Substation Civils Re-Opener
Basic Project Investment Paper
Barking 400kV – Installation of GIS Access Platform

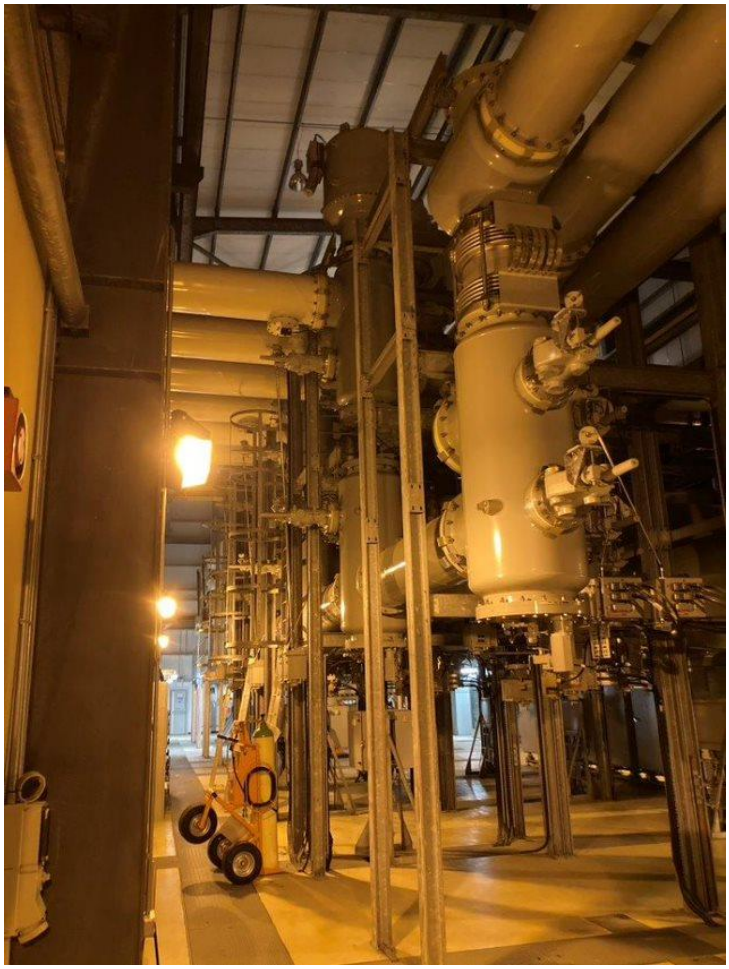
Author	Steve Barnett	Date Started	14/06/2022
Reference Number	2013-177		

1. Scheme Summary by Regulatory Category

Unique Identifier	Site	Asset	RIIO Financial Category	Output Year	Total Costs (£m)
2013-177	Barking 400kV Substation	GIS Hall	Buildings	2025	[redacted]

2. Driver Summary

Project Overview	At Barking 400kV substation there isn't a means of safe access to Gas Zones 4 on each of the feeder bays. This limits the access to the wound VT's and restricts maintenance of the assets and access to the gas filling points. The project proposes to install new access platforms and stairs/ladders at each feeder bay to allow access to the filling points at the top of the GIS equipment. A survey of each feeder bay will need to be carried out to determine the location and size of each platform and stairs/ladder.
Plant Status Link:	2013-177

Scope Diagram/Photographs	

3. Project Summary

Overview	The project proposes to install new access platforms and stairs/ladders at each feeder bay to allow access to the filling points at the top of the GIS equipment. The project will require a survey of each feeder bay to determine the location and size of each platform and stairs/ladder. This will take approximately 1 week. The access arrangements and platforms will then require fabrication. This is expected to take approximately 3 months. Once this is complete, the installation can take place at the substation taking 1-2 weeks per bay. This work will be phased to suit operational requirements.
Programme/Duration	Site works expected to take around 6 months. The works will need to be carried out intermittently to ensure that they do not impact operational arrangements within the substation.
Outage Requirements & Ops Resource	No required outages anticipated as the works are around GIS trunking
Key Risks and Hazards	Working at height Congested areas Access/Egress Proximity to SF6 equipment.

Design to Be Resolved	No design works has yet been undertaken. Further detailed surveys will be required for the fabrication design to be produced.
Development Strategy/Interacting Works	Works will be planned to take place around site constraints. No known interacting works currently.
Assets In Ellipse:	BARK4SBLD BARK4SGT1
Contract Strategy	Competitive Tender or Multiple Quotations.

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 (£m)**	**Design Costs (£m)**	**Contractor Prelims (£m)**	**Contractor Construction Cost (£m)**	**Contractor Temporary Works (£m)**	**Contingency (£m)**	**Total Project Cost (£m)**
	2013-177	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Notes:	Estimated design cost for further surveys and design for fabrication. Contractor produced estimate incorrectly applied prelims percentage. This is adjusted to the correct value in this paper. Covered by assurance adjustment in Appendix 02.							

5. Declarations

Approval		**Name**	**Signature**	**Date**	**Declaration**
1	Commercial and Portfolio Manager	Sheena Froggatt		03/08/22	The Investment Team Manager has determined that this scheme is in line with overall business goals and objectives.
2.	Asset Management Lead	Damien Culley		22/08/22	The Asset Management Lead has determined that this scheme is in line with overall business goals and objectives.