

## Quadrant II- Notes

**Paper Code :** COD110

**Module Name:** Direct Labour Cost Variance – II

---

### ❖ Direct Labour Variance

A labour variance arises when the actual cost associated with a labour activity varies (either better or worse) from the expected amount. The expected amount is typically a budgeted or standard amount. The labour variance concept is most commonly used in the production area, where it is called a direct labour variance.

The labour variance can be used in any part of a business, as long as there is some compensation expense to be compared to a standard amount. It can also include a range of expenses, beginning with just the base compensation paid, and potentially also including payroll taxes, bonuses, the cost of stock grants, and even benefits paid.

Labour variances are just like material variances and can be defined as follows:

#### ***(a) Labour Cost Variance:***

Labour Cost Variance = Standard Cost of Labour – Actual Cost of Labour.

#### ***(b) Labour Rate (of Pay) Variance:***

Labour Rate of Pay Variance = Actual Time Taken (Standard Rate per hour – Actual Rate per hour).

#### ***(c) Labour Efficiency Variance:***

Labour Efficiency Variance (LEV) = Standard Rate (Standard Time for Actual Output – Actual Hours worked)

#### ***(d) Labour Mix Variance***

Thus labour mix or gang variance arises due to difference in composition of standard and actual labour force. It is calculated using the following formula:

Labour mix variances = Total actual labour hours

$$\left[ \text{Standard rate per labour hour of standard mix} - \text{Standard rate per hour of actual mix} \right]$$

OR

Labour mix variances = Total actual labour hours

Revised Standard rate per labour hour of standard mix — Actual hours of each type of labour

Revised standards hour's means that the standard proposition of each type of labour hours in the total actual hours. They are calculated as under:

Revised standards = 
$$\frac{\text{Standard hours of each type of labour} \times \text{Total Actual Hours}}{\text{Total Standard Hours}}$$
 hour's

**e) Labour Idle Time Variance:**

Labour idle time cost always affects profits of the concern adversely and hence the variance is considered as adverse. The following formula is used to calculate idle time variance:

Labour Idle Time Variance = 
$$\text{Standard Labour hour rate} \times \left[ \text{Actual labour hours worked} - \text{Actual labour hours paid} \right]$$

OR

Labour Idle Time Variance = Standard Labour hour rate X Idle time hours.

**Q.NO.1**

ABC Ltd manufactures a product. Budgeted production and standard labour cost for the month was as follows

Budgeted production - 8,000 units

Standard labour cost per unit (1 ½ hours @Rs. 4 per hour) Rs. 6

Actual results for the month were:

Production: 7,800 units

Wages : Rs. 56,000

Throughout the month 56 workers were employed who were on duty for 8 hours per day for 25 days. However, during the last week of the month each worker remained idle for 4 hours as a result of machine breakdown because of poor maintenance.

Calculate LCV, LTV, LEV, LITV

Solution:

| Particulars | Standard Cost<br>1 unit |             |              | Standard Cost for Actual<br>Output |             |              | Actual Cost (7800units) |             |              |
|-------------|-------------------------|-------------|--------------|------------------------------------|-------------|--------------|-------------------------|-------------|--------------|
|             | Time<br>Hrs.            | Rate<br>RS. | Value<br>Rs. | Time<br>Hrs.                       | Rate<br>RS. | Value<br>Rs. | Time<br>Hrs.            | Rate<br>RS. | Value<br>Rs. |
| Labour      | 1.5                     | 4           | 6            | (7800*1.5)<br>= 11,700             | 4           | 46,800       | (56*8*25)<br>=11,200    | 5           | 56000        |

Calculation of variances

**(a) Labour Cost Variance:**

Labour Cost Variance = Standard Cost of Labour – Actual Cost of Labour.

$$\begin{aligned} \text{LCV} &= (\text{ST} \times \text{SR}) - (\text{AT} \times \text{AR}) \\ &= (11,700 \times 4) - (11,200 \times 5) \\ &= 46800 - 56,000 \\ &= -9,200 \text{ (Unfavourable variances)} \end{aligned}$$

**(b) Labour Rate (of Pay) Variance:**

Labour Rate of Pay Variance = Actual Time Taken (Standard Rate per hour – Actual Rate per hour).

$$\begin{aligned} \text{LRV} &= \text{AT} (\text{SR} - \text{AR}) \\ &= 11200 (4 - 5) \\ &= 11,200 (-1) \\ &= -11,200 \text{ (Unfavourable variances)} \end{aligned}$$

**(c) Labour Efficiency Variance:**

Labour Efficiency Variance (LEV) = Standard Rate (Standard Time for Actual Output – Actual Hours worked)

$$\begin{aligned}\text{LEV} &= \text{SR (ST – AH worked)} \\ &= 4 (11,700 - 10,976) \\ &= 4 (724) \\ &= 2,896 \text{ (Favourable variances)}\end{aligned}$$

Calculation of Idle Time

Idle Time = Total number of Workers employed \* Total time worker remained idle.

$$\text{Idle Time} = 56 * 4 = 224 \text{ hours.}$$

$$\begin{aligned}\text{Actual Hours worked} &= \text{Actual time Paid} - \text{Idle Time} \\ &= 11200 - 224 \\ &= 10,976.\end{aligned}$$

**e) Labour Idle Time Variance:**

Labour Idle Time Variance = Standard Labour hour rate

|                                  |   |                                |
|----------------------------------|---|--------------------------------|
| Actual labour<br>hours<br>worked | — | Actual<br>labour<br>hours paid |
|----------------------------------|---|--------------------------------|

$$\begin{aligned}\text{LITV} &= \text{SR (AT worked – AT paid )} \\ &= 4 (10976 - 11,200) \\ &= 4 ( -224) \\ &= -896 \text{ (Adverse)}\end{aligned}$$