We request to replace the attached PV formulae and relevant PVC of Apr 22 in place of earlier sent formula vide circular referred above for using in future contracts.

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.

Director

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	Mar-22	Oct-22
R	Oct-21	Feb-22	R	Mar-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	Mar-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

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 = Price of Rounds 25 mm (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, **TWO** months 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) and rate of exchange (FE_0) to be considered for the month of May 2022 whereas prices of Steel (I_0), Silicone Rubber (R_0), and wholesale price index numbers for 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 = Price of Rounds 25 mm (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, **TWO** 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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Effective from 1st April 2022

For example, if date of delivery falls in December 2022, the applicable Prices of Zinc (Zn), Aluminium (Al) and Rate of exchange (FE) to be considered for the month of November 2022 whereas prices of Steel (I), Silicone Rubber (R) and wholesale price index numbers for 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 steel is the average retail price of Rounds 25 mm as published by Joint Plant Committee (JPC) in Rs./MT
4. Price of Silicone Rubber in Rs./Kg is the average price as quoted by supplier for their standard grade
5. The wholesale price index numbers for '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.
6. 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, **TWO** 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) to be considered for the month of May 2022 whereas price of Silicone Rubber (R₀), 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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Effective from 1st April 2022

- 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, **TWO** months 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) to be considered for the month of November 2022 whereas price of Silicone Rubber (R) and 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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