



PERENCO UK LIMITED Trent 43/24a Topsides and Riser Sections Decommissioning Programmes

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Table of Contents

1. EXECUTIVE SUMMARY	8
1.1 Decommissioning Programme	8
1.2 Requirement for Decommissioning Programme(s)	8
1.3 Introduction	8
1.4 Overview of Installations Being Decommissioned	10
1.4.1 Installations	
1.4.2 Pipelines	11
1.5 Summary of Proposed Decommissioning Programmes	
1.6 Field Location Including Field Layout and Adjacent Facilities	14
1.7 Industrial Implications	17
2. DESCRIPTION OF ITEMS TO BE DECOMMISSIONED	
2.1 Installations: Surface Facilities	
2.2 Pipelines Including Stabilisation Features	
2.3 Wells	
2.4 Drill Cuttings	
2.5 Inventory Estimates	21
3. REMOVAL AND DISPOSAL METHODS	23
3.1 lopsides	
3.1.1 Topsides Decommissioning Overview	
3.1.2 Preparation/Cleaning	
3.1.3 Removal Methods	
3.2 Pipelines	28 20
3.5 Wells	28
5.4 Waste Streams	29
4. ENVIRONMENTAL APPRAISAL OVERVIEW	
4.1 Environmental Sensitivities (Summary)	
4.2 Potential Environmental Impacts and their Management	31
5. INTERESTED PARTY CONSULTATIONS	34
6. PROGRAMME MANAGEMENT	35
6.1 Project Management and Verification	35
6.2 Post-Decommissioning Debris Clearance and Seabed Clearance Verification	35
6.3 Schedule	
6.4 Costs	
6.5 Close Out Report	
6.6 Post-Decommissioning Monitoring and Evaluation	
7. SUPPORTING DOCUMENTS	



Tables

Table 1.1: Installation(s) Being Decommissioned - Trent TP Platform	10
Table 1.2: Installation(s) Being Decommissioned - Trent TC Platform	10
Table 1.3: Installation(s) Section 29 Notice Holders Details - Trent TP Platform	11
Table 1.4: Installation(s) Section 29 Notice Holders Details - Trent TC Platform	11
Table 1.5: Pipeline(s) Being Decommissioned	11
Table 1.6: Pipeline(s) Section 29 Notice Holders Details (PL253b, PL1220 and PL1221)	11
Table 1.7: Pipeline(s) Section 29 Notice Holders Details (PL2162, PL2163)	12
Table 1.8: Summary of Decommissioning Programmes	12
Table 1.9 Adjacent Facilities	15
Table 2.1: Surface Facilities Information	18
Table 2.2: Pipeline/Flowline/Umbilical Information	18
Table 2.3: Well Information	19
Table 2.4: Drill Cuttings Pile(s) Information	20
Table 3.1: Cleaning of Topsides for Removal	26
Table 3.2: Topsides Removal Methods	27
Table 3.3: Pipeline or Pipeline Groups Decommissioning Options	28
Table 3.4: Well Plug and Abandonment	28
Table 3.5: Waste Stream Management Methods	29
Table 3.6: Inventory Disposition	29
Table 4.1: Environmental Sensitivities	
Table 4.2: Environmental Impact Management	
Table 5.1: Summary of Stakeholder Comments	34
Table 7.1: Supporting Documents	

Figures

Figure 1.1: Trent Platforms	9
Figure 1.2: Field Location in UKCS	14
Figure 1.3: Field Layout	15
Figure 1.4: Adjacent Facilities	17
Figure 2.1: Pie Chart of Estimated Inventories (Topside TP)	21
Figure 2.2: Pie Chart of Estimated Inventories (Topside TC)	22
Figure 3.1: Trent TP Platform	24
Figure 3.2: Trent TC Platform	25
Figure 6.1: Gantt Chart of Project Plan	36

Appendices

Appendix	Description	Page
1	Marine protected areas within the vicinity of Trent	40
2	Windfarms, cables, & marine aggregate sites within the vicinity of Trent	41
3	Public Notice	42

Terms and Abbreviations

Abbreviation	Explanation
%	Percentage
"	Inch
0	Degrees
AB1	Abandoned Phase 1
AB2	Abandoned Phase 2
AB3	Abandoned Phase 3 (fully abandoned)
AtoN	Aid to Navigation
BGT	Bacton Gas Terminal
BP	BP Exploration Operating Company Limited
СА	Comparative Assessment
CIP	Communication Interface Plan
СОР	Cessation of Production
DESNZ	Department for Energy Security and Net Zero
DP	Decommissioning Programme
EA	Environmental Appraisal
E&A	Exploration & Appraisal
EC	European Commission
EDP	Eastern Daily Press
EEEGR	East of England Energy Group
EL	Elevation
EPS	European Protected Species
EU	European Union
EUNIS	European Nature Information System
GHG	Greenhouse Gas
HAZMAT	Hazardous Materials
HCS	Hydrocarbon Safe
HLV	Heavy Lift Vessel
HSE	Health and Safety Executive
HVAC	Heating, Ventilation and Air Conditioning
ICES	International Council for the Exploration of the Sea

Abbreviation	Explanation
IEER	Instrument and Electrical Equipment Room
IWS	International Waste Shipment
JUB	Jack-Up Barge
km	Kilometre
LAT	Lowest Astronomical Tide
LSA	Low Specific Activity
m	Metre
m ³	Cubic metre
MAG	Magnetometer
MBES	Multi Beam Echo Sounder
MCZ	Marine Conservation Zones
MEG	Monoethylene Glycol
MLQ	Maintenance Living Quarters
mm	Millimetre
МОАВ	Mobile Offshore Application Barge
МРА	Marine Protected Area
N/A	Not applicable
NFFO	National Federation of Fishermen's Organisations
NIFPO	Northern Ireland Fish Producers' Organisation
NORM	Naturally Occurring Radioactive Material
NSTA	North Sea Transition Authority
NUI	Normally Unattended Installation
OEUK	Offshore Energies UK
OPEP	Oil Pollution Emergency Plan
OPRED	Offshore Petroleum Regulator for Environment & Decommissioning
OSPAR	Oslo and Paris Convention
P&A	Plug and Abandonment
Perenco	Perenco UK Limited
PL	Pipeline
PLC	Public Limited Company
PPE	Personnel Protection Equipment

Abbreviation	Explanation
PWA	Pipeline Works Authorisation
SAC	Special Area of Conservation
SCAP	Supply Chain Action Plan
SFF	Scottish Fishermen's Federation
SLV	Single Lift Vessel
SNS	Southern North Sea
SSS	Side-Scan Sonar
ТС	Trent Compression Platform
Те	Metric Tonne
ТР	Trent Production Platform
TR	Temporary Refuge
UK	United Kingdom
UKCS	UK Continental Shelf
VI	Sixth

1. EXECUTIVE SUMMARY

1.1 Decommissioning Programme

This document contains the decommissioning programmes (DPs) for the removal of the topsides of the Trent Production Platform (TP) and Trent Compression Platform (TC) from the Trent Installation, as well as the top of the riser sections of pipelines PL253b, PL1220 and PL1221 on the TP, and the top of the riser sections of pipelines PL2163 on the TC.

Perenco UK Limited (Perenco) has prepared this DP on behalf of all Section 29 (S29) Notice Holders. The Section 29 notice holder's letters of support will be provided in Section 8 in the final approved revision of this document.

A separate Jackets DP will be submitted for the Trent jackets, template, and manifold. The lower sections of the riser PL2162 and PL2163 are located within the TC jacket legs and will be removed in the Trent jackets campaign and included in the Jackets DP. The top of the riser sections will be removed with the TC topside and are included in this DP.

Pipelines PL253b, PL1220, PL1221 will be covered under a separate Pipeline DP except for the top sections of the risers which will be removed with the topsides and cut just below the spider deck.

1.2 Requirement for Decommissioning Programme(s)

Installations: In accordance with the Petroleum Act 1998, the Section 29 notice holders of the Trent (TP and TC) topsides (see Tables 1.3 and 1.4) are applying to the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) to obtain approval for decommissioning the installations detailed in Section 2.1 of this programme. (See also Section 8 - Section 29 Notice Holders Letter(s) of Support).

Pipelines: In accordance with the Petroleum Act 1998, the Section 29 notice holders of the PL253b, PL1220, PL1221, PL2162 and PL2163 pipelines (see Tables 1.6 and 1.7) are applying to OPRED to obtain approval for decommissioning the pipelines detailed in Section 2.2 of this programme. (See also Section 8 – Section 29 Notice Holders Letter(s) of Support).

In conjunction with public, stakeholder and regulatory consultation, the decommissioning programmes are submitted without derogation and in compliance with national and international regulations and OPRED guidelines. The schedule outlined in this document is for a five-years decommissioning project plan due to begin in Q3 2025 at the earliest.

1.3 Introduction

The Trent installation is located in the Trent Field in Block 43/24a (Licence P.685) of the United Kingdom Continental Shelf (UKCS) in the Southern North Sea (SNS). It stands in 48.6 metres (m) of water, approximately 116 kilometres (km) from Flamborough, on the UK coastline, and 72km from the UK/Netherlands international line. The Trent installation is located within the Southern North Sea Special Area of Conservation (SAC) for the Harbour Porpoise and is located 9.6km south of the Dogger Bank SAC, a designated site for the Annex I Sandbanks habitat.

The Trent installation consists of two adjoining normally unattended installation (NUI) platforms, the TP, a small, fixed steel structure, and the TC, a Mobile Offshore Application Barge (MOAB). Perenco

acquired 100% of the Trent field in 2003, taking over the operatorship. The TP was installed in 1996 and the TC was installed by Perenco in 2005. The two platforms are connected by a 30m long bridge (see Figure 1.1).

Perenco has explored all avenues for continuing production and concluded that due to high operational costs and a reduction of gas production, continued operations are uneconomical. Due to the cost of purchasing carbon dioxide allowances, the cost of running the Trent compression train significantly increased. In addition, the compression was unable to operate at the current low rates from the limited well stock which is subject to liquid loading.

Trent hydrocarbon processing was temporarily suspended in 2020 for economic reasons and the wells were isolated in 2021. The Cessation of Production (COP) documentation was submitted to the North Sea Transition Authority (NSTA) and approved in August 2023. Trent is currently in the warm suspension phase.



Figure 1.1: Trent Platforms

Before the cessation of production, produced gas from Trent was combined with imported third-party gas from the Garrow and Kilmar fields (also known as the Tors fields) that is operated by Waldorf Production/Energean UK Ltd. Kilmar is approximately 21km west and Garrow is approximately 43km west of the Trent installation.

On the Trent installation, the combined gas was metered and then exported via a 24" pipeline PL253b to PL253, via a subsea Wye manifold, which is located approximately 1km east of Trent. The Cygnus installation export pipeline (PL3088) is also connected to the Wye manifold. From the manifold, the 24" ETS pipeline continues to the Bacton Gas Terminal (BGT).

The Trent export pipeline (PL253b) is connected to the PL253 and cannot be fully decommissioned until the Cygnus field reaches COP.

Therefore, there will be a separate pipeline DP for the decommissioning of the Trent pipelines (PL253b, PL1220 and PL1221). However, the topside hydrocarbon safe (HCS) campaign will include the flushing of the PL253b section from Trent to the Wye Manifold and the top of the TP riser sections will be removed with the topsides when cut just below the spider deck. The lower sections of the risers will be removed during the jacket removal campaign and will be included in the Jackets DP.

The lower sections of the Kilmar riser (PL2162 and PL2163) that are located within a TC jacket leg will be cut and removed as part of the jacket campaign and included in the Jackets DP. The top sections of the risers will be removed with the topside (included in this DP). Pipelines PL2162 and PL2163 have been covered in the Kilmar Decommissioning Programmes, approved on 6th May 2025.

1.4 Overview of Installations Being Decommissioned

1.4.1	Install	lations

Table 1.1: Installation(s) Being Decommissioned - Trent TP Platform					
Field(s)	Trent	Production Type (Oil/Gas/Condensate) Gas			
Water Depth (m)	48.6	UKCS block		43/24a	
Distance to median (km)	Distance to median (km) 72 Distance from nearest UK coastline (k		ne (km)	116	
Surface Installation(s)					
Number	Type Topsides Weight (Te)				
1		Topsides 2,094			
Subsea Installation(s) Number of Wells					
Number	Туре	Platform		Subsea	
0	N/A	N/A 5		0	
Drill Cuttings pile(s)					
Number of Piles O Total Estimated volume (m³) N/A			N/A		

Table 1.2: Installation(s) Being Decommissioned - Trent TC Platform					
Field(s)	Trent	Production Type (Oil/Gas/Condensate)	Gas		
Water Depth (m)	48.6	UKCS block	43/24a		
Distance to median	72	Distance from nearest UK coastline	116		
Surface					
Number	Туре	Topsides Weight (Te)			
1	MOAB	1,339			
Subsea Ins	Subsea Installation(s) Number of Wells				
Number	Туре	Platform	Subsea		
0	N/A	0	0		

Drill Cuttings			
Number of Piles	0	Total Estimated volume (m ³)	N/A

Table 1.3: Installation(s) Section 29 Notice Holders Details - Trent TP Platform					
Section 29 Notice Holder(s)	Registration Number	Equity Interest (%)			
Perenco UK Limited	04653066	100			
ARCO British Limited, LLC	BR001713	0			
BP Exploration Operating Company Limited	00305943	0			
Serica Energy Chinook Limited	SC335305	0			

Table 1.4: Installation(s) Section 29 Notice Holders Details - Trent TC Platform					
Section 29 Notice Holder(s) Registration Number Equity Interest (%)					
Perenco UK Limited	04653066	100			
Serica Energy Chinook Limited	SC335305	0			

1.4.2 Pipelines

Table 1.5: Pipeline(s) Being Decommissioned				
Number and total length (m) of Pipeline(s) / umbilical(s)	5 – PL253b* (13m), PL1220* (13m), PL1221* (13m), PL2162* (6m), PL2163* (6m)			
(Full details to be given in Table 2.3)				

*Top of riser section only

Table 1.6: Pipeline(s) Section 29 Notice Holders Details (PL253b, PL1220 and PL1221)					
Section 29 Notice Holder(s)	Registration Number	Equity Interest (%)			
Perenco UK Limited	04653066	100			
ARCO British Limited, LLC	BR001713	0			
BP Exploration Operating Company Limited	00305943	0			
Serica Energy Chinook Limited	SC335305	0			

Table 1.7: Pipeline(s) Section 29 Notice Holders Details (PL2162, PL2163)					
Section 29 Notice Holder(s) Registration Number Equity Interest (%)					
Perenco UK Limited	04653066	100			

1.5 Summary of Proposed Decommissioning Programmes

Table 1.8: Summary of Decommissioning Programmes				
Proposed Decommissioning Solution	Reason for Selection			
Topsides				
The Topsides will be rendered HCS using a decommissioning JUB during the HCS campaign. Several topside modules may be removed piecemeal during the HCS Campaign using the JUB and transported by barge to the UK mainland for recovery/disposal. The remaining Topside modules will be removed by a Heavy Lift Crane Vessel in one section.	Complies with The Convention for the Protection of the North-East Atlantic or Oslo and Paris Convention (OSPAR) requirements and OPRED guidelines.			
The topside modules will be transported to a suitable yard either in the EU or in the UK (to be determined). Re-use followed by recycling and other recovery routes before disposal as a final option is considered.				
Pipelines, Flowlines, Umbilicals & Riser Sections				
The top of riser sections PL253b, PL1220, and PL1221, which remain attached to the TP topside, will be cut just below the spider deck and removed together with the TP topside for dismantlement onshore. The top of riser sections PL2162 and PL2163, which will be cut 0.5m below the hull, will be removed together with the TC topside for dismantlement onshore. Recycle and other recovery methods will be the prioritised disposal options.	Meets HSEx regulatory requirements and the Offshore Energies UK (OEUK) and NSTA guidelines.			
Wells				
The plug and abandonment of all platform wells to comply with the HSE regulation, i.e. "The Offshore Installations and Wells (design and construction etc.) Regulations 1996", and in accordance with the OEUK Well Decommissioning Guidelines, Issue 7, November 2022. Conductors will be cut a minimum of 3m below the natural seabed level. If any practical difficulties are encountered	Meets HSE regulatory requirements and is in accordance with OEUK and NSTA guidelines. Conductor will be cut to at least 3m below the mudline.			
Interdependencies				

Trent neighbours several platforms and associated pipelines, although most of these have been decommissioned. The only active installations are in the Cygnus field, located 51km to the northeast and Ravenspurn field 47km to the southwest. The Cygnus produced gas feeds into the Wye Manifold, which the Trent also used when operating. Production from the Kilmar and Garrow field previously fed into Trent CP. These two fields have ceased production and are due for decommissioning in 2025. It is considered that the Trent decommissioning will not impact any oil and gas infrastructure.

The nearest active windfarm is Hornsea Wind Farm, located approximately 32km south of Trent. The Dogger Bank A windfarm, located approximately 45km to the north, is under construction. Due to the distance from the sites, and the presence of the 500m around the Trent installation, it is considered that there will be no impact on either party.

1.6 Field Location Including Field Layout and Adjacent Facilities



Figure 1.2: Field Location in UKCS



Figure 1.3: Field Layout

Table 1.9 Adjacent Facilities							
Operator/Owner	Name	Туре	Distance/ Direction	Information	Status		
Energean UK Ltd	Kilmar	Platform	21km west	Adjacent platforms	Non- operational		
Energean UK Ltd	Garrow	Platform	44km west	Adjacent platforms	Non- operational		
INEOS UK SNS Limited	Cavendish	Platform	21km northeast	Adjacent platforms	Non- operational		
Ithaca (NE) E&P Limited	Cygnus	Platform	51km northeast	Adjacent platforms	Operational		

Operator/Owner	Name	Туре	Distance/ Direction	Information	Status	
Chrysaor Production (U.K.) Limited	Munro	Platform	44km northeast	Adjacent platforms	Non- operational	
Chrysaor Production (U.K.) Limited	Kelvin	Platform	latform 54km east Adjacent platforms		Non- operational	
Chrysaor Production (U.K.) Limited	Boulton	Platform	33km southeast	Adjacent platforms	Non- operational	
Perenco UK Limited	Ravenspurn North	Platforms	47km southwest	Adjacent platforms	Operational	
Ithaca (NE) E&P Limited	Wye Manifold (Cygnus B Crossing)	Manifold	1.2km east	Adjacent manifold	Operational	
Energean UK Ltd	PL2162/ PL2163	Pipeline/ chemical line	Attached to Trent	Kilmar to Trent	Non- operational	
Ithaca (NE) E&P Limited	PL253a	Pipeline	1.1km east	Esmond to Wye manifold	Non- operational	
Ithaca (NE) E&P Limited	PL253	Pipeline	1.1km east	Wye manifold to Bacton Gas Terminal	Operational	
Perenco UK Limited	PL253b	Pipeline	Attached to Trent	Trent to Wye manifold	Operational	
Perenco UK Limited	PL1220/ PL1221	Pipeline/ chemical line	Attached to Trent	Tyne to Trent	Non- operational	
Ithaca (NE) E&P Limited	PL3088	Pipeline	1.2km east	Cygnus to Wye manifold	Operational	
Impacts of Decom	missioning Propos	sals on third pa	arty/adjacent fa	cilities		
Decommissioning of the TP and TC topsides is expected to have no impact on the adjacent						

facilities.



Figure 1.4: Adjacent Facilities

1.7 Industrial Implications

The Trent decommissioning activities are planned carefully to recognise synergies and efficiencies. Engineering and planning consider the potential integration of various activities; therefore, the decommissioning activities may be completed in an alternate order to that described above in Section 1.5.

All contracts will be tendered according to Perenco procedures. The supplier offers will be assessed against many criteria, including their technical ability and capacity to execute the work in a safe and efficient manner that minimises the impact on the environment; the commercial offer; and the experience of conducting this type of operation in the UKCS.

Perenco has engaged with the NSTA Supply Chain team, and it has been agreed that a Supply Chain Action Plan (SCAP) is required for the Trent Topside DP. The draft SCAP is currently in production and will be submitted to NSTA for review once complete.

Perenco is an active participant in various industry initiatives including:

- OEUK Supply Chain Forum.
- OEUK Decommissioning Forum.
- OEUK Wells Forum.

• East of England Energy Group (EEEGR).

Current operational contracts for items such as environmental permitting, potential vessel sharing, and logistical support will be implemented to support decommissioning activities and wider business optimisation.

2. DESCRIPTION OF ITEMS TO BE DECOMMISSIONED

2.1 Installations: Surface Facilities

Table 2.1: Surface Facilities Information							
	e 114	Location	Topsides/Facilities				
Name Facility Type		WGS84 WGS84 decimal decimal of a minute		Weight (Te)	No of modules		
Trent TP	Topside	54° 17' 56.1539" N 01° 39' 30.3669" E	54 17.936N 01 39.506E	2,094 ^[1]	1		
Trent TC	Topside (MOAB)	54° 17' 55.1744"N" 01° 39' 28.4183"E"	54 17.920N 01 39.474E	1,339	1		

[1] Trent TP Topsides weight includes the connecting bridge between TP and TC (bridge weight is approx. 30 Te), and riser weights.

2.2 Pipelines Including Stabilisation Features

	Table 2.2: Pipeline/Flowline/Umbilical Information							
Pipeline Number	Description	Length (m)	Product conveyed	From – To Location Points	Burial Status	Pipeline Status	Current Content	
PL253b*	Export line (24")	13	Gas	From TP ESDV to cut location below the spider deck at approximately +13m level above LAT	Exposed	Operational	Hydro- carbons	
PL1220*	Import line (20")	13	Gas	From TP Pig Trap to cut location below the spider deck at approximately	Exposed	Out of use	Seawater	

				+13m level above LAT			
PL1221*	Chemical line (3")	13	Methanol	From TP ball valve to cut location below the spider deck at approximately +13m level above LAT	Exposed	Out of use	Seawater
PL2162*	Export line (12")	7.5	Gas	From Trent isolation valves to cut point below the hull at approximately +13m level above LAT	Exposed	Out of use	Seawater
PL2163*	Service line (3")	7.5	MEG and corrosion inhibitor	From Trent isolation valves to cut point below the hull at approximately +13m level above LAT	Exposed	Out of use	Seawater

*Top of riser section only

2.3 Wells

Table 2.3: Well Information				
Platform Wells	Designation	Status	Category of Well	
43/24-P1*	Gas Production	AB2	PL-0-0-3	
43/24-P2	Gas Production	Completed (Shut-in)	PL-3-3-3	
43/24-P3	Gas Production	Completed (Shut-in)	PL-3-3-3	
43/24-P4**	Gas Production	AB1	PL-0-3-3	
43/24-P4z**	Gas Production	Completed (Shut-in)	PL-3-3-3	

Subsea Wells			
None	N/A	N/A	N/A
E & A Wells			
43/24-1**	Exploration	AB2	PL-0-0-3
43/24-2	Appraisal	AB3	PL 0-0-0
43/24-3	Appraisal	AB2	PL-0-0-3
43/24-4	Appraisal	AB2	PL-0-0-3

*43/24-P1 was drilled and P&A'd in one operation.

**After an unsuccessful attempt to modify the original exploration well 43/24-1 for production (43/24-P4), a sidetrack was drilled and put into production (43/24-P4z).

2.4 Drill Cuttings

Table 2.4: Drill Cuttings Pile(s) Information			
Location of Pile Centre (Latitude/Longitude)	Seabed Area (m ²)	Estimated volume of cuttings (m ³)	
N/A	N/A	N/A	

2.5 Inventory Estimates



Figure 2.1: Pie Chart of Estimated Inventories (Topside TP)

^{*}Includes weight of connecting bridge between TP and TC, and riser weights.



Figure 2.2: Pie Chart of Estimated Inventories (Topside TC)

^{*}Includes weight of risers

3. REMOVAL AND DISPOSAL METHODS

In line with the waste hierarchy, in which the prevention of waste is preferred, Perenco has assessed the options for extending the producing life of the platforms, but this was not commercially viable.

The re-use and relocation of the platform topsides have also been considered but were not viable due to the ageing technology and high maintenance costs. The fabric and structural integrity have made the reuse options limited.

Perenco will continue to review the platforms' equipment inventories to assess the potential for adding to their existing asset portfolio spares inventory or for resale to the open market.

Recovered material will be landed ashore for disposal by a contractor. It is not possible to forecast the wider reuse market with any accuracy or confidence this far forward. Perenco will continue to track reuse market trends to seize reuse opportunities at the appropriate time.

If it is intended that the topsides will be disposed of outside of the United Kingdom, an application will be made to the Environment Agency for an International Waste Shipment (IWS) consent, in accordance with the International Waste Shipments (Amendment of Regulation (EC) No 1013/2006 and 1418/2007) Regulations 2021.

3.1 Topsides

3.1.1 Topsides Decommissioning Overview

Description of Trent TP Platform

The TP is a conventional four-legged carbon steel jacket with four deck levels with the following elevations above LAT:

- Helideck EL +39.5m.
- Weather deck EL +33.5m.
- Mezzanine deck EL +27m.
- Cellar deck EL +21m.

The TP is secured to the seabed by $4 \times 60''$ steel piles approximately 54m overall in length, driven through pile sleeves attached to the jacket legs. The platform cantilevers 7m from the South face of the cellar deck. The helideck cantilevers from the East face of the platform. The vent tower is located on the weather deck, in the Northeast corner of the platform.

From the south face of the cellar deck, the platform cantilevers 7m to provide support for the redundant Monoethylene Glycol (MEG) regeneration package and a laydown area.

From the north face of the cellar deck, the platform cantilevers 10m to provide support for the redundant MEG Buffer Storage Vessels. Due to weight limitations, the 100 Te capacity MEG tank has been taken out of service.

A 30.48m long bridge to the TC platform on the north face of TP is accessed from the mezzanine deck. From the east face of the weather deck, a cantilever supports the helideck. The crane pedestal is located in the Northwest corner and the vent tower is located in the Northeast corner of the weather deck.

The majority of the cellar and mezzanine deck flooring comprises grating although the laydown area is made of 10-millimetre (mm) plate while the Instrument and Electrical Equipment Room (IEER) is mounted on 8mm plate. The weather deck is constructed from a 10mm plate.

The IEER, also designated as the Temporary Refuge (TR) on the cellar deck is separated from the wellhead and process area by an H60 fire/blast wall. The maintenance living quarters (MLQ) are located on the weather deck. The MLQ comprises a two-level structure. The lower level consists of recreational facilities, a galley/mess, laundry, and a locker room. The upper level consists of six 2-man cabins, an office, and a gymnasium.

Construction is generally of steel, clad externally to protect against the effects of wind, rain, and saltladen spray. The roof of the MLQ supports the Heating, Ventilation and Air Conditioning (HVAC) equipment.

The riser for the decommissioned Tyne gas pipeline (PL1220 and PL1221) and the Trent 24" export line (PL253b) is located on the TP.



Figure 3.1: Trent TP Platform

N.B. The Blastwalls, Firewalls, Heat Shields and ID signs were omitted for clarity. (A photo of Trent TP is shown on the Title page of this document).

Description of Trent TC Platform

The TC platform is a dedicated MOAB; a self-installing four-legged platform, suction-piled into the seabed to provide stability for a single 30m x 30m deck. Four main legs reach from the seabed to the topside. The legs are connected by bracings in the lower part of the structure.

The deck holds the equipment required for compression and associated facilities. There are two access platforms, one for the compressor inter-stage and discharge coolers and one for the

compressor turbine air inlet plenum chamber and exhaust and lube oil coolers. In the southeast corner is a control room with an electrical equipment room above. The riser from Kilmar to Trent pipeline (PL2162 and PL2163) has a dedicated slug-catcher located at the northeast of the platform.



Figure 3.2: Trent TC Platform

N.B. The Blastwalls, Firewalls, Heat Shields and ID signs were omitted for clarity. (A photo of Trent TC is shown on the Title page of this document).

Overview of Topsides Removal Methodology

The topsides decommissioning will be undertaken in three phases:

- 1. Render HCS.
- 2. Lighthouse Mode.
- 3. Topsides removal and onshore dismantlement.

During the campaign to render the topsides HCS, a limited quantity of plant, equipment and structures will be removed to facilitate the HCS activity and/or weight shedding for the topsides' removal. At the current time, it is anticipated that the following equipment and structures may be removed during the HCS campaign:

- MEG Regeneration Unit (vessels & piping).
- Pipe supports.
- Riser and caisson sections.
- Small section of helideck (to aid removal of topsides).
- Vent tower.
- Temporary Living Quarter containers.

The equipment and structures removed during the HCS campaign will be transported onshore to the UK via a supply vessel for waste treatment.

During the HCS campaign, solar-powered aids to navigation (AtoNs) will be placed on the respective helidecks of the topsides; the AtoNs will be monitored remotely from the Bacton Terminal by the terminal staff during the Lighthouse Mode. A suitable contingency plan will be put in place in case of an AtoN failure; this will ensure that appropriate measures remain in place which are compliant with the navigational requirements of the Consent to Locate permit.

A heavy lift vessel (HLV) will be used to remove the Trent TP topside and the Trent TC topside. The topsides will be cut from the respective jackets and transferred in a single lift via a crane onto the HLV. Both topsides will be sea-fastened onto the main deck of the HLV during the same offshore campaign. The topsides will be transported onshore by the HLV for dismantlement and waste recovery.

It is anticipated that there will be no interval between the removal of the topsides and the removal of the jackets. The HLV that is being used for the removal of the topsides will also be used to remove the jackets during the same offshore campaign.

Table 3.1: Cleaning of Topsides for Removal			
Waste Type	Composition of Waste	Disposal Route	
Hydrocarbons in topside vessel, equipment, and piping	Process fluids, fuels, and lubricants.	Flushed with seawater. The flush water will either be injected into platform donor well(s) or processed through an onboard treatment unit to make it suitable for discharge to sea or transferred to tote tanks for onshore disposal.	
NORM sludge and scale	NORM and radioactive material.	Radioactivity monitoring will be undertaken during the breaking of containment of all topside vessels and pipework. Any plant or equipment with NORM	

3.1.2 Preparation/Cleaning

		reading will be isolated and left in-situ, as it is considered safer to remove onshore.
		NORM treatment will be done under permit by a specialist company and disposed of safely in line with legal requirements.
		A qualitative HAZMAT survey indicates that the topsides have low concentrations of Lead and Chromium VI in the paintwork.
Original paint	Lead-based and Chromium VI-based paints on a steel structure.	Quantitative testing of the paint will be required at the dismantling facility.
coating		Toxic particulates may arise during flame-cutting or grinding/blasting. Appropriate PPE is required during the dismantlement for health safety measures.
		The concentrations are low and thus do not affect the standard disposal routes of steel recycling.
Asbestos fibre	Possible presence in gaskets.	Appropriate control and management will be enforced. Any suspected asbestos-containing material will be left in-situ during offshore works. Appropriate removal and disposal controls will be used during onshore dismantlement.
Other hazardous material	Electrical material, batteries, fluorescent light fixtures.	Segregation during the dismantlement phase.

3.1.3 Removal Methods

Table 3.2: Topsides Removal Methods

1) HLV (semi-submersible crane vessel) ⊠ 2) Mono-hull crane vessel □3) SLV (Single Lift Vessel) □

4) Piece small \Box 5) Other \Box

Method	Description
Proposed removal method and disposal route - Onboard an HLV to a disposal yard in the UK or in Europe.	Partial removal of topsides, piecemeal as described above during the HCS campaign. The topsides will be removed onshore and recovered at a selected dismantlement yard to comply with relevant legislation and company policy. For the remaining topsides, each topside will be cut from the jackets and transferred in a single lift via crane onto the HLV.
	The topsides will be sea-fastened onto the main deck of the HLV. The HLV will be towed to the onshore dismantlement yard. By means of the

crane, the topsides will be lifted onto the quayside. A yard in the UK or Europe will be used.
If the topsides will be disposed of outside of the United Kingdom, an application will be made to the Environment Agency for IWS consent, in
accordance with the International Waste Shipments (Amendment of Regulation (EC) No 1013/2006 and 1418/2007) Regulations 2021.

3.2 Pipelines

Decommissioning Options: A Comparative Assessment (CA) is not required as the risers will be fully removed, as detailed in Table 3.3:

Table 3.3: Pipeline or Pipeline Groups Decommissioning Options			
Pipeline or Group (as per PWA)	Condition of line/group	Whole or part of pipeline/group	Decommissioning options considered
PL253b*	Attached to topside; exposed	Part of riser section	
PL1220*	Attached to topside; exposed	Part of riser section	A CA is not required; the topside riser sections will be fully
PL1221*	Attached to topside; exposed	Part of riser section	
PL2162*	Attached to topside; exposed	Part of riser section	removed.
PL2163*	Attached to topside; exposed	Part of riser section	

*Top of riser section only

3.3 Wells

Table 3.4: Well Plug and Abandonment

The five platform wells (43/24-P1, 43/24-P2, 43/24-P3, 43/24-P4 and 43/24-P4z) will be plugged and abandoned, in accordance with OEUK Guidelines for the suspension and abandonment of wells. A Decommissioning JUB will come alongside the TP to perform the P&A activity.

The necessary permits will be obtained from OPRED before the commencement of the operations.

3.4 Waste Streams

T	Table 3.5: Waste Stream Management Methods
Waste Stream	Removal and Disposal Method
Bulk liquids	Arising from flushing vessels, pipework and sumps, oily waters will either be injected into platform donor well(s), processed offshore through an onboard oily water separator and discharged to sea, or transferred to tote tanks for transport and disposal onshore.
Marine growth	N/A
NORM/LSA Scale	Tests for NORM/Low Specific Activity (LSA) will be undertaken offshore by the Radiation Protection Supervisor. It is preferable to leave NORM- contaminated materials in-situ and treat them when onshore. Any NORM encountered will be dealt with and disposed of in accordance with guidelines and company policies and under appropriate permits
Asbestos	Tests for asbestos will take place offshore and will be dealt with/disposed of according to guidelines and company policies.
Other hazardous wastes	Will be recovered to shore and disposed of under appropriate permit.
Onshore dismantling sites	Appropriate licenced site(s) will be selected. The facility chosen will demonstrate a proven disposal track record and waste stream management throughout the deconstruction process and demonstrate its ability to deliver innovative recycling options. (OPRED will be made aware once a decision has been made). If it is intended that the topsides will be disposed of outside of the United Kingdom, an application will be made to the Environment Agency for International Waste Shipment (IWS) consent, in accordance with the International Waste Shipments (Amendment of Regulation (EC) No 1013/2006 and 1418/2007) Regulations 2021.

Table 3.6: Inventory Disposition			
	Total Inventory Tonnage	Planned tonnage to shore	Planned left <i>in situ</i>
TP Topside	2,094 ^{[1] [2]}	2,094	0
TC Topside	1,339 ^[1]	1,339	0

Note: ^[1] – Topside weight represents current operational weight as per the latest weight report and includes the weight of the riser sections. [2] TP weight also includes the 30 Te bridge weight.

4. ENVIRONMENTAL APPRAISAL OVERVIEW

4.1 Environmental Sensitivities (Summary)

Table 4.1: Environmental Sensitivities			
Environmental Receptor	Main Features		
Conservation Interests	Trent is located within the Southern North Sea Special Area of Conservation (SAC), a designated site for the Harbour Porpoise.		
	Trent is located 9.6km south of the Dogger Bank SAC, a designated site for the Annex I Sandbanks habitat.		
Seabed	The EUSeaMap seabed habitat maps predicted the seabed around the Trent platform to be A5.27: Deep Circalittoral Sand (as per the EUNIS seabed classification system). However, ground truthing during the pre-decommissioning benthic survey identified the benthic habitat as A5.35: Circalittoral Sandy Mud; characterised as circalittoral, cohesive sandy mud.		
	There were no protected benthic habitats or marine species encountered on the seabed in the vicinity of Trent.		
	There were no significantly high concentrations of metals and hydrocarbons identified in the sediment samples collected around Trent during the benthic survey.		
Fish	Cod, Lemon Sole, Nephrops, Plaice, Sandeels, and Whiting have spawning grounds in the area of the North Sea in which Trent is located. In the same area, Anglerfish, Blue Whiting, Cod, Hake, Herring, Ling, Mackerel, Sandeels, Spurdog, and Whiting have nursery grounds.		
Fisheries	The area around Trent is not considered an important area for commercial fisheries, with limited fishing efforts reported to occur. When it does occur, it is predominated during the summer to Autumn months. Fishing effort within the ICES Rectangle 37F1 is very low, with an average of 61 fished days per year between 2018 and 2022.		
Marine Mammals	The Southern North Sea generally has a relatively low density of marine mammals. While over ten species of cetaceans have been recorded in the Southern North Sea, only the Harbour Porpoise and White-Beaked Dolphin can be considered as regularly occurring throughout most of the year, and the Minke Whale is a frequent seasonal visitor. Low densities of Harbour Porpoise have been recorded in ICES Rectangle 37F1 during the Summer and Autumn months.		
	Trent is located inside the Southern North Sea SAC, which is a designated area for the Harbour Porpoise.		
	The seas around Trent are not important feeding grounds for Harbour Seals. Trent is located towards the outer extent of the feeding grounds for Grey Seals, which have breeding grounds at The Wash, approximately 115km southwest of Trent.		

Birds	A seabird breeding survey of Trent in 2024 indicated that no seabirds are nesting on Trent. Trent is not within a 'hotspot area' for seabirds, as it is not an area of high seabird density at sea.
	The Seabird Oil Sensitivity Index (SOSI) in the vicinity of Trent indicates seabird oil sensitivities is low to high from February to June. From August to January, the sensitivity is very high and in July, the sensitivity is extremely High.
Onshore Communities	A number of beaches are located along the Yorkshire and Lincolnshire coast, including Hornsea, Mablethorpe, Skegness, Sutton-on-Sea, Scarborough, Whitby and Withernsea. Mablethorpe and Skegness are important coastal towns in Lincolnshire. These areas are important for tourism. Due to the distance from shore, pleasure crafts would typically not be present in this part of the North Sea.
Other Users of the Sea	The density of marine traffic within Block 43/24 is classified as 'High'. This is attributed to the high density of oil and gas infrastructure in the vicinity and other shipping activity, predominantly cargo ships and offshore support vessels.
	While there is significant surface and subsurface infrastructure in the UKCS Blocks around 43/24, the majority has ceased production.
	There are no licenced marine aggregate areas within a 40km radius of Block 43/24.
	No subsea telecommunication cables cross the block of interest.
	Trent lies within an Airforce Danger Area, the 'EGD323D Southern Complex'.
	There are currently two active windfarm sites within a 40km radius of Trent, namely "Hornsea Project 2 (Phase 1)" and "Hornsea Project 2 (Phase 2)". There is also one consented wind farm site "Hornsea Project 4", and one pre-planning application for the windfarm "R4 Project 1 (Dogger Bank Southwest)", within 40km of Trent.
	There are no protected wrecks recorded within 5km of Trent.
Oil Spill Potential	There are limited sources of hydrocarbon on the installation. The only potential source would be from a bunkering incident, which would have insufficient volumes to constitute a potential for a Major Environmental Incident.
Atmosphere	The offshore decommissioning activities will produce atmospheric emissions, primarily through fuel combustion. The emissions will be minimal in terms of the overall carbon footprint of the UKCS oil and gas activity and the UK national carbon budget.

4.2 Potential Environmental Impacts and their Management

Environmental Impact Assessment Summary:

The aspects for which Perenco consider there to be minimal or non-significant impact and therefore have been screened out from further detailed assessment within the Environmental Appraisal (EA) report are described below:

• Energy emissions

- Waste generation.
- Physical presence of vessels in relation to other sea users.
- Operational discharges to sea.
- Noise emissions.

Potentially significant impacts which are assessed in detail within the EA include:

- Impacts associated with seabed disturbance.
- Engine emissions.
- Bird habitat.
- Vessel collision.

Overview:

Following a detailed review of the proposed decommissioning of Trent, the environmental sensitivities present in the area, and potential impacts on other sea users and the environment, it has been determined that the decommissioning of the Trent topsides and risers will not have significant impacts following the implementation of appropriate mitigation measures. In addition, incremental cumulative impacts and transboundary effects associated with the planned decommissioning operations are expected to be negligible. All identified impacts associated with the decommissioning project are well understood and managed through the implementation of established mitigation measures.

Table 4.2: Environmental Impact Management									
Activity	Main Impacts	Management							
Topsides and riser sections		Trent is located within the Southern North Sea Special Area of Conservation (SAC), a designated site for the Harbour Porpoise. The re-suspension of sediments will be minor in the context of the background turbidity. Sediment plumes will be extremely short-lived, given the strong tidal currents in the area. There were no sensitive benthic habitats recorded in the vicinity of the installation.							
	Seabed disturbance from positioning the HLV.	There is also potential for benthic abrasion and smothering by anchors and spud cans. Disturbance is limit the approach, anchoring and leg positioning of the supporting jack-up rigs and barges. The selected we location will avoid areas identified as having benthic structures as identified in the as-found survey and Specific Assessment. Rig move procedures will also be developed utilising information from subsea survey. Specific Assessments. Repositioning of JUB to be minimised to avoid additional seabed disturbance.							
		The impact is considered insignificant.							
	Impact on the potential nesting birds' habitat	PUK appointed an ornithologist to undertake a seabird survey of Trent in 2023 and 2024. No nesting birds were encountered on the installation on both occasions. It is recommended to continue undertaking an annual nesting survey of Trent and to maintain a Seabird Management Plan for the installation.							
removal		The impact is considered insignificant.							
	Engine emissions from operational activity of HLV and support vessels (GHG emissions)	The emissions will be minimal in terms of the overall carbon footprint of the UKCS oil and gas activity and the UK national carbon budget. Best practices will be employed to minimise this carbon footprint, including optimising the logistical planning of vessels and operating effective environmental management systems to minimise emissions.							
	Christionsy	The impact is considered insignificant.							
	Vessel collision – loss of containment	The only identified potential source of a spill is during bunkering. The Trent installation will have an OPEP, and a Communications Interface Plan (CIP) will be prepared and approved before the commencement of the decommissioning activity. A bunkering procedure will be in place to control the process to limit the potential for diesel release during bunkering.							



5. INTERESTED PARTY CONSULTATIONS

Consultations Summary:

Table 5.	Table 5.1: Summary of Stakeholder Comments							
Who	Comment	Response						
1. Informal Stakeholder Consul	tations							
OPRED Environmental Management Team								
Health & Safety Executive								
MCA								
Environment Agency								
ММО								
UKHO								
2. Public								
3. Statutory Consultations								
National Federation of Fishermen's Organisations (NFFO)								
Scottish Fishermen's Federation (SFF)								
Northern Ireland Fish Producers' Organisation (NIFPO)								
Global Marine Group								
NSTA		Perenco has consulted with the NSTA under S29(2A) of the Petroleum Act						



6. PROGRAMME MANAGEMENT

6.1 **Project Management and Verification**

A Perenco Project Management team will be appointed to manage suitable sub-contractors during both the HCS campaign and the topsides removal campaign. Perenco standard procedures for operational control and hazard identification and management will be used. Where possible the work will be coordinated with other operations in the SNS.

Perenco will monitor and track the progress of consents and the consultations required as part of this process. Any major changes to the DP will be discussed and agreed with OPRED.

6.2 Post-Decommissioning Debris Clearance and Seabed Clearance Verification

This DP covers the removal of the Trent topsides and top sections of the riser sections only. Therefore, any post-decommissioning surveys will be detailed in the subsequent Jackets DP.

Any objects dropped during the topsides preparation and removal will be notified to OPRED via the PON2 process, and their subsequent recovery reported via the PON2 and DP Progress Reports.

6.3 Schedule

It is anticipated that there will be no interval between the removal of the topsides and the removal of the jackets, i.e., the removal of all topsides and jackets will be conducted during the same offshore campaign. The HLV that is being used for the removal of the topsides will also be used to remove the jackets. However, there are expected to be some topside items to be removed as part of the topside HCS campaign in preparation for the topsides' removal campaign.

Topside inspections were executed on some critical structural items during June 2025. Subsea, general visual inspection, cathodic protection and scour surveys were completed in May 2025, which indicated no issues. The subsea inspections are expected to be executed on a 5-year frequency.

Figure 6.1 below provides the timeline of all decommissioning activities concerning the DPs.



Figure 6.1: Gantt Chart of Project Plan

Decommissioning Activities		2025				2026				2027				2028				2029				2030			
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q 4	
Phase 1: Topsides Hydrocarbon Sa	ife & I	HLV P	repar	ation	Wor	k																			
Topside HCS and Items Removal																									
Phase 2: Lighthouse mode																									
Lighthouse mode																									
Phase 3: Topsides Removal																									
Topsides and Riser Sections Removal																									
Close Out Report																									

KEY						
	Anticipated Start					
	Earliest Start					
	Potential Activity Schedule					
	Window					



6.4 Costs

The decommissioning costs detailed within this DP will be provided to OPRED separately.

6.5 Close Out Report

In accordance with the OPRED Guidelines, a Close Out Report will be submitted to OPRED once the Trent installation has been removed. If the Trent jackets are not removed during the same offshore campaign for removing the topsides, then a topside Close Out Report will be submitted to OPRED within 12 months of the removal of the topsides.

6.6 Post-Decommissioning Monitoring and Evaluation

The Close Out Report will provide a proposed frequency for any further legacy monitoring surveys based on the survey results and comparisons. The legacy monitoring regime will be discussed and agreed upon with OPRED as part of the Pipeline DP close out process.



7. SUPPORTING DOCUMENTS

Table 7.1: Supporting Documents							
Document Number	Title						
1	Seabird Survey 2023						
2	Seabird Survey 2024						
3	Trent Pre-Decommissioning Environmental Seabed Monitoring Survey 2024: Habitat Assessment						
4	PERENCO UK MBES_SSS_MAG-Survey-Report TRENT						
5	PERENCO UK MBES_SSS-TRENT_PL253b_PIPELINE SURVEY-Report						



8. SECTION 29 NOTICE HOLDERS LETTER(S) OF SUPPORT



APPENDICES



Appendix 1 – Marine protected areas within the vicinity of Trent





Appendix 2 – Windfarms, cables & marine aggregate sites within vicinity of Trent



Appendix 3 – Public Notice