



Transmission Owner Reinforcement Instruction (TORI)

Quarterly Update Report Q3

June 2021 – September 2021

SSEN Transmission's Quarterly Update Report provides an update on our Transmission Owner Reinforcement Instruction (TORI) projects. These projects are required to reinforce the Transmission network in the North of Scotland to facilitate the connection of renewable generation. These TORI's may be included in connection agreement contacts as Enabling Works or Wider Works.

For each existing TORI in our area, this report provides:

- An overview of the TORI project including completion date.
- A summary of works completed in the last three months.
- A summary of works due to be undertaken in the next three months.

Should you have any questions or feedback on the report, please get in touch with us at transmission.commercial@sse.com



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TORI	Scheme		
SHET-RI-007a - Beauly - Blackhillock 400 kV	Beauly - Blackhillock 400 kV Double Circuit OHL		
Double Circuit OHL			
Overview of Works			
Establish a new double circuit 400kV overhead	, , , , , , , , , , , , , , , , , , , ,		
	Beauly 400kV AIS busbar and the Blackhillock 400kV		
GIS busbar.			
Project Completion Date	31/12/2027		
Summary of works in last quarter:			
Project assigned to development team to begin	initial optioneering works.		
Summary of works in next quarter:			
Project assigned to development team to begin initial optioneering works.			
Additional Comments:			
N/A			
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TORI	Scheme		
SHET-RI-007b - Beauly 400 kV Busbar	Beauly 400 kV Busbar		
Overview of Works			
Construct a new 400kV GIS double busbar at Beauly substation and interface with the existing			
275kV busbar. The 400kV double busbar is to con	nprise of one bus section breaker, two bus		
couplers, and feeder bays for circuit connections.			
Project Completion Date	30/03/2027		
Summary of works in last quarter:			
See TORI-042			
Summary of works in next quarter:			
See TORI-042			
Additional Comments:			
See TORI-042			



TORI	Scheme
SHET-RI-009 - East Coast Onshore 275kV	East Coast Onshore 275kV Upgrade
Upgrade	

Establish new busbar at Alyth, to be built at 400kV but initially operate at 275kV, with reactive compensation support. Now includes Errochty Thermal Relay Works scope.

Re-profile the existing Kintore-Tealing-Kincardine 275kV circuits and the existing Tealing-Westfield-Longannet 275kV circuits for higher temperature operation.

Install 275kV Phase shifting transformers on each of the Kintore – Tealing circuits (XT1/XT2) at Tealing substation.

Tealing substation.	
Project Completion Date	31/10/2023

Summary of works in last quarter:

OHL Works (LT162): Land agreement in place for lease of land where new Terminal Towers to be situated. Overhead line works now underway. Temporary Towers erected ready for temporary bypass needed to erect 2 new Terminal Towers for tee into Substation.

Foundations installed for 2 new Terminal Towers and Tower steelwork assembled ready for erection of new towers.

Works on Tealing – Westfield 275kV circuit started and are progressing to programme.

Alyth Substation (LT139): Over the past 3 months a contractor has been involved in site platform consolidation works. This has involved importing 65,000t of 6f5 stone and laying a 300mm capping layer over the entire platform.

They have then targeted cells that have shown to have more settlement due to underlying poor ground conditions and loaded these cells to full platform height and monitored settlement values over a 5-week period.

This strategy has allowed the design team to gather settlement data and confidently move forward with the design for buildings, roads, gantries and transformer bunds.

Data gathered has also allowed for a platform reduction of 300mm saving on circa 20,000t of imported 6f5 stone and around a 50% reduction in driven piles.

Complete design refinement phase and continue with main works on both the Alyth Substation and the East Coast 275kV overhead line circuit contracts.

Tealing Substation: Phase Shifting Transformer works remain in development.

Summary of works in next quarter:

OHL Works (LT162): Overhead line works progressing to programme. Temporary bypass to be installed. 2 new Terminal Towers to be erected. New Tension Tower on Alyth – Tealing circuit to have foundations installed and tower erected.

Temporary bypass to be wired back onto new Terminal Towers and Aylth-Tealing circuits to be transferred onto new Terminal Tower 239B.

Works on Tealing – Westfield 275kV circuit to be completed to programme.

Alyth Substation Works (LT162): Moving forward over the next 3 months site will be piling foundations for the GIS building, MSCDN and Statcom, GIS Structures and Gantries. Site will also be carrying out the start of site drainage and foundation works.

Additional Con	nments:
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,	etween Creag Dhubh (North Argyll) substation and	
Establish a new 275/132 kV Substation in North Argyll near the existing Inveraray/Taynuilt 132 kV line route with two 480 MVA 275/132 kV transformers. Space provision only is to be provided for additional feeder bays. Establish a new 275 kV double circuit OHL between Creag Dhubh (North Argyll) substation and		
Overview of Works	<u> </u>	
SHET-RI-013 - North Argyll Substation	North Argyll Substation	

Scheme

Summary of works in next quarter:

TORI

Scottish Government's EIA Scoping Option to be received.

Virtual Public Consultation Events held in July 2021.

Stakeholder Consultation completed from June to August 2021.

Town & Country Planning Application for Creag Dhubh (North Argyll) substation to be submitted. Section 37 application to build and operate a new OHL between Creag Dhubh (North Argyll) substation and Dalmally to be submitted.

Additional Comments:		
N/A		
13/7		



TORI	Scheme		
SHET-RI-019 - Dounreay - Orkney 220kV Subsea	Dounreay - Orkney 220kV Subsea HVAC Cable		
HVAC Cable Link 1	Link 1		
Overview of Works			
Establish a 220kV HVAC circuit over a distance of approximately 68km between the 275kV GIS			
substation at Dounreay on the mainland and the new 132kV substation in the vicinity of Finstown			
on Orkney. The HVAC circuit comprises of approximately 15km of land cable and 53km of subsea			
cable. Voltage Compensation devices will be insta	alled at both cable ends within the substation		
compounds at Dounreay and Finstown.			
Project Completion Date	30/04/2025		
Summary of works in last quarter:			
Continue engagement with Orkney developers.			
Summary of works in next quarter:			
Continue engagement with Orkney developers.			
Additional Comments:			
N/A			



TORI	Scheme		
SHET-RI-020 - Dounreay - Orkney 220kV Subsea	Dounreay - Orkney 220kV Subsea HVAC Cable		
HVAC Cable Link 2	Link 2		
Overview of Works			
Establish a second 220kV Subsea HVAC circuit over a distance of approximately 68km between the			
275kV GIS substation at Dounreay on the mainlar	nd and the new 132kV substation in the vicinity		
of Finstown on Orkney. The HVAC circuit compris	• • • • • • • • • • • • • • • • • • • •		
53km of subsea cable. Voltage Compensation dev	vices will be installed at both cable ends within		
the substation compounds at Dounreay and Finst	own. Finstown Substation is established as part		
of SHET-RI-019.			
Project Completion Date	30/04/2025		
Summary of works in last quarter:			
Project on hold.			
Summary of works in next quarter:			
Project on hold			
Additional Comments:			
N/A			



TORI	Scheme						
SHET-RI-025a - Peterhead-Rothienorman 400	Peterhead-Rothienorman 400 kV OHL upgrade						
kV OHL upgrade							
Overview of Works							
The 275kV overhead lines between Peterhead, New Deer and Rothienorman (Rothienorman substation established as part of SHET-RI-105) are constructed for 400kV operation. Reinsulate approximately 47km of OHL to 400kV operation and put into service between the new 400kV busbars at Peterhead (established by SHET-RI-025c) and the new 400kV substations at New Deer and Rothienorman (both transitioned to 400kV under SHET-RI-025d).							
Replacement of the existing earth wire with OPG Rothienorman.	W is required between New Deer -						
Project Completion Date	30/09/2023						
Summary of works in last quarter:							
Please see project update for SHET-RI-025d North	h East 400kV Reinforcement.						
Summary of works in next quarter:							
Please see project update for SHET-RI-025d North East 400kV Reinforcement.							
Additional Comments: N/A							



TORI Scheme
SHET-RI-025b - Eastern Subsea HVDC Link Eastern Subsea HVDC Link

Overview of Works

Install a 2GW HVDC link between Peterhead (SHE-Transmission) and Drax (NGET).

This TORI describes the SSENT works.

HVDC cables to be routed into the sea, then south towards the North East of England in NGET's license area.

Project Completion Date 31/10/2029

Summary of works in last quarter:

Ongoing Seabed Survey Works.

Consultation and final decision on Initial Needs Case following Ofgem publication.

Ongoing offshore and onshore environmental assessment works.

Ongoing onshore Engineering investigation works.

Development of Engineering specifications for future tendering works.

Final Needs Case progressing for submission in Q4 2021.

Summary of works in next quarter:

Completion of Seabed Survey Works.

Completion of offshore and onshore environmental assessment works.

Final Needs Case submission.

Tendering documentation to be prepared and ready for submission in Q1/Q2 2022.

Additional Comments:		
N/A		



TORI	Scheme
SHET-RI-025c - Peterhead 400 kV Busbar	Peterhead 400 kV Busbar

Construct a new 400kV substation close to the existing 275kV substation at Peterhead. Install two new 1200MVA 400/275kV supergrid Transformers and approx. 500m of 275kV cable between the new 400kV busbar and the existing 275kV busbar. Two new Overhead line towers and Installation of 132kV cable from new Cable sealing end to existing 275kV sub station.

Modify the existing 275 kV substation and busbar arrangements to accommodate the above works. The existing 275/132kV supergrid transformer SGT1 which is currently connected to line circuit reference VX1 will be banked with the new 1200MVA 400/275kV.

Project Completion Date	31/10/2023

Summary of works in last quarter:

Continuation of main civil works on new sub station platform with all building foundations being poured, future duct installations, fencing erection, perimeter road construction, drainage install and more recently primary and secondary steelworks erection to GIS building. Cladding deliveries also began for GIS building. Excavation and blinding for the two SGT bunds.

132kV underground cable installation completed between existing 275kV sub station and new Cable Sealing end Compound. All new cables pulled and terminations ongoing. VS2/VS1 outages ongoing to early Q4 2021 to allow completion of this work.

GE-UK now in construction of our two 1200MVA SGTs.

Summary of works in next quarter:

Continuation of works to GIS building by way of roof and wall cladding and placing rebar to main internal floor. Steelwork erection planned for SGT5 and SGT4 building to begin Q2 2021, with cladding to follow on. Expected completion of perimeter sub station fencing and gates. Further various concrete pad foundations to completion and on going perimeter road works and outfall drainage system.

132kV cable project will continue through its outages for VS2/VS1 until completion in Q4 2021 and then general reinstatement will be carried out, removing temporary roads and top soiling. Further trial holing to progress for 275kV cable route design to bring forward in programme.

Additional Comments:	
N/A	



TORI	Scheme
SHET-RI-025d - North East Reinforcement	North East Reinforcement

Re-insulate the 275kV double circuit overhead lines between Rothienorman – Blackhillock and Rothienorman - Kintore for 400kV operation.

Remove the two line connected 400/275kV, 1200MVA SGTs from Blackhillock Substation. Install two new 400/275kV, 1200MVA at Kintore for terminating the Rothienorman to Kintore double circuit overhead line onto the 275kV busbar at Kintore.

Install two 400/132kV, 240MVA SGT's and two 132/33kV, 120MVA GTs to connect the Rothienorman GSP to the 400kV Rothienorman Busbar.

Project Completion Date	31/10/2023
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Summary of works in last quarter:

OHL Works - OHL works continue between New Deer and Peterhead, with works now complete on VND1 circuit. Pre-commencement conditions now discharged. Finalise tender documentation for the Substation scope of works.

Kintore Substation Works – Execution phase commenced with contract award achieved for both; the substation, and transformers. Commenced the earthworks on site and detailed design of the substation.

Rothienorman Substation Works – Contract awarded for SGTs and procurement of substation contractor nearing conclusion. Start on site planned for Q1 2022. Interface discussions with other NE400 projects continue.

New Deer Substation Works – Commencement of procurement activities for substation contractor is imminent. Discussions with Moray East have commenced re' the upgrade to 400kV. Interface discussions with other NE400 projects continue.

Summary of works in next quarter:

OHL Works - Continue with works on the 2nd circuit, VND2, between New Deer and Peterhead. Issue tender documentation for the Substation scope of Works.

Kintore Substation Works – Continuation of platform earthworks and development of the Supergrid Transformer design.

Rothienorman Substation Works – Conclusion of substation procurement and continuing design works in preparation for site mobilisation.

New Deer Substation Works – Commence procurement for substation contractor and continue engagement with Moray East.

Additional Comments:



TORI	Scheme						
SHET-RI-026 - Blackhillock 275 kV QBs	Blackhillock 275 kV QBs						
Overview of Works							
At Blackhillock, install 2 x 865MVA (continuous rating) 275kV quadrature boosters with bypass on the existing 275kV circuits (AH1/HO2) to Knocknagael, rearranging the circuit terminations as appropriate.							
Project Completion Date	31/10/2026						
Design development work continuing on the proj works in line with programme dates.	ect alongside the East Coast 400kV upgrade						
Summary of works in next quarter:							
Design development work continuing on the proj works in line with programme dates.	ect alongside the East Coast 400kV upgrade						
Additional Comments:							
N/A							



TORI	Scheme					
SHET-RI-028 – Thurso South to Gills Bay 132kV OHL	Thurso South to Gills Bay 132kV OHL					
Overview of Works						
It is proposed to construct a new 132kV GIS double Phillipstoun Mains, near Gills Bay (west of John Contract Thurso south.	O'Groats) and connect in two radial circuits from					
Construct a new suitably rated hybrid overhead I operated at 132kV, from Gills Bay to Thurso Sout						
Project Completion Date	01/04/2025					
Summary of works in last quarter:						
Continued development of new switching station	n consent application.					
Continued engagement with landowners to secu	re outstanding land agreements.					
Summary of works in next quarter:						
Submit new switching station consent application						
Continued engagement with landowners to secu						
Development of Needs Case and CBA to support	Wisir submission to Orgem					
Additional Comments:						
N/A						



TORI	Scheme								
SHET-RI-033 - Second 2 GW East Coast HVDC	Second 2 GW East Coast HVDC Link Peterhead								
Link Peterhead to England	to England								
Overview of Works									
Install an indoor 2GW HVDC converter station wi	th associated equipment. HVDC cables to be								
routed into the sea and then south towards Engla	and (landing point to be confirmed). This will be a								
joint project with National Grid.									
Project Completion Date	31/10/2031								
Summary of works in last quarter:									
Continued development of initial fleeds case sco	Continued development of initial needs case scope.								
Summary of works in next quarter:									
Summary of works in next quarter: Continued development of initial needs case sco	pe.								
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•	oe.								



TORI	Scheme
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SHET-RI-042 - Western Isles - Beauly HVDC Link | Western Isles - Beauly HVDC Link

Overview of Works

Establish a 600MW HVDC link with associated equipment and converter stations between the Western Isles (Arnish on Lewis) and the 400kV double busbar at Beauly (established under SHET-RI-007b). The HVDC cable is to be approximately 79km of subsea cable, and approximately 80km of land cable. The HVDC infrastructure will interface with a new 132kV double busbar at Arnish (Lewis) and the 400kV double busbar at Beauly.

Project Completion Date 30/03/2027

Summary of works in last quarter:

Continued engagement with stakeholders with view to holding round table meeting between all parties

Completed preliminary options assessment for mainland convertor station site and awarded contract to commence detailed site assessment with baseline noise surveys

Received revalidated tender and re-engaged with preferred supplier

Concluded Landownership exercise along route to refresh existing data

Continued optioneering activities and revalidation of governance process.

Issued project status update letter to Ofgem confirming that SSEN Transmission is committed and ready to progress the 600MW HVDC transmission link, providing a timetable for doing so should the conditionality be met through the Contracts for Difference (CfD) Auction Round 4 (AR4);

Summary of works in next quarter:

Roundtable meeting between key stakeholders – Ofgem / UK & Scot Gov / Councils / Developers Conclude Site Assessment for mainland convertor station

Conclude lease agreement at Arnish

Continue engagement with preferred tenderer

Apply for revised Planning in Principle and EIA at Arnish

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TORI	Scheme		
SHET-RI-043 - Lewis Infrastructure	Lewis Infrastructure		
Overview of Works			
Build a new 132kV single circuit OHL between existing Stornoway substation, the new Arnish substation (provided under SHET-RI-042 - Western Isles - Beauly HVDC Link) and a new AC switching station at Balallan on the Isle of Lewis.			
Dismantle the existing 132kV single circuit OHL between Balallan and the existing Stornoway substation.			
Project Completion Date	30/03/2027		
Summary of works in last quarter:			
Bird Surveys have been completed.			
Summary of works in next quarter:			
Discussions on how best to proceed with project underway.			
Additional Comments:			
N/A			



TORI	Scheme	
SHET-RI-046 - Taynuilt-North Argyll Rebuild	Taynuilt-North Argyll Rebuild	
Overview of Works		
Reinforce the transmission network between Tay	nuilt and North Argyll substation (established as	
part of SHET-RI-013). Rebuild approximately 12.5	km of existing 132kV double circuit steel tower	
line between North Argyll and Taynuilt with a larg	ger capacity 132kV.	
Project Completion Date	31/10/2028	
Summary of works in last quarter:		
Project on hold.		
Summary of works in next quarter:		
Project on hold.		
Additional Comments:		
N/A		



TORI	Scheme		
SHET-RI-050a - Inveraray - Port Ann	Inveraray - Port Ann Reinforcement		
Reinforcement	, ,		
Overview of Works			
Reinforce the 132kV Transmission network in the Kintyre Peninsula. Rebuild approximately 37km			
of double circuit OHL between Inveraray and Po	• • • • • • • • • • • • • • • • • • • •		
operation, but initially operated at 132kV.	TOTAL THE LOWERS WIN DE DUNCTON 275KV		
operation, but initially operated at 132kV.			
Project Completion Date	30/07/2021		
Summary of works in last quarter:			
Full energisation of the new overhead line was a	achieved on 25 th July 2021. The focus is now on		
the dismantling of the redundant towers and re			
, and the second			
Summary of works in next quarter			
Complete dismantling of redundant overhead lin	ne and continue with the final reinstatement.		
Additional Comments:			
N/A			



TORI	Scheme	
SHET-RI-050b - Port Ann - Crossaig	Port Ann - Crossaig Reinforcement	
Reinforcement		
Overview of Works		
Reinforce the 132kV Transmission Network in the Kintyre Peninsula. Rebuild approximately 48km		
of double circuit OHL between Port Ann and Cros	ssaig. The towers will be built for 275kV	
operation, but initially operated at 132kV.		
Project Completion Date	31/10/2023	
Summary of works in last quarter:		
Continued with forestry operations with 70% of f	elling works complete. First outages completed	
to allow enabling works at An Suidhe and Crarae	substations. Balfour Beatty commenced access	
enabling works. Argyll & Bute Council fully discharged all Sec 37 and planning conditions.		
Summary of works in next quarter:		
Continue with forestry operations and hand over control of all sections to Balfour Beatty for		
construction access. Balfour Beatty will commence construction of access tracks to tower		
locations as per programme followed by the first scheduled foundations works.		
Additional Comments:		
N/A		



TORI	Scheme
SHET-RI-052 - Lairg-Loch Buidhe 132kV	Lairg-Loch Buidhe 132kV Reinforcement
Reinforcement	

Establish a new 132kV double busbar at Lairg (Dalchork substation) and construct approximately 17km of new double circuit 132kV overhead tower line between Lairg and Loch Buidhe.

Project Completion Date	30/04/2022

Summary of works in last quarter:

Completed the Substation platform including below-ground earthing, drainage and backfilling around structures. Completed installation of AIS electrical equipment, marshalling kiosks and progress the cable pulling, dressing and glanding/terminating. Progress the Control Building internal fit-out & install internal equipment. Install DNO supply to the site. Progress Loch Buidhe Substation & Cable Sealing End foundations progressing along with the HV cable trench and drawpit.

Progress the OHL access tracks, spurs & working pads. Progressed the install of the pad & column and piled foundations. Progress the erection of further L7c towers. Completed the first phase of the replacement of the earthwire with OPGW (with outage) for Cassley – Shin route.

Summary of works in next quarter:

Complete the internal fit-out of the Control Building. Complete the cable installation (dressing/glanding and terminating) both external and to the C&P panels & LVAC Board. Commence the commissioning (Stage 1).

Complete the equipment installation at the Cable Sealing End (CSE) (terminal tower) and the new bays in the Substation. Take outages to complete the installation. Complete the pulling and testing of the 132kV HV cable.

Complete the installation of all access roads/spurs and working pads. Complete all piled foundations/pile caps and p&c foundations. Progress the construction/erection and 'topping-off' of the L7c towers. Commence stringing works on sections 1 & 2 of new DLB OHL route. Complete the E/W to OPGW installation (CS Route) and erect the new CS80R tower (tie-in to Dalchork Substation).

Prepare for 'remote end works' (Cassley & Lairg Substations) under outage in Apr'22.

Additional Comments: N/A			
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TORI	Scheme
ION	Julienie

SHET-RI-053 - Shetland 600 MW HVDC Link and Kergord 132kV Substation

Shetland 600 MW HVDC Link and Kergord 132kV Substation

Overview of Works

Construct a 600MW HVDC link from Shetland to the Scottish mainland at an HVDC switching station in the vicinity of Noss Head in Caithness. The HVDC switching station works will integrate with the Caithness-Moray Transmission Reinforcement (part of SHET-RI-031)

The HVDC link includes a 600MW HVDC converter station and 132kV Substation at Kergord in Shetland. The new 132kV Substation at Kergord will be the collection point for generation in Shetland.

The 600MW HVDC link will have approximately 13km of land cable and 284km of subsea cable between Shetland and the HVDC switching station in Caithness.

Project Completion Date 31/03/2024

Summary of works in last quarter:

Substantial completion of civil and electrical design for both Noss Head and Kergord sites. Continued with substructure construction and commenced steel erection at Noss Head Switching Station and Kergord HVDC Converter.

Commenced construction of 132kV AC Substation at Kergord (Substructure). Handed over earthworks platform to Viking Energy Windfarm for windfarm substation. Substantially completed Horizontal Directional Drill operations at Noss Head, substantially completed HVDC cable duct installation in Caithness, commenced HVDC duct installation in Shetland. Completed offshore prelay survey on offshore cable route. Continued manufacturing of HVDC land and offshore cable. Commence manufacturing of HVDC main circuit equipment.

Summary of works in next quarter:

Complete civil and electrical design for all elements. Complete steelwork and cladding for HVDC buildings at Kergord (HVDC Converter) and Noss Head (DC Switching Station). Complete steelwork and commence cladding for AC Substation at Kergord. Commence LV electrical installation works to all buildings. Complete UXO survey on offshore cable route and commence boulder clearance on offshore cable route. Continue HVDC Duct installation in Shetland. Complete Cable Type Tests and complete Land Cable manufacturing, offshore cable manufacturing continues.

Additional (Comments:
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TORI	Scheme		
SHET-RI-058 - Beauly-Loch Buidhe 275kV OHL	Beauly-Loch Buidhe 275kV OHL Reinforcement		
Reinforcement	Beauty Eden Bulane E75KV On Externior dement		
Overview of Works			
This project is to reinforce the existing BSW/BSE Beauly, Shin to Loch Buidhe 132kV double circuit			
with a higher capacity 275kV double circuit OHL.			
The reinforcement will include a new double circ			
approximately 40km, as well as works at Beauly,	Loch Buidhe and Shin substations.		
Project Completion Date	31/10/2030		
Summary of works in last quarter:			
Project progressed to optioneering stage with Development team. Derogation in place to allow			
generation customers to connect			
Summary of works in next quarter:			
Continue optioneering stage. Request for derogation to be extended.			
Additional Comments:			
N/A			



TORI	Scheme		
SHET-RI-059 - Third 2GW East Coast HVDC Link	Third 2GW East Coast HVDC Link Peterhead to		
Peterhead to England	England		
Overview of Works			
Install an indoor 2GW HVDC converter station with associated equipment. HVDC cables to be			
routed into the sea and then south towards Engla	and (landing point to be confirmed). This will be a		
joint project with National Grid.			
	0.4.04000		
Project Completion Date	31/10/2033		
Summary of works in last quarter:			
Project on hold.			
Summary of works in next quarter:			
Project on hold.			
Additional Comments:			
N/A			



TORI	Scheme		
SHET-RI-061 - Skye Overhead Line	Skye Overhead Line Reinforcement		
Reinforcement			
Overview of Works			
Construct a new 132kV circuit from Fort Augustus to Ardmore. The circuit is proposed as double			
circuit structure from Fort Augustus to Broadford, Single Circuit Structure from Broadford to			
Edinbane and single circuit structure from Edinba	ane to Ardmore (approximately 160km Fort		
Augustus 132kV substation to Ardmore 132kV substation).			
	T		
Project Completion Date	31/12/2025		
Conclusion alignment design, submission of Initial Needs Case to Ofgem, commencement of detailed site investigations			
Summary of works in next quarter: Undertake public consultation on proposed alignment, commence detailed design and progress EIA and landowner negotiations to inform the s37 consent application			
Additional Comments: N/A			



TORI	Scheme
SHET-RI-064 - Fort Augustus Substation	Fort Augustus Substation 400/132kV
400/132kV Development	Development

Develop the existing Fort Augustus substation to include a new 400kV and a new 132kV busbar. The new 400kV busbar is to be connected to the new 132kV busbar via two new 480MVA 400/132kV Super grid transformers.

Project Completion Date	31/10/2021

Summary of works in last quarter:

Redundant 400kV equipment in the existing Fort Augustus substation has been dismantled. The new 400kV equipment has been prepared for Energisation.

The 132kV equipment and Super grid transformers have been installed ready for commissioning.

Summary of works in next quarter:

The 400kV equipment will be energised. The remaining 132kV and Supergrid transformer commissioning works will be completed and then energised.

Additional Comments:		
N/A		
•		



TORI	Scheme	
SHET-RI-065a - Beauly 132 kV Substation	Beauly 132 kV Substation Redevelopment	
Redevelopment		
Overview of Works		
Establish a new 132kV double busbar arrangement at Beauly substation, and transfer the circuits from the existing 132kV busbar to the new busbar. Connect the new 132kV double busbar to the		
275/132kV transformer will be undertaken under SHET-RI 065b		
Project Completion Date	31/10/2024	
Summary of works in last quarter:		
Submit Planning application Take onboard public consultation feedback with regards to visual impact.		
Complete environmental surveys.		
Summary of works in next quarter:		
Continue with stakeholder discussions and project progression.		
Additional Comments:		
N/A		
17/4		



TORI	Scheme	
SHET-RI-065b - Beauly 3rd SGT Replacement	Beauly 3rd SGT Replacement	
Overview of Works		
Replacement of third existing 275/132kV 120MV/	A SGT with a new 360MVA 275/132kV	
transformer.		
SHET-RI 065a covers establishment of a new 132k	,	
substation, and transfer the circuits from the exis	ting 132kV busbar to the new busbar.	
		
Project Completion Date	31/10/2025	
Summary of works in last quarter:		
See TORI-065a		
Summary of works in next quarter:		
See TORI-065a		
Additional Comments:		
N/A		



TORI	Scheme	
SHET-RI-066 - Fort Augustus Substation	Fort Augustus Substation 400/275kV	
400/275kV Development	Development	
Overview of Works		
Develop the existing Fort Augustus substation to include a new 275kV busbar. The 275kV busbar is		
connected to the 400kV busbar via two 1200M	VA 400/275kV Supergrid transformers. The 400kV	
busbar is part of SHET-RI-064 works.		
Project Completion Date	01/12/2027	
Summary of works in last quarter:		
Project on hold		
Summary of works in next quarter:		
Project on hold		
Additional Comments:		
N/A		



TORI	Scheme
	Fort Augustus -Invergarry-400/132kV
SHET-RI-068 - Fort Augustus -Invergarry-	
400/132kV Development	Development
Overview of Works Upgrade the existing 132kV double circuit OHL be with a new 400kV OHL. The existing 132kV OHL FFE/FFW Circuits.	petween Fort Augustus and Invergarry substation forms part of the Fort Augustus to Fort William
Part of the upgrade is to establish a 400/132kV s 132kV OHL from Fort William and Invergarry Ge	<u> </u>
The new 400kV OHL will terminate into the 400k part of SHET-RI-064 works.	kV busbar at Fort Augustus. The 400kV busbar is
Project Completion Date	31/12/2027
Summary of works in last quarter: Route option assessment and development of the consultation and pre-submission consents work planning authority.	
Summary of works in next quarter:	
Route option assessment and development of the consultation and pre-submission consents work	

planning authority.

N/A

Additional Comments:



TORI	Scheme	
SHET-RI-069 - Kinardochy Reactive	Kinardochy Reactive Compensation	
Compensation		
Overview of Works		
Reactive Compensation is required at a new Kinardochy substation for voltage support on the		
275kV Reauly-Denny overhead line. The Reactive Compensation will require a canability of +		

Project Completion Date 31/08/2024

Summary of works in last quarter:

325MVAr and -225MVAr.

Progression of detailed design works for both the substation and overhead line elements of the project.

Secured planning consent for the main substation works

Formal agreement for all land purchase and access arrangements.

Summary of works in next quarter:

Additional surveys and ground investigation works.

Completion of the initial design phase of the project and preparation for mobilisation to site. Secure consent for the Overhead Line construction works.

Additional Comments:	
N/A	
N/A	



TORI	Scheme	
SHET-RI-072 - Blackhillock-Kintore 400 kV OHL Upgrade	Blackhillock-Kintore 400 kV OHL Upgrade	
Overview of Works		
Replace the existing 55km XH1/XH2 275kV double circuit OHL with a 400kV double circuit OHL. The new 400kV OHL will terminate on the 400kV busbars at Blackhillock and Kintore substations.		
A new connection arrangement is required at Cairnford substation to allow connection to the proposed 400kV OHL.		
Project Completion Date	30/09/2027	
Summary of works in last quarter:		
Project on hold.		
Summary of works in next quarter:		
Project on hold.		
Additional Comments:		
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TORI	Scheme
SHET-RI-075 - Orkney 132kV Infrastructure Finstown - Ellibster	Orkney 132kV Infrastructure
	Finstown - Ellibster
Overview of Works	
SHET-RI-075 works forms part of the Orkney 132kV Local Onshore	Transmission Infrastructure.
The works includes the establishment of the 132 kV Switching Stati	ion at Ellibister and a 132kV
OHL Trident wood pole connection from Ellibister to Finstown Subs	station. Note that Finstown
132kV Substation is established as part of SHET-RI-019 works.	
Purious Completion Puls	20/04/2025
Project Completion Date	30/04/2025
Summary of works in last quarter:	
Project on hold.	
Summary of works in next quarter:	
Summary of works in next quarter.	
Project on hold	
,	
Additional Comments:	
21/2	
N/A	



TORI	Scheme		
SHET-RI-079 - Blackhillock Additional	Blackhillock Additional 275/132kV SGTs		
275/132kV SGTs			
Overview of Works			
Reinforce the transmission network at Black	Reinforce the transmission network at Blackhillock substation by installing two additional new		
275/132kV Supergrid Transformers. The transformers are to be rated at 360MVA.			
Project Completion Date	30/06/2025		
Summary of works in last quarter:			
Project to continue work towards initial design deliverables and progress through early-stage			
internal governance steps. Identified issues requiring resolving relating to scope including whether			
1 or 2 SGTs are required and whether to use SF6 or an alternative			
Summary of works in next quarter:			
Work to conclude the above issues and relevant internal governance requirements.			
Additional Comments:			
N/A			



TORI	Scheme		
SHET-RI-086 - Craig Murrail Switching Station	Craig Murrail Switching Station		
Overview of Works			
It is proposed that a new 132 kV switching station	n will be constructed near the Port Ann tee point		
(Craig Murrail) cutting into the Crossaig-Inveraray	(Craig Murrail) cutting into the Crossaig-Inveraray 132 kV double circuit. Disconnect Port Ann from		
tee points on the 132kV OHL and connect Port Ai	nn GSP directly onto the new 132kV double		
busbars.			
Project Completion Date	31/10/2025		
Summary of works in last quarter:			
Challahaddan Canaulhahian aanulahad fuana luga h			
Stakeholder Consultation completed from June to August 2021 on Preferred Site location.			
Virtual Public Consultation Events held in July 2021.			
Summary of works in next quarter:			
Summary of works in next quarter.			
Environmental surveys; civils and electrical engineering design work at Preferred Site location.			
Stakeholder consultation on more detailed designs including further Public Consultation Events.			
Additional Comments:			
N/A			



TORI	Scheme		
SHET-RI-088 - Loch Buidhe - Dounreay 275kV	Loch Buidhe - Dounreay 275kV Reinforcement		
Reinforcement			
Overview of Works			
Reconductor the existing 275kV double circuit OF	HL between Loch Buidhe and Dounreay		
(approximately 87km). The double circuit is to be	reconductored with a high temperature		
conductor, with a summer pre-fault rating of 900	MVA.		
	0.4 (0.0 (0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0		
Project Completion Date	31/08/2025		
Summary of works in last quarter:			
Works to be considered alongside SHET-RI-058.			
Summary of works in next quarter:			
We what he considered along side CUET DLOSO			
Works to be considered alongside SHET-RI-058.			
Additional Comments:			
Additional comments:	Additional Comments.		



TORI	Scheme			
SHET-RI-089 - Farigaig SGT2 Upgrade	Farigaig SGT2 Upgrade			
Overview of Works				
Upgrade the 120MVA 275/132kV SGT2 at Farig	gaig substation to a 240MVA SGT, to facilitate the			
connection of generation in the area.				
Project Completion Date	30/08/2024			
Summary of works in last quarter:				
The Modification Application has been signed by the Developer, with the project now on hold				
until 2023 when activities will recommence.				
Interfaces with Farigaig SGT1 (SHET-RI-129) Upgrade options assessed.				
Summary of works in next quarter:				
Options for direct replacement of the transformer in-situ will be assessed.				
Additional Comments:				



TORI	Scheme		
SHET-RI-090 - Coupar Angus - Errochty 132kV	Coupar Angus - Errochty 132kV Reconductoring		
Reconductoring			
Overview of Works			
Reconductor approximately 15.4km of the existing	ng 132kV double circuit OHL between Errochty		
and Clunie substations. This double circuit is to b	and Clunie substations. This double circuit is to be reconductored with UPAS conductor (1 x		
300mm2) and will operate at 75°C to give a minimum summer pre-fault rating of 176MVA.			
Project Completion Date	31/10/2026		
Summary of works in last quarter:			
Project on hold.			
Summary of works in next quarter:			
Project on hold.			
A LPC and Comments			
Additional Comments:			
N/A			



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TORI	Scheme		
SHET-RI-093 - East Coast Phase 2 - 400kV	East Coast Phase 2 - 400kV Reinforcement		
Reinforcement			
Overview of Works			
Upgrade the existing Blackhillock / Rothienorman	n / Kintore / Alyth / Kincardine east coast 275kV		
circuits to 400kV operation. Establish a new 400kV double busbar at Kintore to enable this upgrade.			
This upgrade also interfaces at Blackhillock 400k	V Substation and with Scottish Power		
Transmission (SPT) at Kincardine substation. SPT	will be responsible for all the 400kV OHL upgrade		
and substation works beyond the SSEN Transmis	sion/SPT Boundary (Boundary 4).		
	T.		
Project Completion Date	31/10/2026		
Summary of works in last quarter:	Summary of works in last quarter:		
Commenced assessment of the required upgrade works at Fetteresso Substation and establish			
required design works.			
Kintore substation - Main works Contracts placed for both; Gas Insulated Switchgear and Civil			
Works (which had commenced with SHET-RI-25d).			
Summary of works in next quarter:			
Kintore substation - Continuation of platform ear	rthworks and development of the initial		
switchgear design.			
A 1 100			
Additional Comments:			
N/A			



TORI	Scheme
SHET-RI-098 - Dunoon GL1-GL2 OHL Rebuild	Dunoon GL1-GL2 OHL Rebuild

Rebuild approximately 18km of double circuit overhead line between Dunoon substation and the SHET – SPT boundary.

This project interfaces with Scottish Power Transmission (SPT), and any works required beyond the SHET-SPT boundary will be the responsibility of SPT.

Project Completion Date	30/03/2026

Summary of works in last quarter:

Undertook consultation on the proposed alignments. From consultation feedback identified a proposed alignment. Commenced Scoping Report. Continued with ornithological surveys. Continued engagement with stakeholders.

Summary of works in next quarter:

Engage contractor to undertake access report and Traffic Management Plan. Complete Scoping report. Commence Environmental Impact Assessment. Complete ornithological surveys.

Additional Comments:		
N/A		



TORI	Scheme		
SHET-RI-099 - Beauly-Keith 132kV	Beauly-Keith 132kV Reconductoring		
Reconductoring			
Overview of Works			
Reconductor approximately 108km of the existing	-		
Keith 132kV substations. This double circuit is to	be reconductored with a minimum summer pre-		
fault rating of 176MVA.			
Pulint Constitution But	40/05/2024		
Project Completion Date	18/06/2021		
Summary of works in last quarter:			
Circuit inter tripping protection modifications and	Circuit inter tripping protection modifications and commissioning complete.		
Summary of works in payt quarters			
Summary of works in next quarter:			
N/A			
Additional Comments:			
Project complete in Q2 2021.			



TORI	Scheme
SHET-RI-105 - Rothienorman s/s &	Rothienorman s/s & Rothienorman - Kintore
Rothienorman - Kintore Reconductoring	Reconductoring

Establish a new double busbar at Rothienorman to be built at 400kV, but initially operate at 275kV. Re-conductor the 275kV double circuit overhead line between the new double busbar at Rothienorman and Kintore substation (MX1, MX2).

Project Completion Date	20/08/2021
Summary of works in last quarter:	
Substation is now fully energised on s	schedule and all OHL works are complete. Ongoing
completion of minor remedial works and preparation of final records.	
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Summary of works in next quarter:	
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TORI	Scheme	
SHET-RI-106b - Connagill 2nd SGT	Connagill 2nd SGT	
Overview of Works		
At Connagill substation, install a 2nd 275/132kV 360MVA supergrid transformer, to enable the		
connection of wind generation in the local area to the Dounreay – Loch Buidhe 275kV circuit.		
Project Completion Date	01/04/2024	
Summary of works in last quarter:		
Initial high-level project development, along with	initial internal governance activities for project	
inception.		
Commence of conducting and accordance		
Summary of works in next quarter:	and with initial internal accompany attition for	
Continue with high-level project development, along with initial internal governance activities for		
project inception.		
Additional Comments:		
N/A		



TORI	Scheme
SHET-RI-107 - North Argyll - Inveraray	North Argyll - Inveraray Reinforcement
Reinforcement	
Overview of Works	
Reinforce the double circuit overhead line between	een North Argyll 275/132kV substation
(established as part of SHET-RI-013) and Inverar	ay 132kV switching station. This reinforced circuit
will connect to the double circuit overhead line	from Crossaig (rebuilt as part of SHET-RI-050)
approximately 2.8km away from Inveraray.	
Project Completion Date	30/10/2025
Summary of works in last quarter:	
Stakeholder Consultation to be completed with	Public Consultation Events to be held on the route
options and preferred route.	
Balfour Beatty engaged to undertake alignment	design.
Summary of works in next quarter:	
•	and design in conjunction with Ramboll beginning
the environmental assessment of the alignment and options.	
Stakeholder and Public Consultation on preferre	d alignment to be completed.
Additional Comments:	
N/A	



TORI	Scheme	
SHET-RI-109 - Loch Buidhe - Spittal 132kV	Loch Buidhe - Spittal 132kV Reconductoring	
Reconductoring		
Overview of Works		
Reconductor the existing 90km 132kV tower line between Loch Buidhe and Spittal substations.		
The 132kV overhead line is to be reconductored with a higher capacity conductor than the		
existing conductor and should have a minimum summer pre-fault rating of 176MVA.		
Project Completion Date	30/06/2027	
Summary of works in last quarter:	30/00/2027	
	am to the entioneering stage	
Project to be progressed by the Development team to the optioneering stage.		
Summary of works in next quarter:		
Project to be progressed by the Development team to the optioneering stage.		
Additional Comments:		
N/A		



TODI		
TORI	Scheme	
SHET-RI-111 - Abernethy 132kV Mesh Corner	Abernethy 132kV Mesh Corner	
Overview of Works		
At Abernethy 132/33kV substation, install a four	circuit breaker mesh corner. This will be	
connected to the existing Burghmuir – Charleston	n 132kV double circuit overhead line (PCN/CAS).	
Project Completion Date	31/10/2022	
Summary of works in last quarter:		
Continue to progress with Regional Development	t Plan and further optioneering to identify most	
economical solution to accommodate contracted	generation.	
Summary of works in next quarter:		
Continue to progress with Regional Development Plan and further optioneering to identify most		
economical solution to accommodate contracted generation.		
Additional Comments:		
N/A		



TORI	Scheme	
SHET-RI-115 - Melgarve 400/132 kV Substation	Melgarve 400/132 kV Substation Additional	
Additional SGTs	SGTs	
Overview of Works		
At Melgarve substation (established under SHET-	RI-085a and SHET-RI-085b), install an additional	
two 480MVA SGTs to enable the connection of w	ind generation in the area.	
Project Completion Date	31/10/2026	
Summary of works in last quarter:		
Conclusion of options within the Melgarve substa	ation and refinement of the design and necessary	
extension work for commencing Town and Country Planning pre-submission works including the		
environmental surveys.		
Summary of works in next quarter:		
Public consultation will be held on the preferred	design option. The design will continue to be	
refined for commencing Town and Country Planr		
environmental surveys.		
Additional Comments:		
N/A		



SHET-RI-116 - Kergord - Yell 132kV Connection	Kergord - Yell 132kV Connection	
Overview of Works		
On Shetland install a new 132kV single circuit between the Kergord 132kV substation (established as part of SHET-RI-053) and a new 132kV switching station on Yell, to enable the connection of renewable generation.		
Project Completion Date	01/04/2025	
Summary of works in last quarter:		
Public consultation events took place on Shetland 7 th , 8 th and 9 th September. Feedback will now be used to inform the alignment stage prior to consenting. Planning applications to be submitted 1 st half of 2022.		
Engagement with landowners, statutory consultees and stakeholders has intensified this last period.		
Environmental survey contract placed for alignment stage. Surveys to start September 2021. Surveys will inform Environmental Assessments (EAs) and planning applications.		
Noise surveys completed for South Yell Switching Station. Contract placed for peat probing and tenders under review for geotechnical investigations.		
Summary of works in next quarter:		
Carry out LIDAR (topography) surveys of route alignments. Carry out geotechnical investigations for route alignments and South Yell Switching Station. Prepare scope for subsea cable route survey between Cul Ness landfall on Shetland mainland and Burravoe on Yell.		
Finalise route alignments taking on board feedback and freeze designs for planning. Prepare planning deliverables for South Yell Switching Station planning application.		

Scheme

TORI

Prepare EAs for planning applications.

Additional Comments:

N/A



TORI	Scheme	
SHET-RI-117 - Tealing 275kV Busbar Upgrade	Tealing 275kV Busbar Upgrade	
Overview of Works		
At Tealing remove the existing 275kV 2500A rate	d busbar and replace with a new 4000A rated	
275kV double busbar complete with two bus couplers, one bus section and busbar selection on all		
feeder bays.		
Project Completion Date	29/04/22	
Second phase of the reserve bus bar now energised, and first phase of main busbar bar also now re-built and re – energised		
Summary of works in next quarter:		
Main bus bar 1 phase 2 worked progressing with dismantling completed and installation of equipment on-going		
Additional Comments:		
N/A		



TORI	Scheme		
SHET-RI-119 - Corriemoillie Transformer	Corriemoillie Transformer Protection		
Protection Modification	Modification		
Overview of Works			
At the existing Corriemoillie substation, install a 3 ended grid transformer differential protection			
scheme on GT2 to enable the connection of a second generator at Corriemoillie.			
Project Completion Date 31/10/2024			
Summary of works in last quarter:			
Project initiated and passed to the Delivery team for review and coordination with generator			
connection works.	connection works.		
Summary of works in next quarter:			
Delivery team progressing with review and coordination with generator connection works.			
Additional Comments:			
N/A			



Overview of Works		
Construct a new Grid Supply Point substation near Fiddes connected to the 275kV double circuit		
tower line XT1/XT2 between Kintore and Tealing.		
Construct a new 132kV double circuit overhead line between Brechin and the		
Tealing/Arbroath/Brechin Tee Point.		
Reconductor the existing double circuit tower line between Tealing and the		
Tealing/Arbroath/Brechin Tee Point.		
Dismantle the existing Fiddes 132/33kV substation.		
Dismantle the existing 132kV single circuit overhead line between the		
Craigiebuckler/Tarland/Fiddes Tee Point and the Brechin Substation.		
Project Completion Date 21/10/2026		
Project Completion Date 31/10/2026		
Summary of works in last quarter:		
Publish the report on consultation for the overhead line works between Brechin and the		

Finalise the scheme option for Fiddes Substation or Fiddes to Fetteresso Overhead Line works. Asset Management to undertake further asset condition assessment surveys of the overhead line

Ongoing System Planning and Asset Management review of the overhead line options between

Scheme

East Coast 132kV Upgrade

Additional Comments:

Summary of works in next quarter:

Tealing/Arbroath/Brechin Tee Point.

between Brechin and the Tealing/Arbroath/Brechin Tee Point.

Brechin and the Tealing/Arbroath/Brechin Tee Point.

N/A

TORI

SHET-RI-120 - East Coast 132kV Upgrade



TORI	Scheme	
SHET-RI-121 - Charleston - Abernethy 132kV	Charleston - Abernethy 132kV Reconductoring	
Reconductoring		
Overview of Works		
Reconductor approximately 25km of 132kV OHL	between Abernethy 132kV substation and	
Charleston 132kV substation. The circuit should be reconductored with a conductor capable of a		
minimum summer pre-fault rating of 150MVA.		
Project Completion Date	31/10/2022	
	31/10/2022	
Summary of works in last quarter:		
Continue with Optioneering and Project Development to identify optimum reinforcement strategy		
to accommodate contracted generation.		
Summary of works in next quarter:		
Continue with Optioneering and Project Development to identify optimum reinforcement strategy		
to accommodate contracted generation.		
Additional Comments:		
N/A		



TORI	Scheme	
SHET-RI-123 - Shin - Loch Buidhe 132kV	Shin - Loch Buidhe 132kV Reconductoring	
Reconductoring		
Overview of Works		
Following the completion of SHET-RI-058, Shin s	ubstation will be radially connected into Loch	
Buidhe 132kV substation via the existing 132kV double circuit. TORI-123 project is to reconductor this 132kV double circuit overhead line between Shin substation and Loch Buidhe substation. The		
Project Completion Date	31/12/2023	
Summary of works in last quarter:		
System Studies ongoing. Works to be considered alongside SHET-RI-058.		
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Summary of works in next quarter:		
System Studies ongoing. Works to be considered alongside SHET-RI-058.		
Additional Comments:		
N/A		
1		



TORI	Scheme		
SHET-RI-124 - 2nd Shetland HVDC Link Kergord	2nd Shetland HVDC Link Kergord -		
- Rothienorman	Rothienorman		
Overview of Works			
Construct a 2nd 600MW (tbc) HVDC link from Kei	Construct a 2nd 600MW (tbc) HVDC link from Kergord 132kV substation on Shetland (established		
under SHET-RI-053) to the Scottish mainland at a	n HVDC convertor station at Rothienorman		
substation.			
TI COOL NAVINGO II I VIII VIII VIII VIII VIII VIII VI			
The 600MW HVDC link will have approximately 3	6km of land cable and 320km of subsea cable		
between Shetland and Rothienorman.			
Project Completion Date	31/10/2026		
Summary of works in last quarter:			
Project on hold.			
Summary of works in next quarter:			
Project on hold.			
Additional Comments:			
N/A			



TORI	Scheme		
SHET-RI-126 - Kergord - Yell 132kV 2nd	Kergord - Yell 132kV 2nd Connection		
Connection			
Overview of Works			
On Shetland install a new 2nd 132kV single circuit between the Kergord 132kV substation			
(established as part of SHET-RI-053) and the South Yell Switching Station (constructed as part of			
SHET-RI-116), to enable the connection of renewable generation.			
Project Completion Date	31/10/2026		
Summary of works in last quarter:			
Project on hold.			
Summary of works in next quarter:			
Project on hold.			
Additional Comments:			
N/A			



	Scheme	
SHET-RI-127 - Dounreay - Spittal 400 kV Double	Dounreay - Spittal 400 kV Double Circuit Cable	
Circuit Cable		
Overview of Works		
Establish two new 400kV double busbars, one at a new site close to Dounreay and the second		
close to Spittal. Construct approximately 15km of new 400kV double circuit underground cables from the new site close to Dounreay and Spittal. The new 400kV cable circuits should have a		
		minimum summer rating of 1000MW on each circuit
Project Completion Date	31/10/2031	
Summary of works in last quarter:		
Coordination required with Scotwind and Offshore Transmission Network Review workstream.		
Summary of works in next quarter:		
Summary of works in next quarter: Coordination required with Scotwind and Offshore	re Transmission Network Review workstream.	
	re Transmission Network Review workstream.	
Coordination required with Scotwind and Offshore	re Transmission Network Review workstream.	
Coordination required with Scotwind and Offshor	re Transmission Network Review workstream.	
Coordination required with Scotwind and Offshor	re Transmission Network Review workstream.	



TORI	Scheme		
SHET-RI-129 - Farigaig SGT1 Upgrade	Farigaig SGT1 Upgrade		
Overview of Works			
Upgrade the 120MVA 275/132kV SGT1 at Farigaig substation to a 240MVA SGT, to facilitate the			
connection of generation in the area.			
Project Completion Date	01/04/2024		
Summary of works in last quarter:			
Project Team assessing the works planned for the	Farigaig SGT2 upgrade and reviewing		
implementing these on the SGT1 upgrade.			
Development team engaging on initial optioneeri	ng work.		
Summary of works in next quarter:	Summary of works in next quarter:		
Transformer in-situ replacement design will be re	fined in preparation for drafting works		
information for tender.			
Additional Comments:			
N/A			



TORI	Scheme	
SHET-RI-130a - North Argyll - Craig Murrail	North Argyll - Craig Murrail 275kV Operation	
275kV Operation		
Overview of Works		
Reinforce the network in the Argyll and Kintyre network to enable 275kV operation of the		
network from Creag Dhubh substation (established as part of SHET-RI-013) to Craig Murrail		
Substation. This will require the upgrade of substations on this circuit for 275kV operation.		
Project Completion Date	31/10/2025	
Summary of works in last quarter:		
Stakeholder Consultation completed from June to August 2021 on Preferred Site location.		
State Total Consultation Completed Total Consultation	o August 2021 on Preferred Site location.	
Virtual Public Consultation Events held in July 20		
·		
·		
Virtual Public Consultation Events held in July 20 Summary of works in next quarter:	21.	
Virtual Public Consultation Events held in July 20 Summary of works in next quarter: Environmental surveys; civils and electrical enging	21. neering design work at Preferred Site location.	
Virtual Public Consultation Events held in July 20 Summary of works in next quarter:	21. neering design work at Preferred Site location.	
Summary of works in next quarter: Environmental surveys; civils and electrical enging Stakeholder consultation on more detailed designation.	21. neering design work at Preferred Site location.	
Virtual Public Consultation Events held in July 20 Summary of works in next quarter: Environmental surveys; civils and electrical engir Stakeholder consultation on more detailed designable. Additional Comments:	21. neering design work at Preferred Site location.	
Summary of works in next quarter: Environmental surveys; civils and electrical enging Stakeholder consultation on more detailed designation.	21. neering design work at Preferred Site location.	



	7		
TORI	Scheme		
SHET-RI-130b - Craig Murrail - Crossaig 275kV	Craig Murrail - Crossaig 275kV Operation		
Operation			
Overview of Works			
Reinforce the network in the Argyll and Kintyre network to enable 275kV operation of the			
network from Craig Murrail substation to a new double busbar substation to be established at			
Crossaig.			
Project Completion Date	31/10/2026		
Summary of works in last quarter:			
Stakeholder Consultation completed from June to August 2021 on Preferred Site location.			
Virtual Public Consultation Events held in July 2021.			
Summary of works in next quarter:			
Environmental surveys; civils and electrical engineering design work at Preferred Site location.			
Stakeholder consultation on more detailed designs including further Public Consultation Events.			
Additional Comments:			
N/A			



TORI
SHET-RI-131 - Brechin 132kV Extension

Overview of Works
Construct 2 new circuit breakers at Brechin Grid Supply point.

Project Completion Date
Summary of works in last quarter:
Continue optioneering and project development alongside related reinforcement, SHET-RI-120.

Summary of works in next quarter:
Continue optioneering and project development alongside related reinforcement, SHET-RI-120.

Additional Comments:
N/A



TORI	Scheme
SHET-RI-132 - Beauly-Blackhillock High	Beauly-Blackhillock High Temperature
Temperature Reconductoring	Reconductoring

Reconductor the Beauly - Blackhillock 275 kV double circuit line with high temperature conductors. The circuits to be reconductored comprise the existing 275kV overhead lines between Beauly and Knocknagael, and between Knocknagael and Blackhillock.

The substation at Knocknagael is adjacent to the existing Foyers line tee point.		
,		
Project Completion Date	31/10/2026	
Summary of works in last quarter:		
Initial Development and optioneering v	vorks progressed.	
Summary of works in next quarter:		
Initial Development and optioneering works to progress.		
mater 2 or ore principles and operating memory of principles.		
Additional Comments:		
N/A		



TORI	Scheme	
SHET-RI-134 – Beauly-Denny 2 nd Circuit upgrade	Beauly-Denny 2 nd Circuit upgrade from 275kV	
from 275kV to 400kV	to 400kV	
Overview of Works		
Upgrade the existing Beauly / Fasnakyle/ Fort Augustus / Tummel-Kinardochy / Braco West /		
Bonny Bridge 275kV circuit to 400kV; mirroring the ratings of the existing 400kV circuit, along the		
route		
Project Completion Date	31/10/2029	
Summary of works in last quarter:		
Initial Development and optioneering works to progress.		
Summary of works in next quarter:		
Initial Development and optioneering works to progress.		
Additional Comments:		
N/A		



TORI	Scheme		
SHET-RI-135 - Broadford to Edinbane 132kV	Broadford to Edinbane 132kV Reinforcement		
Reinforcement			
Overview of Works			
Construct a 132kV Collector Switching Station at Edinbane; install a second 132kV busbar at			
Broadford 132kV Substation; add a second 132kV circuit between Broadford 132kV Substation			
and Edinbane 132kV Collector Switching Station, mirroring the rating of the existing 132kV circuit.			
These works will include provision of reactive compensation equipment.			
·			
Project Completion Date	31/07/2026		
Summary of works in last quarter:			
Initial Development and optioneering works to progress.			
Summary of works in next quarter:	Summary of works in next quarter:		
Initial Development and optioneering works to progress.			
Additional Comments:			
N/A			



TORI	Scheme	
SHET-RI-136 - Blackhillock 400kV Building	Blackhillock 400kV Building Extension	
Extension		
Overview of Works		
Extend existing Blackhillock 400kV GIS building to allow space provision for additional bays.		
Pusicat Consulation Pate	24 /00 /2024	
Project Completion Date	31/08/2024	
Summary of works in last quarter:		
Initial development and optioneering works to	progress.	
	progress.	
	progress.	
	progress.	
Initial development and optioneering works to Summary of works in next quarter:		
Initial development and optioneering works to		
Initial development and optioneering works to Summary of works in next quarter:		
Initial development and optioneering works to Summary of works in next quarter:		
Initial development and optioneering works to Summary of works in next quarter:		
Initial development and optioneering works to Summary of works in next quarter: Initial development and optioneering works to		



TORI	Scheme
SHET-RI-137 - Blackhillock-New Deer-Peterhead	Blackhillock-New Deer-Peterhead 400kV OHL
400kV OHL	

Establish a new 400kV double circuit overhead line from Blackhillock to New Deer (60km) and New Deer to Peterhead (22km).

Project Completion Date	31/10/2031

Summary of works in last quarter:

Initial development and optioneering works to progress. Project to be prepared for submission for evaluation in Network Options Assessment (NOA).

Summary of works in next quarter:

Initial development and optioneering works to progress. Project to be prepared for submission for evaluation in Network Options Assessment (NOA)

Additional Comments:

N/A



TORI	Scheme	
SHET-RI-138 - New Deer 400kV Busbar	New Deer 400kV Busbar Extension	
Extension		
Overview of Works		
Extend 400kV double busbar to form 3-section busbar at New Deer 400kV Substation.		
	T a + /+ a /a a a	
Project Completion Date	31/10/2033	
Summary of works in last quarter:		
Initial development and optioneering works to progress.		
Summary of works in next quarter:		
Initial development and optioneering works to progress.		
Additional Comments:		
N/A		



TORI	Scheme	
SHET-RI-139 - 2GW HVDC Link New Deer to	2GW HVDC Link New Deer to England	
England		
Overview of Works		
Install an indoor 2GW HVDC converter station with associated equipment at New Deer Substation. HVDC cables to be routed into the sea and then south towards England (landing point to be		
	L	
Project Completion Date	31/10/2033	
Summary of works in last quarter:		
Initial development and optioneering works to progress.		
Summary of works in next quarter:		
Initial development and optioneering works to progress.		
Additional Comments:		
N/A		



TORI	Scheme	
SHET-RI-140 - Thurso South 275 kV Substation	Thurso South 275 kV Substation	
Redevelopment	Redevelopment	
Overview of Works		
Redevelop the existing Thurso South 275 kV substation into a new 275 kV double busbar		
arrangement.		
Project Completion Date	01/06/2025	
Summary of works in last quarter:		
Initial Development and optioneering works to progress.		
Summary of works in next quarter:		
Initial Development and optioneering works to progress.		
Additional Comments:		
N/A		



TORI	Scheme
SHET-RI-142 - Caithness to New Deer 2 - 2 x	Caithness to New Deer 2 - 2 x 1GW HVDC Links
1GW HVDC Links	
Overview of Works	
Construct 2 x 1GW HVDC links from Spittal to Ne	ew Deer 2, including converter stations and
associated equipment.	
Project Completion Date	31/10/2031
Summary of works in last quarter:	
Subject to acceptance	
Summary of works in next quarter:	
Coordination required with Scotswind and Offsh	ore Transmission Network Review workstream.
Additional Comments	
Additional Comments:	
N/A	



TORI	Scheme	
SHET-RI-143 - Kergord - Gremista GSP 132kV	Kergord - Gremista GSP 132kV Infrastructure	
Infrastructure		
Overview of Works		
Construct a new 132kV 24km circuit between Kergord substation and Gremista GSP, terminated		
onto new 132kV feeder bays at Kergord and Gremista. Construct a new Tee point for the		
connection of a wind farm.		
Project Completion Date	30/04/2025	
Summary of works in last quarter:		
Initial Development and optioneering works to progress.		
Summary of works in next quarter:		
Initial Development and optioneering works to progress.		
Additional Comments:		
N/A		



Scheme		
New Deer 2 400kV Substation		
Overview of Works		
Establish a new 400kV substation close to the proposed New Deer 400kV substation and tie in the		
proposed 400kV circuits from New Deer to Peterhead.		
1		
31/10/2033		
Summary of works in last quarter:		
Initial development and optioneering works to progress.		
Summary of works in next quarter:		
Initial development and optioneering works to progress.		



TORI	Scheme	
SHET-RI-145 - 2GW HVDC Link New Deer 2 to	2GW HVDC Link New Deer 2 to England	
England		
Overview of Works		
Install an indoor 2GW HVDC converter station with associated equipment at New Deer 2		
Substation. HVDC cables to be routed into the sea and then south towards England (landing point		
to be confirmed). This will be a joint project with National Grid.		
Project Completion Date	31/10/2033	
Summary of works in last quarter:		
Initial development and optioneering works to progress.		
Summary of works in next quarter:		
Initial development and optioneering works to progress.		
Additional Comments:		
N/A		



TORI	Scheme	
SHET-RI-147 - Tealing 400kV Substation	Tealing 400kV Substation	
Overview of Works		
Establish a new 400kV substation close to the existing Tealing 275kV Substation.		
Project Completion Date	31/10/2031	
Summary of works in last quarter:		
Initial development and optioneering works to pr	ogress.	
Summary of works in next quarter:		
Initial development and optioneering works to progress.		
Additional Comments:		
N/A		



	Scheme
SHET-RI-148 - Alyth – Tealing 400kV	Alyth – Tealing 400kV Reinsulation
Reinsulation	
Overview of Works	
Re-insulate the 275kV double circuit overhe	ead line between Alyth and Tealing for 400kV
operation.	
Project Completion Date	31/10/2031
inception.	
Summary of works in next quarter:	
Initial high-level project development, along with initial internal governance activities for project inception.	
	g with initial internal governance activities for project
inception.	g with initial internal governance activities for project
	g with initial internal governance activities for project



TORI	Scheme
SHET-RI-149 - Tealing – Glenrothes Westfield	Tealing – Glenrothes Westfield 400kV Rebuild
400kV Rebuild	
Overview of Works	
Rebuild the 275kV double circuit overhead line b	petween Tealing and Glenrothes-Westfield for
400kV operation.	
Project Completion Date	31/10/2031
Summary of works in last quarter:	
Initial high-level project development, along with	h initial internal governance activities for project
inception.	
Summary of works in next quarter:	
Initial high-level project development, along with	h initial internal governance activities for project
inception.	
Additional Comments:	
N/A	



TORI	Scheme	
SHET-RI-150 - Inverguie Tee – Peterhead 132kV	Inverguie Tee – Peterhead 132kV	
Reconductoring	Reconductoring	
Overview of Works		
Reconductor approximately 6.7km of 132kV OHL between The Inverguie Tee and Peterhead		
132kV substation. The circuit should be reconductored with a conductor capable of a minimum		
summer pre-fault rating of 226MVA.		
Project Completion Date	31/10/2029	
Summary of works in last quarter:		
Initial high-level project development, along with initial internal governance activities for project		
inception.		
Summary of works in next quarter:		
Initial high-level project development, along with initial internal governance activities for project		
inception.		
Additional Comments:		
N/A		



SHET-RI-151 - Peterhead — St Fergus 132kV Line Works - Overview of Works Overhead line works to bring the 132kV circuit to ground, including any required modificat Design and installation of one 132kV circuit breaker with three 132kV disconnectors and associated protection and control equipment for each of the two circuits. Project Completion Date Summary of works in last quarter: Initial high-level project development, along with initial internal governance activities for p inception.	ons.
Overview of Works Overhead line works to bring the 132kV circuit to ground, including any required modificat Design and installation of one 132kV circuit breaker with three 132kV disconnectors and associated protection and control equipment for each of the two circuits. Project Completion Date 31/10/2029 Summary of works in last quarter: Initial high-level project development, along with initial internal governance activities for p	
Overhead line works to bring the 132kV circuit to ground, including any required modificat Design and installation of one 132kV circuit breaker with three 132kV disconnectors and associated protection and control equipment for each of the two circuits. Project Completion Date 31/10/2029 Summary of works in last quarter: Initial high-level project development, along with initial internal governance activities for p	
Design and installation of one 132kV circuit breaker with three 132kV disconnectors and associated protection and control equipment for each of the two circuits. Project Completion Date 31/10/2029 Summary of works in last quarter: Initial high-level project development, along with initial internal governance activities for p	
associated protection and control equipment for each of the two circuits. Project Completion Date 31/10/2029 Summary of works in last quarter: Initial high-level project development, along with initial internal governance activities for p	roject
Project Completion Date 31/10/2029 Summary of works in last quarter: Initial high-level project development, along with initial internal governance activities for p	roject
Summary of works in last quarter: Initial high-level project development, along with initial internal governance activities for p	roject
Summary of works in last quarter: Initial high-level project development, along with initial internal governance activities for p	roject
Initial high-level project development, along with initial internal governance activities for p	roject
	roject
inception.	
Summary of works in next quarter:	
Initial high-level project development, along with initial internal governance activities for p	roject
inception.	
Additional Comments:	
N/A	



TORI	Scheme	
SHET-RI-153 - Spittal 2 275 kV Substation	Spittal 2 275 kV Substation	
Overview of Works		
Construct a new 275 kV substation 'Spittal 2' close to the existing Spittal 275 kV		
substation in Caithness.		
Project Completion Date	31/05/2028	
Summary of works in last quarter:		
Subject to acceptance		
Company of works in post growton.		
Summary of works in next quarter:		
Initial Dayslanment and antion caring works to an	TO GROSS	
Initial Development and optioneering works to progress.		
Additional Comments:		
N/A		
ly.c		



TORI	Scheme	
SHET-RI-166 - Tealing – Arbroath 132kV Line	Tealing – Arbroath 132kV Line Works	
Works		
Overview of Works		
Overhead line works to bring the 132kV circuit to ground, including any required modifications.		
Design and installation of one 132kV circuit breaker with two 132kV disconnectors and associated		
protection and control equipment.		
Project Completion Date	30/04/2026	
Summary of works in last quarter:		
Initial high-level project development, along with initial internal governance activities for project		
inception.		
Summary of works in next quarter:		
Initial high-level project development, along with	i initial internal governance activities for project	
inception.		
Additional Comments:		
N/A		