

# Substation Civils Re-Opener

## Basic Project Investment Paper


### Abham 400kV – Installation of Lighting Within Substation Compound

Author	Steve Barnett	Date Started	14/06/2020
Reference Number	2021-403		

#### 1. Scheme Summary by Regulatory Category

Unique Identifier	Site	Asset	RIIO Financial Category	Output Year	Total Costs (£m)
2021-403	Abham 400kV Substation	Substation Lighting	Security	2025	

#### 2. Driver Summary

Project Overview	There is no external lighting around the substation. Existing lamps are on a frame gantries but do not work. A new lighting scheme to be proposed and installed.
Plant Status Link:	2021-403
Scope Diagram/Photographs	 <p>Aerial view of the HV compound.</p>



### 3. Project Summary

<b>Overview</b>	The current compound lighting has failed and is no longer suitable for modern working practices. Luminaires were historically mounted on high level gantries. Our move to MEWP based maintenance and the move away from using ladders on gantries has made these difficult to maintain. Additionally, modern lighting standards are very different to those of the 1960's & '70's. New lighting is to be maintainable from ground level without the use of a MEWP, by means of luminaires that can be lowered to ground.
<b>Programme/ Duration</b>	Site duration is 6 months.
<b>Outage Requirements &amp; Ops Resource</b>	The works are only expecting to require H.V system outages when removing old masts/fixtures. Local L.V. works will be required and SAP resource.
<b>Key Risks and Hazards</b>	Scope of works will be dependent on the design location of new light fixtures. Fixtures will require new cabling to be installed. Where existing cabling can be retained, it will need assessing for condition. Existing lighting columns / masts may need outages to safely demolish.
<b>Design to Be Resolved</b>	The scheme requires a full design, either pre tender or by a design and build contractor post contract award. Availability of appropriate designers has previously been difficult and market resource may be tricky. Design is to follow TS 2.10.04
<b>Development Strategy/Interacting Works</b>	It may be possible to combine with the control building refurbishment scheme.
<b>Assets In Ellipse:</b>	Not yet listed within Ellipse.
<b>Contract Strategy</b>	Competitively tender via the minor civils framework, or possibly an electrical framework, either build only or design and build.

### 4. Baseline Cost Estimates

All costs in this section are base costs (pre-out-turned), to 2 decimal places

Base year	2018/19							
Base Cost totals (£m)	Plant Status No.	Costs incurred to date	Design Costs	Contractor Prelims	Contractor Construction Cost	Contractor Temporary Works	Contingency (£m)	Total Project Cost (£)
	2021-403	0	████	████	████	████	████	████

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Approval					
1	Commercial and Portfolio Manager	Sheena Froggatt		17/08/22	<p>The Commercial and Portfolio Manager has determined that this scheme is in line with overall business goals and objectives.</p> <p>*Approved subject to cost review.</p>
2	Asset Management Lead	Damien Culley		22/08/22	<p>The Asset Management Lead has determined that this scheme is in line with overall business goals and objectives.</p>