

Document No:	HSS 406 OA 12	Issue Date:	30 November 2018
Type:	Operational Safety Alert		
Subject:	Operation of Early EMMCo TMC Hinged Transformer Links		
Applicable Areas:	EPN / LPN / SPN / Services	Applicable Job Roles:	All Operational Staff
Issued By:	Asset Management	Author:	Daniel Elphick
Circulation:			
<input type="checkbox"/> All UK Power Networks Staff <input checked="" type="checkbox"/> Asset Management <input checked="" type="checkbox"/> Capital Programme & Procurement <input checked="" type="checkbox"/> Connections <input checked="" type="checkbox"/> Contractors <input type="checkbox"/> Customer Services <input type="checkbox"/> Finance <input type="checkbox"/> G81 External website <input type="checkbox"/> HR & Communications <input checked="" type="checkbox"/> ICPs (Independent Connection Providers) <input checked="" type="checkbox"/> IDNOs (Independent Distribution Network Operators) <input type="checkbox"/> Information Systems <input checked="" type="checkbox"/> Legal <input type="checkbox"/> Meter Operators		<input type="checkbox"/> Network Operations <input checked="" type="checkbox"/> EPN <input checked="" type="checkbox"/> LPN <input checked="" type="checkbox"/> SPN <input checked="" type="checkbox"/> Connections Services <input checked="" type="checkbox"/> Distribution Capital Delivery <input type="checkbox"/> Highway Services <input type="checkbox"/> Logistics <input type="checkbox"/> Network Control <input type="checkbox"/> Powercare <input type="checkbox"/> Transport Services <input checked="" type="checkbox"/> SHE&TTA <input checked="" type="checkbox"/> In Business safety team <input checked="" type="checkbox"/> Safety Reps <input type="checkbox"/> Strategy and Regulation <input checked="" type="checkbox"/> UK Power Networks Services	

Please consult the author if you have any queries about the information below.

What Happened?

An Electrical Fitter was inserting and tightening the LV Tx links in a Transformer Mounted Cabinet (TFMC) when a flashover occurred.

The fitter involved was shaken but unhurt.

Investigation

The investigation is ongoing but early indications are that the type involved seems to be limited to some types manufactured by EMMCo in the early 1970's and is, from the serial number range, probably exclusive to SPN, but due to incomplete data in the Asset Register this cannot be definitively confirmed.

Each transformer link consist of a two bladed tinned copper solid link with two securing bolts, with the bottom one forming a hinge.

The investigation has concluded the nut on the left hand side of the left hand blade is only there to prevent the hex headed bolt, from being undone too far, or fully, when the link is loosened. The grub screw in the nut prevents it being undone from the bolt.

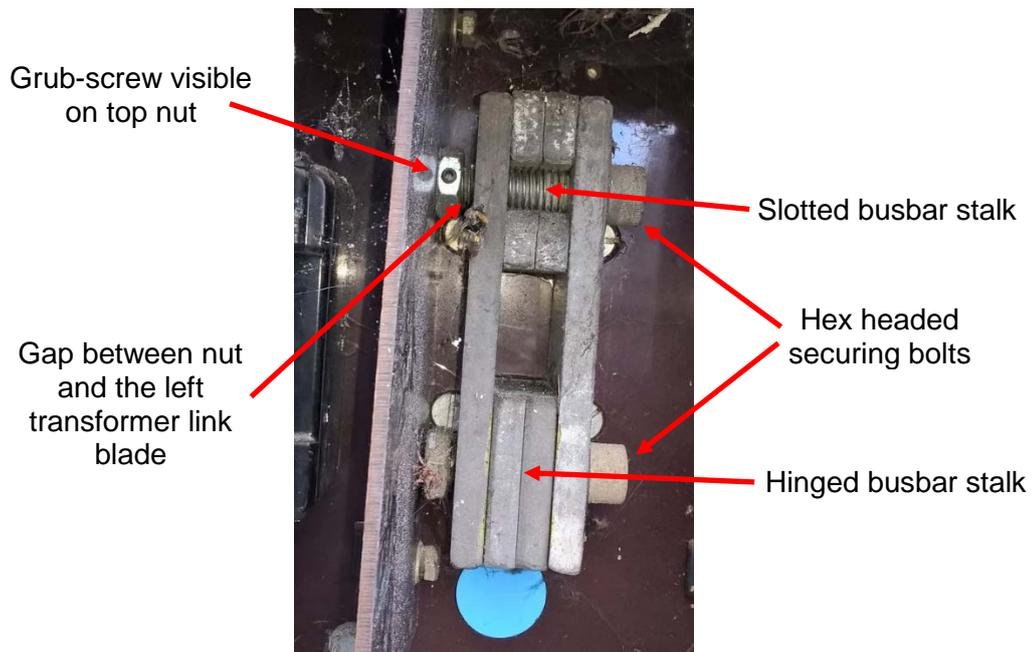
The hex headed bolt tightens into the left hand blade, which is threaded, this tightens the left and right hand moving blades onto the fixed stalks.

It is the responsibility of line management to ensure that all appropriate employees are issued with this Alert and their understanding of the contents is checked. This Alert will be subject to compliance audits after 14 days from the date of issue.

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Transformer Mounted Cabinet showing Transformer links at top



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It is not required to use a spanner to hold the nut on the left hand side of the blades. This nut does not affect the tightening or loosening of the link.

This type of link with a hex socket headed bolt shall only be tightened and loosened, using the approved insulated tool, provided for this purpose and when both bolts are loose.

Only this approved insulated tool shall be used to tighten, insert or to remove this type of link. **No other tools are required.**

Actions

This operational alert shall be briefed out and issued, to all operational staff, who are required to remove and insert transformer links in LV TFMCs as part of their role.

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Transformer Mounted Cabinet showing the insulated tool used to tighten the hex socket headed transformer link bolt.



Transformer link with the hex socket headed transformer link bolt and nut removed to show the threaded inside of the left hand blade.

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