

NR/L3/SIGELP/50001 Working on or near 650V Signalling Power Supplies		
NR/SPS S001		
Planning of Work on or Near Signalling Power Supplies above 175V		
Issue No. 01	Issue Date: 6 th June 2015	Compliance Date: 6 th June 2016

GENERAL



Safety: This procedure covers all persons accessing equipment housings such as location cases, power enclosures, PSPs, REBs and relay rooms containing signalling power supply equipment above 175V.

Hazards Associated with Electrical Supplies

The Electricity at Work Regulations 1989 requires that precautions are to be taken against the risk of death or injury from electricity in work applications. This procedure has been written in accordance with HSE publication HSG85 – Electricity at Work Safe Working Practices (3rd Edition)

The following clauses refer to the Planning Flow Chart contained within this instruction and specify what is to be considered at each decision step of the process.

PROCEDURE

Does the task involve direct works on the Signal Power Supply equipment above 175V?

Yes if any of the following apply: -

- Intrusive maintenance or replacement of 230V/400V/650V FSP switchgear and fusegear.
- Intrusive Maintenance or replacement of 230V/400V/650V step-down transformers.
- Intrusive Maintenance or replacement of 230V/400V/650V booster transformers.
- Intrusive Maintenance or replacement of 230V/400V/650V feeder cabling.
- Intrusive Maintenance or replacement of 230V/400V/650V internal FSP wiring.
- Intrusive Maintenance or replacement of 230V/400V/650V surge arrestors.
- Removal of 230V/400V/650V terminal covers and barriers for testing.
- Use of a portable IM unit for fault finding purposes.

Does the task involve work on or inside a cable route enclosure containing 230V/400V/650V cabling?

Yes if any of the following apply:-

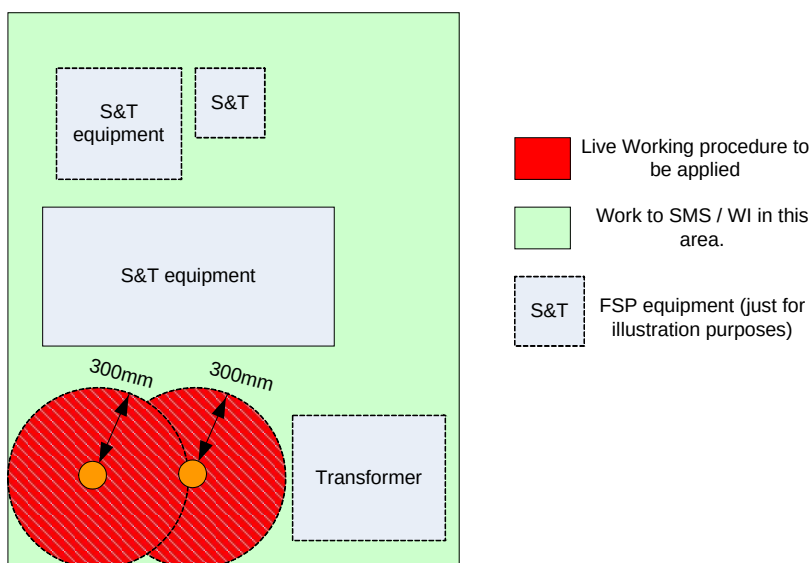
- Maintenance or repair of the cable route containing 230V/400V/650V signal supply cabling;
- Replacement or repair of any other cabling within the same cable route as 230V/400V/650V signal supply cabling;

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- Running new cable within an existing cable route containing 230V/400V/650V supply cabling;

Does the task including the use of tools, come within 300mm of exposed live terminals or conductors above 175V?

- Determine if the FSP contains exposed live terminals/conductors of the 650 V supply from either previous SIN119 information stored in Ellipse or by visual inspection.
- Determine if the task is within a 300mm radius of the exposed live terminals or conductors above 175V.



Does the task involve removing or refitting the terminal covers?

- Where testing requires that 230V/400V/650V terminal covers are be removed.
- Replacement of damaged or missing 230/400V/650V terminal cover.

Does the task involve fault finding with a portable IM unit?

- Using a portable IM unit for fault finding where a cable fault exists.
- Using a portable IM for periodic trending when booster transformers without an IM installation are found.

Is there a white period available within a reasonable timescale?

If a suitable white period is available within a reasonable timescale, identify this and follow the planning and publishing process in the WON for signalling disconnection. This then allows the dead working procedure to be followed.

If a white period is not available within a reasonable timescale, such as under fault conditions the relevant signal box should be consulted with regards to the operational impacts of isolating the 230V/400V/650 V supply to the FSP(s) and an emergency disconnection agreed.