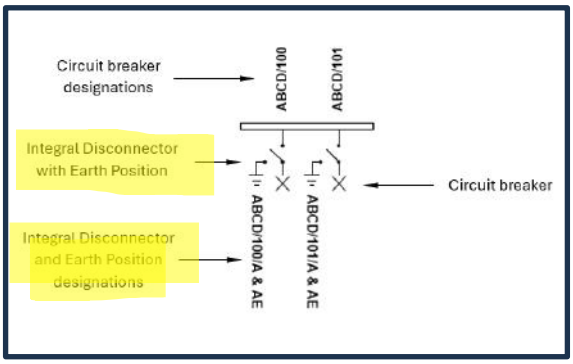
Eastern

Ref: **ER-CSTAN-018**
Date of issue: **09/10/2025**
Location: **Eastern Region**
Contact: **Paul Mint,**
Principal Engineer (Contact Systems)

Eastern Region – Contact Systems – Technical Advice Note

Distribution Substation Integral Disconnectors – Update to Isolation Diagrams & Instructions – Integral Disconnectors being used to implement OLE Isolations



Electrical Section or Sub-section	Lines Isolated	Limits of Isolation		Circuit Breaker / Disconnector (Switch)			Remarks
		From	To	Operate Remotely	Operate Manually	Point of Isolation	
650 (Complete)	**Down Slow** **Down Corby**	Down Slow SPC3/110/24	Down Corby SPC3/119/780	KGNA/650 KGNA/650/A HAAA/650 HAAA/650/A		HAAA/650/A KGNA/650/A 646C 650A 650C 654A	For this isolation, switch Nos. 646C and 650C MUST 650A 654A be in their normally open positions.
650A	**Down Slow**	SPC3/110/24	SPC3/113/464	KGNA/650 HAAA/650 HAAA/650/A	650/2	HAAA/650/A 646C 650A 650/2	For this isolation, switch No. 646C MUST 650A be in its normally open position.

Overview
In modern distribution substations, Integral Disconnectors with earth positions have been installed, that can be remotely controlled by the Electrical Control Room.

These devices provide enhanced electrical safety and can be used to provide an 'extra' earth to an OLE isolation.

Even though these devices have been installed for many years, there has not been a national agreed ruleset on how these devices should be shown on the OLE Isolation Diagrams & Instructions, and how these devices shall be used to implement an OLE isolation.

Because of this, their use has been inconsistent, or they have not been used at all for OLE Isolations.

Technical Authority have now published a ruleset on how the Isolation Diagrams & Instructions shall be depicted to include these devices and guidance on how they should be used to implement an OLE isolation.

On Eastern Region we are in the process of updating our Isolation Diagrams & Instructions that have remotely operable Integral Disconnectors and this Technical Advice Note advises on a set of actions to prepare you for this change.

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Advised Actions

1. Isolation practitioners are required to check the NRG Isolation Team Diagrams & Instructions Portal (QR Link Below), where previews of the forthcoming changes to the Isolation Diagrams & Instructions are shown.

   Please look out for the Integral Disconnector Isolation Diagram & Instruction changes which will be occurring on Eastern Region.

2. All Electrical Control Room Operators and Nominated Persons shall familiarise themselves with the document ***'Guidance for the use of Substation Integral Disconnectors'*** which is attached to this Technical Advice Note and will be included in the isolation documentation once updated.

   If you have any questions please raise these with your Line Manager.

3. All Nominated Persons are reminded that Earthing shall remain in accordance with the requirements of NR/L3/ELP/29987 or NR/L3/ELP/SAI25 (where deployed). The application of an 'extra' remote earth within the Substation does not negate the requirement to apply Circuit Main Earths (Duplicate Portable Earths) or Additional Earths (Single Earths) to an OLE isolation.

4. All Nominated Persons are reminded of the importance of applying and removing local earths and continuity jumpers if there is a break in continuity within the OLE system. Please refresh yourself on the requirements of Network Rail Work Instruction - **NR/OLE F05 - 'The application and removal of local earths and temporary continuity jumpers on AC Electrified Line**s' which is attached to this Technical Advice Note.

   Due to the 'extra' remote earth being applied within the Substation, residual currents in the OLE maybe increased, hence why it is important to manage any breaks in continuity appropriately.

   Remember with or without an extra remote earth applied, breaks in continuity within the OLE need to be appropriately managed by following NR/OLE F05.

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Distribution list

- Technical Head of Discipline [E&P]
- Route Asset Engineers (E&P)
- IME's
- EPME's
- Project Engineers (Works Delivery)
- Principal Engineer (CDE)
- Operations Manager (Electrical Control)
- Isolation Contractor – Responsible Manager

The above recipients should distribute and onward brief to effected parties as necessary.