

Session: LT AB (Aerial Bunch) Cable Erection

Learning Objectives	Evaluation Criteria
<ul style="list-style-type: none"> • Explain how the PCC pole is erected in the pole pit • Explain the usage and purpose of stay wire and strut poles in overhead system • Explain how lineman climbs on the erected PCC pole using a ladder and • Explain how he fixes the accessories on the pole and lays the AB cable in the process of AB cable erection 	<p>Interactive Questioning</p>



Duration

30 Minutes



Resources

PowerPoint Presentation, Whiteboard, Markers, Screen and Projector



Facilitator’s Notes

In this session, take the participants through an interactive presentation with video snippets on how the PCC pole is erected in the pole pit, the usage and purpose of stay wire and strut poles in overhead system and AB cable erection.

End of Note



1. Tell:

Welcome to the video presentation on “LT AB (Aerial Bunch) Cable Erection”.

Facilitator’s Note:

- Welcome the participants and give a brief overview on the session
- Click to play the video



Facilitator’s Notes:

- Display the slide
- Read out the objectives and ask learners to note them
- Inform them that they will be asked questions during the session

End of Notes



2. Tell:

By the end of this session, you will be able to:

- Explain how the PCC pole is erected in the pole pit
- Explain the usage and purpose of stay wire and strut poles in overhead system
- Explain how lineman climbs on the erected PCC pole using a ladder and

- Explain how he fixes the accessories on the pole and lays the AB cable in the process of AB cable erection

Let us first observe how the pole and the overhead line are erected.



3. Tell:

Before erecting the pole, the pole has to be lifted with the help of a crane. Let us observe the same.

Facilitator's Note:

Click to play the video.



4. Tell:

The pole is lifted always from minor axis using the cantilever system.

Facilitator's Note:

Continue to play the video.



5. Tell:

Anchoring is required as we have to erect the pole in a pit.

Facilitator's Note:

Continue to play the video.



6. Tell:

The pole will be placed inside the pit carefully. It is first placed on the cemented base plate, while aligning it with the side anchors simultaneously.

Facilitator's Note:

Continue to play the video.



7. Tell:

The pit has to be re-filled with soil.

In this way, PCC pole is erected and a similar procedure is adopted for the erection of other poles.

Facilitator's Note:

Continue to play the video.

Tell:

There are seven PCC poles and two strut poles in this LT ABC line.

Here, you can see that the pole is firmly embedded and the stay wires are fitted at both ends of the poles.



















8. Tell:

Let us now learn about line erection. Here, you can notice that the lineman is climbing on the erected pole using a ladder.

Facilitator's Note:

Click to play the video.

-   **9. Tell:**
Here, you can notice that the lineman is tightening the cross-arm.
Facilitator's Note:
Click to play the video.
-   **10. Tell:**
Here, you can observe that the lineman is standing on the cross arm and fixing the Zola and safety belt over the pole.
Facilitator's Note:
Continue to play the video.
-   **11. Tell:**
Here, you can observe that the lineman is inserting the rope into the pulley.
Facilitator's Note:
Continue to play the video.
-   **12. Tell:**
Here, the ground staff are pulling the cable with the help of a rope.
Facilitator's Note:
Continue to play the video.
-   **13. Tell:**
Now, you will see how the complete overhead network of LT ABC is erected. The stay wires are fitted at both ends of the pole. A cross arm is fixed on every pole so that the lineman can climb easily.
Facilitator's Note:
Continue to play the video.
-   **14. Tell:**
Let us now learn about a strut pole, which is added to give vertical and horizontal support to a turned cable.
Facilitator's Note:
Click to play the video.
-   **15. Tell:**
The cable will be used for onward connection as an additional feeder through the sub-station and will go to another source.
Facilitator's Note:
Continue to play the video.
-   **16. Tell:**
Now, let's take a closer look at the LT ABC overhead system with its accessories and how connections are made to the distribution box for providing a service line to the

consumers.

Facilitator's Note:

Click to play the video.

Tell:

Here, you can notice the LT ABC overhead distribution network. ABC stands for Aerial Bunch Cables, which has a bunch of six cables.

In this video presentation, we have seen how ABC overhead line erection is carried out, completing up to the dead end for making additional LT feeder. We have also seen the accessories used in LT ABC.

Facilitator's Note:

Click to play the video.

Key Learning Outcomes



17. Tell:

Let us quickly recollect the key points of this session.

In this session, you have learnt that:

- It is very important to balance the pole before erecting it to avoid damage
- The stay wires are fitted at both ends
- The lineman climbs on the erected pole using a ladder if he has to work on the pole
- Cross arms are fixed on each pole so that lineman can stand on it while working
- A strut pole is added to give vertical and horizontal support to the turned cable
- ABC, which stands for Aerial Bunch Cable, has a bunch of six cables