The Railway Board had nominated a Committee of Directors and Chief Engineers (Construction) to go into the question of providing a price variation clause in the works contracts to be entered into by the Railways. The Committee has since submitted its Report and based on its recommendations, the Board have decided that price variation clause as indicated in Annexure-I may be provided in future contracts valuing Rs. 25 lakhs and above. The price variation clause should be included in the special conditions of tenders and only thereafter tenders should be invited, so that the tenderers are fully aware of the implications of the price variation clause and take the same into account while quoting their rates. The price variation clause as indicated in Annexure-I has been vetted by the Legal Cell of the Board's office.

2. The percentage component of various items like material, labour, fuel, etc. will be different for different types of works. These percentages for various types of works are given in Annexure-II. Depending upon the type of the work, these percentages should be incorporated in the price variation clause before including the same in the tender documents so that these are duly taken into account by the tenderers while quoting their rates.

3. A report as to how this clause has worked may be sent by the Railways within a year's time with recommendations/suggestions, if any, inter-alia suggesting whether the clause should be applied to contracts of lesser value also.
4. This issues with the concurrence of the Finance Directorate of Railway Board.

5. Please acknowledge receipt.

(Hindi version will follow)

DA/As above.

Director, Civil Engineering,
Railway Board.

No.80/W1/CT/10.

New Delhi, Dated 25-4-1980.

Copy forwarded for information to:

i. The ADAI(Railways), New Delhi, (with 140 spare copies).

ii. The F.A. & C.A.Os./All Indian Railways.

iii. The Chief Auditors/All Indian Railways.

Copy to: D.W., JDW, JDF(X)I, JDV(E), DDW-II, DDW-III, W-2, W-3, W-4, W-5, W-6, F(X)2, Vig.III (with 5 spare copies), Railway Board, New Delhi.
ANNEXURE - I

PRICE VARIATION

The rates quoted by tenderer and accepted by Railway Administration shall hold good till the completion of the work and no additional individual claim will be admissible on account of fluctuation in market rates, increase in taxes/any other levies/tolls etc. except that payment/recovery for overall market situation shall be made as per price variation clause given in para below.

No cognizance will be given for any sort of fluctuations in taxes and other market conditions etc. for any individual item for the purpose of making adjustments in payments. The contract shall, however, be governed by the general price variation clause as under:

Adjustment for variation in prices of material, labour, fuel, explosives, detonators shall be determined in the manner prescribed below:

The percentage component of various items in a contract on which variation in prices shall be admissible shall be:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material component</td>
<td>%</td>
</tr>
<tr>
<td>Labour component</td>
<td>%</td>
</tr>
<tr>
<td>Fuel component</td>
<td>%</td>
</tr>
<tr>
<td>Explosives component</td>
<td>%</td>
</tr>
<tr>
<td>Detonators component</td>
<td>%</td>
</tr>
</tbody>
</table>

For Fixed component at ...% no price variation will be admissible.

If, in any case, the accepted offer includes some specific payment to be made to consultants or some materials supplied by Railway at fixed rate, such payments should be excluded from the gross value of the work for purpose of payment/recovery of variations.

The amount of variation in prices in the several components (labour, material etc.) shall be worked out by the following formulae:-

\[
\begin{align*}
(i) \quad L &= \frac{R \times (I-I_0)}{I_0} \times \frac{P}{100} \\
(ii) \quad M &= \frac{R \times (W-W_0)}{W_0} \times \frac{Q}{100} \\
(iii) \quad U &= \frac{R \times (F-F_0)}{F_0} \times \frac{Z}{100} \\
(iv) \quad X &= \frac{R \times (E-E_0)}{E_0} \times \frac{S}{100} \\
v) \quad N &= \frac{R \times (D-D_0)}{D_0} \times \frac{T}{100}
\end{align*}
\]

P.T.O.
L - Amount of price variation in labour
M - Amount of price variation in materials
U - Amount of price variation in fuel
X - Amount of price variation in explosives
N - Amount of price variation in detonators
R - Gross value of the work done by the contractor as per on-account bill(s) excluding cost of materials supplied by Railway at fixed price. This will also exclude specific payment, if any, to be made to the consultants engaged by the contractors (such payment will be indicated in the contractor's offer).

Io - Consumer Price Index Number for Industrial Workers - All India - published in R.B.I. Bulletin for the base period.
I - Consumer Price Index Number for Industrial Workers - All India - Published in R.B.I. Bulletin for the first month of the quarter under consideration.
Wo - Index Number of wholesale prices - By Groups and Sub-Groups - All commodities - as published in the R.B.I. Bulletin for the base period.
W - Index Number of wholesale prices - By Groups and Sub-Groups - All commodities - as published in the R.B.I. Bulletin for the first month of the quarter under consideration.
Fo - Index Number of wholesale prices - By Groups and Sub-Groups for Fuel, Power, Light and Lubricants as published in the R.B.I. Bulletin for the base period.
F - Index Number of wholesale prices - By Groups and Sub-Groups for Fuel, Power, Light and Lubricants as published in the R.B.I. Bulletin for the first month of the quarter under consideration.
Bo - Cost of explosives as fixed by DGS & D in the relevant rate contract of the firm from whom purchases of explosives are made by the contractor for the base period.
E - Cost of explosives as fixed by DGS & D in the relevant rate contract of the firm from whom purchases of explosives are made by the contractor for the first month of the quarter under consideration.
Do - Cost of detonators as fixed by DGS & D in the relevant rate contract of the firm from whom purchases of detonators are made by the contractor for the base period.
D - Cost of detonators as fixed by DGS & D in the relevant rate contract of the firm from whom purchases of detonators are made by the contractor for the first month of the quarter under consideration.
Note: The index number for the base period will be the Index Number as obtained for the month of opening of the tender and the quarters will commence from the month following the month of opening of tender.

The adjustment for variation in prices if required shall be made once every quarter in the on-account Payments. If more than one on-account Payment is made to the contractor in a quarter, the adjustment, if required, shall be made in each bill.

If the amount of variation in prices, either upward or downward is less than 5% of the amount payable to the contractor (excluding (a) cost of cement, steel and other items supplied by the Railway to the contractor at a fixed price, and (b) specific consultancy charges as per accepted offer), no adjustment shall be made. Further reimbursement/recovery due to variation in prices shall be made only for the amount in excess of 5% of the amount payable to the contractor.

Total amount of Reimbursement/Recovery due to variation in prices of the several components shall be limited to 15% (i.e., 20%-5% floor price) of the amount finally payable to the contractor excluding (a) cost of cement, steel and other items supplied by the Railway to the contractor at a fixed price, and (b) specific consultancy charges as per accepted offer.

**Price variation during extended period of contract**

The price adjustment as worked out above i.e., either increase or decrease will be applicable up to the stipulated date of completion of the work including the extended period of completion where such extension has been granted under clause 17(3) of the General Conditions of Contract. However, where extension of time has been granted due to contractors' failure under Clause 17(4) of the General Conditions of Contract, price adjustment will be done as follows:

(a) In case the indices increase above the indices applicable to the last month of original completion period or the extended period under clause 17(3) the price adjustment for the period of extension granted under clause 17(4) will be limited to the amount payable as per the indices applicable to the last month of the original completion period or the extended period under clause 17(3) of the General Conditions of Contract, as the case may be.

contd...
(b) In case the indices fall below the indices applicable to the last month of the original/extended period of completion under clause 17(3), as the case may be, then the lower indices will be adopted for price adjustment for the period of extension under clause 17(4) of the General Conditions of Contract.

The aforesaid ceiling of 15% will, however, be applicable whatever may be the actual period of the execution of the contract.

Note: "Materials supplied free by the Railway to the contractors will not form part of the value of the contract entered into and will fall outside the purview of the price variation clause."

********
Statement showing the percentage of labour components, material components, fuel components, etc. in various types of works.

<table>
<thead>
<tr>
<th>Component</th>
<th>Earthwork contracts</th>
<th>Ballast and Quarry Products Contracts</th>
<th>Tunneling Contracts</th>
<th>Other Works Contracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour component</td>
<td>55%</td>
<td>45%</td>
<td>40%</td>
<td>30%</td>
</tr>
<tr>
<td>Fuel component</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Other material components</td>
<td>35%</td>
<td>10%</td>
<td>5%</td>
<td>30%</td>
</tr>
<tr>
<td>Fixed component</td>
<td>35% will not be considered for any price variation.</td>
<td>40% will not be considered for any price variation.</td>
<td>35% will not be considered for any price variation.</td>
<td>35% will not be considered for any price variation.</td>
</tr>
</tbody>
</table>

Since it is not possible to legislate the above percentages for every type of work, Chief Engineer/Chief Engineer(Con) may vary these percentages in consultation with F.A & CAO/FA & CAO(Con) keeping in view the special features and complexities of the work involved. It should, however, be borne in mind that whatever percentages are to be adopted they should be first decided and indicated in the price variation clause to be included in the special tender Conditions before floating the tenders so that the tenderers are fully aware of them while quoting their rates.