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10	DAMAGE TO STRANDED CATENARY FROM BIRD INITIATED SHORT CIRCUITS AT PORTAL STRUCTURES
COMPONENT	Catenary wire and supports at portal structures
PROBLEM	<p>Bird strikes at portal structures cause short circuits from live equipment to earth and circuit breaker trippings. Where stranded catenary runs through the bridge, these short circuits cause conductor stranding with a risk of dewirement.</p> <p>This campaign change is related to campaign changes 31, 32 and 33 and also to campaign change 20 (see actions required).</p>
	

Reference Information	
Ellipse standard job number	13010
Ellipse standard job description	Resolve bird strike risk at portal structure
Category	Catenary
Priority	Yes
Types of OLE affected	Ex-DC; Mk1; Mk2
Original equipment dates	Before 1970



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DAMAGE TO STRANDED CATENARY FROM BIRD INITIATED SHORT CIRCUITS AT PORTAL STRUCTURES

ACTION REQUIRED

The following options are available. These are not necessarily in order of preference.

1. Increase electrical clearance to 600mm minimum;
2. Install inverted cantilever catenary support (for catenary support above the boom, to increase electrical clearance);
3. Fit anti bird secondary insulation mats to the structure;
4. Cut in solid conductors at support. This solution will reduce the risk of conductor stranding but will not reduce the risk of circuit breaker trippings.

This campaign change can be delivered together with campaign change 20 when fitting inverted cantilever catenary supports.

Do not use secondary insulation as a justification for infringing minimum electrical clearances.

