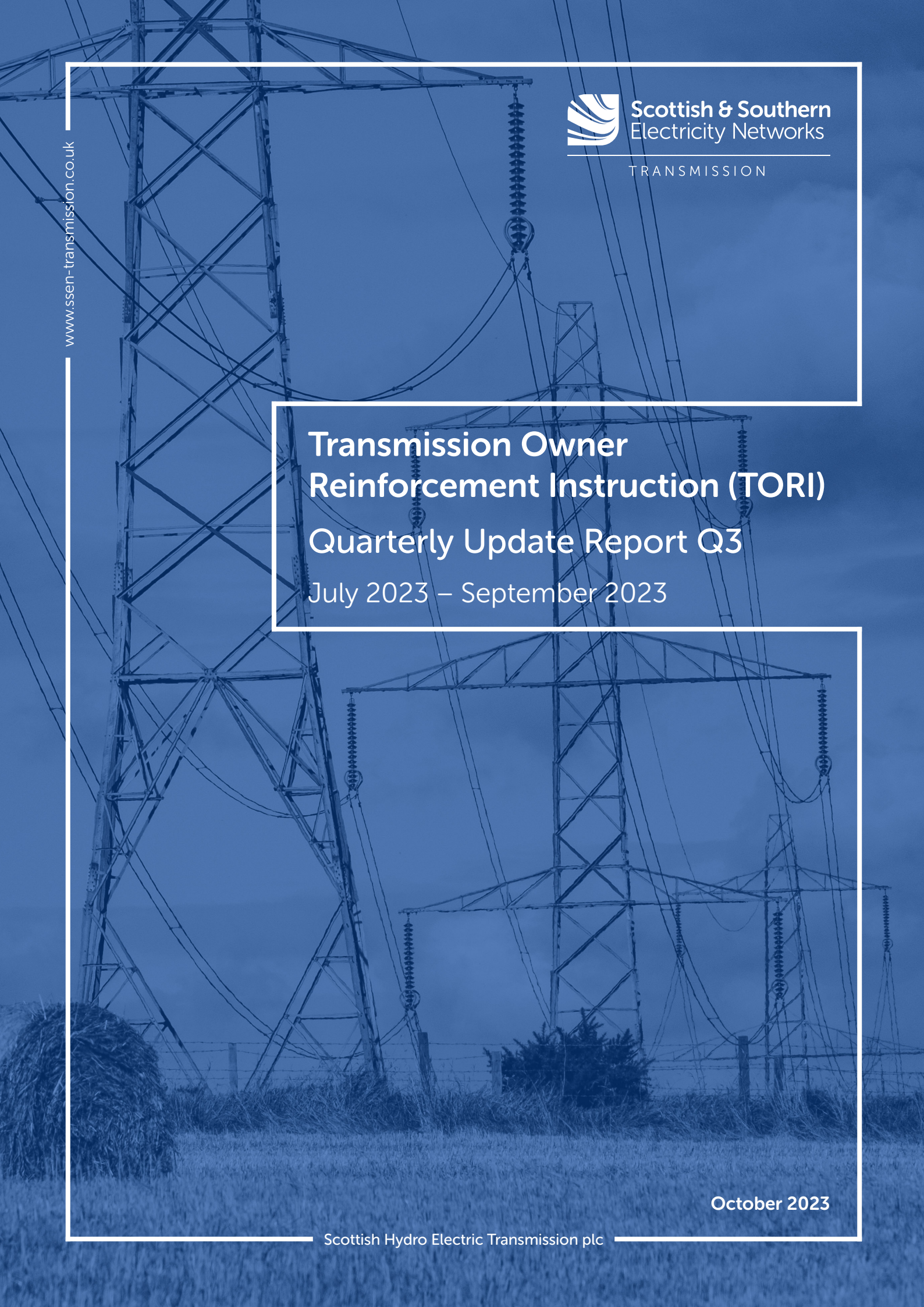

Scottish & Southern Electricity Networks

TRANSMISSION

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Transmission Owner Reinforcement Instruction (TORI)

Quarterly Update Report Q3

July 2023 – September 2023

October 2023

Scottish Hydro Electric Transmission plc

Transmission Owner Reinforcement Instruction (TORI)

Quarterly Update Report Q3

July 2023 – September 2023

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 contracts 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

Table of Contents

TORI SHET-RI-007a - Beauly - Blackhillock 400 kV Double Circuit OHL	**Scheme** Beauly - Blackhillock 400 kV Double Circuit OHL
Overview of Works Establish a new double circuit 400kV overhead line approximately 110km from Beauly to Blackhillock. In an update from initial scope, the new OHL is to connect to a new 400kV busbar at Beauly and a new 400kV busbar at Blackhillock.	
Proposed Consent Submission	01/11/2024
Current Project Phase	Design
Next Project Phase	Consenting
Next Stakeholder Event	November 2023
Project Completion Date	31/10/2030
Summary of works in last quarter:	
Summary of works in next quarter:	
Additional Comments: Project is being developed in parallel to SHET-RI-137 Blackhillock – New Deer – Peterhead 400kV OHL with shared project team. New Beauly 400kV Busbar to be connected to is captured in scope of SHET-RI-007b. New Blackhillock 400kV Busbar to be connected to is captured in scope of TORI 199.	

TORI SHET-RI-007b - Beauly 400 kV Busbar	**Scheme** Beauly 400 kV Busbar
Overview of Works Busbar extension at the existing Beauly substation.	
Proposed Consent Submission	tbc
Current Project Phase	Optioneering
Next Project Phase	Design
Next Stakeholder Event	tbc
Project Completion Date	01.04.2025
Summary of works in last quarter:	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-009 - East Coast Onshore 275kV Upgrade	**Scheme** East Coast Onshore 275kV Upgrade
Overview of Works Establish new busbar Substation at Alyth, to be built at 400kV but initially operated at 275kV, with reactive compensation support. Also 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.	
Proposed Consent Submission	Complete
Current Project Phase	Execution
Next Project Phase	Operation
Next Stakeholder Event	TBC
Project Completion Date	31/10/2023
Summary of works in last quarter: Complete commissioning of the Gas Insulated Switchgear and commence the outage work to connect it on to the network, Complete assembly of the STATCOM and MSCDN equipment and start commissioning works, Completion of exterior civil works**.**	
Summary of works in next quarter (Alyth Ssubstation):	
Additional Comments: N/A	

TORI SHET-RI-013 - North Argyll Substation	Scheme North Argyll Substation
Overview of Works 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 with provision for additional future feeder bays. Establish a new 275 kV double circuit OHL between Creag Dhubh (North Argyll) substation and a tie in point on existing Dalmally – Windyhill SPEN circuit, near Dalmally.	
Proposed Consent Submission	Substation consented. Overhead line consent subject to Public Local Inquiry.
Current Project Phase	Refinement
Next Project Phase	Execution
Next Stakeholder Event	TBC
Project Completion Date	30/11/2027
Summary of works in last quarter: Initial Works detailed design is ongoing. Supplementary ground investigation works were completed to inform earthworks model.	
Summary of works in next quarter: Progress the Initial Works contract design deliverables. Submission of deliverables to Planning Authority to clear consent pre-commencement conditions. Prepare for Forestry Contractor mobilisation in early 2024.	
Additional Comments: N/A	

TORI SHET-RI-019 - Dounreay - Orkney 220kV Subsea HVAC Cable Link 1	**Scheme** Dounreay - Orkney 220kV Subsea HVAC Cable 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 installed at both cable ends within the substation compounds at Dounreay and Finstown.	
Proposed Consent Submission	Complete
Current Project Phase	Refinement
Next Project Phase	Delivery
Next Stakeholder Event	None planned at present.
Project Completion Date	Q2 2028
Summary of works in last quarter: Part A Design Works and Pre-Commencement Conditions Works have commenced.	
Summary of works in next quarter: Completion of Part A Design Works, securing of Long Lead Equipment and completion of Stage Gate 3 in March 2023.	
Additional Comments: Part B Contract Award targeted April 2023.	

TORI SHET-RI-020 - Dounreay - Orkney 220kV Subsea HVAC Cable Link 2	**Scheme** Dounreay - Orkney 220kV Subsea HVAC Cable 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 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 installed at both cable ends within the substation compounds at Dounreay and Finstown. Finstown Substation is established as part of SHET-RI-019.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
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 SHET-RI-025a - Peterhead-Rothienorman 400 kV OHL upgrade	**Scheme** Peterhead-Rothienorman 400 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 OPGW is required between New Deer - Rothienorman.	
Proposed Consent Submission	Consent approved
Current Project Phase	Commissioning
Next Project Phase	Handover
Next Stakeholder Event	N/A
Project Completion Date	30/10/2023
Summary of works in last quarter: OHL works complete, and 1st circuit energised at 400kV	
Summary of works in next quarter: Continue energisation sequence for 2nd circuit energised at 400kV	
Additional Comments: N/A	

TORI SHET-RI-025b - Eastern Subsea HVDC Link	Scheme 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.	
Proposed Consent Submission	All material consents approved pending discharge of conditions
Current Project Phase	Refinement
Next Project Phase	Construction
Next Stakeholder Event	
Project Completion Date	31/10/2029
Summary of works in last quarter: Secured Crown Estate Scotland Option Agreement Commenced Early Works and Site Verification with Converter / Civils preferred bidder Awarded Enabling Works Part A Contracts (132kV Diversion and 400kV GIS Substation Extension) Submitted Ofgem Project Assessment Phase 2A (Non EPC cost & Risk) – end August Continued Employer Led Offshore UXO Surveys	
Summary of works in next quarter: Commence Enabling Part A Design development Submit Ofgem Project Assessment Phase 2B (EPC Costs) – end October Complete PSR and PAR governance – Gate 3 – moving from Refinement in Construction phase Await Ofgem Project Assessment Determination Conclude negotiations on main EPC contracts. Continue Employer Led Offshore UXO Surveys	
Additional Comments: Conclude 400kV AC Scope of Works for HVDC converter interface at Peterhead.	

TORI SHET-RI-025c - Peterhead 400 kV Busbar	Scheme Peterhead 400 kV Busbar
Overview of Works 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 under a separate project.	
Proposed Consent Submission	Complete
Current Project Phase	Execution
Next Project Phase	Operation Q4 2023
Next Stakeholder Event	
Project Completion Date	06/11/2023
Summary of works in last quarter: 275kV cable VV1 circuit terminations, cable HV testing, and busbars installed now all installed and energised 31st August 2023. All 6 275kV cable on the second circuit VV2 are now installed, following a failed sheath test on the red phase of this group it was removed, replaced and sheath tested prior to the VND1 outage commencing. Hitachi remedial works on GIS RBB gas leak remedial works complete followed by a further successful High Voltage test in July 2023. VND1 outage commenced 11th September allowing all remaining outage works to commence including VND1/VV2 P&C mods, removal of VND1 downleads from T92 within the existing 275kV substation and 275kV cable works on VV2 circuit.	
Summary of works in next quarter: The fourth coming months will include the completion of all works including, VND1/VV2 Protection and Control Mods, VV2 cable terminations, installation of busbars within SGT5 building, VND1 OHL stringing from existing T89 onto the new VND1 OHL route connecting into the 400kV substation, all civil snagging works, removal of OHL towers and full site de-mobilisation. Full energisation due 6th November 2023 of VND1 OHL, SGT5 and VV2 275kV cable circuit.	
Additional Comments: N/A	

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

Overview of Works

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 400/33kV Super Grid Transformers to connect the Rothienorman Grid Supply Point to the 400kV Rothienorman Busbar. Upgrade the Surge Arresters and Capacitive Voltage Transformers on six existing overhead line feeder bays from 275kV to 400kV.

Upgrade the Surge Arresters and Capacitive Voltage Transformers on four existing overhead line feeder bays and three cable circuit bays from 275kV to 400kV at New Deer substation and bring the whole substation to 400kV operating voltage.

Proposed Consent Submission	Complete
Current Project Phase	Commissioning
Next Project Phase	N/A
Next Stakeholder Event	N/A
Project Completion Date	31/10/2023

Summary of works in last quarter:

OHL Works – All OHL works are complete, with works now concentrated on Substation reconfiguration at Blackhillock for the transition to 400kV Operation.

Summary of works in next quarter:

Complete transition to 400kV operation

Additional Comments:

N/A

TORI SHET-RI-026 - Blackhillock 275 kV QBs	Scheme Blackhillock 275 kV QBs (PSTs)
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.	
Proposed Consent Submission	N/A
Current Project Phase	Development
Next Project Phase	Refinement
Next Stakeholder Event	N/A
Project Completion Date	07/09/27
Summary of works in last quarter: Updated network studies were undertaken for the project to determine the boundary impact of delivering the PSTs out with the RIIO-T2 period. The output advised that the impact of not delivering between 2026-2030 was negligible, with the main need post 2030. The project are now progressing with delivering PSTs in 2027.	
Summary of works in next quarter: Prepare Works Information to support ITT. Ensure all governance is in place to progress through Gate 2. Status Check to be held for project.	
Additional Comments: N/A	

TORI SHET-RI-028 – Thurso South to Gills Bay 132kV OHL	**Scheme** Thurso South to Gills Bay 132kV OHL
Overview of Works It is proposed to construct a new 132kV GIS double busbar arrangement switching station at Phillipstoun Mains, near Gills Bay (west of John O'Groats) and connect in two radial circuits from Thurso south. Construct a new suitably rated hybrid overhead line and underground cable double circuit, operated at 132kV, from Gills Bay to Thurso South.	
Proposed Consent Submission	Consented
Current Project Phase	Development
Next Project Phase	Refinement
Next Stakeholder Event	N/A
Project Completion Date	01/04/2027
Summary of works in last quarter: Continued engagement with landowners to secure outstanding land agreements. Continued development of Needs Case and CBA for MSIP submission.	
Summary of works in next quarter: Continued engagement with landowners to secure outstanding land agreements. Continued development of Needs Case and CBA for needs case submission in conjunction with driving generators. Look to implement strategy for triggering S37 consent prior to expiry in July 2024.	
Additional Comments: N/A	

TORI	Scheme
SHET-RI-033 - Second 2 GW East Coast HVDC Link Peterhead to England	Second 2 GW East Coast HVDC Link Peterhead to England

Overview of Works

Install 525kV 2GW HVDC link between the Netherton Hub in Aberdeenshire (SHE-Transmission) to England (southern landing point and AC connection tie in to be confirmed). Work includes a 2GW converter at either end of the link, with HVDC cables to be routed underground between converter site and landfall, and sub marine cables between landfall locations. The project will be developed and delivered jointly with National Grid Electricity Transmission (NGET).
This TORI describes the SSENT works.

Proposed Consent Submission	Northern Converter Site - Aug 24 (PPiP as part of Netherton Hub); Marine consents - Dec 24
Current Project Phase	Development
Next Project Phase	Refinement
Next Stakeholder Event	PAC1 – Jan/Feb 24
Project Completion Date	31/10/2031

Summary of works in last quarter:

Continued high-level project development, along with initial internal governance activities.
Converter design progressed through FEED consultant
Environmental and engineering surveys progressed to support design development and EIA preparation respectively. Geotechnical ground investigations completed.
Stage Gate 1 PSR completed.
Offshore UXO Survey commenced.

Summary of works in next quarter:

Continue internal Gate 1 governance activities, with Stage Gate 1 scheduled for Q1 2024
Achieve design freeze for EIA
Continue development of procurement strategy.
Complete Offshore UXO survey marine based activities -with data analysis to continue thereafter.
Submit PAN, and continue preparation for PAC1 event in Q1 2024

Additional Comments:

N/A

TORI SHET-RI-043 - Lewis Infrastructure	Scheme Lewis Infrastructure
Overview of Works Requirement to construct a switching station at Balallan to accommodate the newly proposed Muaitheabhal wind farm connection. The switching station will comprise of 5 bays; 2 which allow for the existing Harris-Stronoway 132kV circuit to be connected and 1 for the wind farm connection. There is an allowance of 2 spare bays for future development.	
Proposed Consent Submission	Q2 2025
Current Project Phase	Passed Gate 1 in October
Next Project Phase	Gate 2 March 2025
Next Stakeholder Event	TBC
Project Completion Date	30/10/2030
Summary of works in last quarter: Project documentation completed and collated to allow for project to pass gate 1. PSR1 and DAR were completed. Environmental Surveys are ongoing on Western Isles and these take in the Balallan area. Substation design ongoing with aim to find the most optimal layout. Public consultation was conducted on 11th October in Balallan.	
Summary of works in next quarter: Carry on with environmental surveys, substation design, address any feedback from consultation.	
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 Taynuilt and North Argyll substation (established as part of SHET-RI-013). Rebuild approximately 12.5km of existing 132kV double circuit steel tower line between North Argyll and Taynuilt with a larger capacity 132kV.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/10/2028
Summary of works in last quarter: Project to be reinitiated through internal governance and initial high-level project development commenced.	
Summary of works in next quarter: Progress RIIO-T3 Justification Paperwork	
Additional Comments: N/A	

TORI SHET-RI-050b - Port Ann - Crossaig Reinforcement	**Scheme** Port Ann - Crossaig Reinforcement
Overview of Works Reinforce the 132kV Transmission Network in the Kintyre Peninsula. Rebuild approximately 48km of double circuit OHL between Port Ann and Crossaig. The tower line will be built for 275kV operation, but initially operated at 132kV.	
Proposed Consent Submission	N/A
Current Project Phase	Execution
Next Project Phase	Handover to Operations
Next Stakeholder Event	N/A
Project Completion Date	21/12/2023
Summary of works in last quarter: Dismantling of the existing 132kV overhead line shall commence and the reinstatement of temporary access tracks and compounds shall continue.	
Summary of works in next quarter: All ongoing dismantling and reinstatement works will continue being progressed. The project remains on track for completion December 2023.	
Additional Comments: N/A	

TORI SHET-RI-052 - Lairg-Loch Buidhe 132kV Reinforcement	**Scheme** Lairg-Loch Buidhe 132kV Reinforcement
Overview of Works 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.	
Proposed Consent Submission	n/a
Current Project Phase	Construction
Next Project Phase	Commissioning
Next Stakeholder Event	n/a
Project Completion Date	24/06/2022
Summary of works in last quarter: Resolution of outstanding Defects. Decommissioning of redundant Shin SStn CS Bay	
Summary of works in next quarter: Dismantling of existing Lairg – Shin OHL	
Additional Comments: N/A	

TORI	Scheme
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 10km of land cable and 260km of subsea cable between Shetland and the HVDC switching station in Caithness.

Proposed Consent Submission	July 2020 – Ofgem needs case approval
Current Project Phase	Gate 3 – Kergord Construction Phase Gate 3 – Cables (approaching Gate 4a July 2023) Gate 5 – Noss Head (Energisation complete 2nd June)
Next Project Phase	Gate 4c – Kergord PSR4C Dec 4th to 7th
Next Stakeholder Event	10 Oct 2023 – Community Liaison Group Event monthly.
Project Completion Date	01/07/2024

Summary of works in last quarter:

Kergord

- BAM continued VESDA system changes in October, as well as commencing a deep clean in the period. Snagging and defect work to continue in the period, with civils and preparation for demobilisation continuing.
- SBAM Stage 1 commissioning completed on planned date of 17/09/23. End to End testing complete for first set, with second set (HVDC) now expected mid-October. Roads and pathways completed early September.
- Hitachi replaced the Valve Cooling Bank replacement and continued with earthing of HE Equipment. The 132kV Cables commenced, as well as the installation testing and sub-system testing to continue throughout the period.

Noss Head

- The Civils Contractor (P.C. also) have handed over full control of the site to the LTSA/our project teams in the month of September.
- Final Hitachi Defects were due to be complete in October outage, likely to run into Nov 2023.

Cables

- CP3 Trenching demobilisation completed in September. Some remedial trenching and HMB re-survey were not carried out.
- Nearshore Weisdale Voe cable burial works started as planned in mid-September and are ongoing, due to complete in the month of October.

Summary of works in next quarter:

Kergord

- Buildings being fully fitted out and testing underway for M&E. BAM will complete the Vesda works and commence demobilisation of the compound and final earthworks.
- Siemens BAM will continue defects post Stage 1 commissioning assoc with Operational Intertripping changes and other HVDC panel/wiring amendments.
- Hitachi Energy will complete the 132kV cable pull and continue with Stage 1 commissioning to Dec 2023.

Noss Head

- Hitachi defect resolution planned to coincide with outage planned in Oct/Nov 2023.
- The civil contractor will continue closing out defect correction throughout the period, with as-builts to complete in the month as well.

Cables

- Campaign 3 rock protection will continue into end of year and Weisdale voe final trenching of cable will be concluded.

Additional Comments:

All works remain on schedule.

TORI SHET-RI-058 - Beauly-Loch Buidhe 400kV OHL Reinforcement	**Scheme** Beauly-Loch Buidhe 400kV OHL Reinforcement
Overview of Works This project is to build a new 400kV double circuit line between Beauly 2 400kV substation and Loch Buidhe 400 kV substation.	
Proposed Consent Submission	TBD
Current Project Phase	Internal Governance
Next Project Phase	Optioneering
Next Stakeholder Event	
Project Completion Date	31/10/2030
Summary of works in last quarter: Reinforcement will be now be constructed at 400 kV based on NOA7 Refresh Option BLN4, with an EISD of 2031.	
Summary of works in next quarter: Initial high-level project development, along with initial internal governance activities.	
Additional Comments: N/A	

TORI SHET-RI-059 - Third 2GW East Coast HVDC Link Peterhead to England	**Scheme** Third 2GW East Coast HVDC Link Peterhead to 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 England (landing point to be confirmed). This will be a joint project with National Grid.	
Proposed Consent Submission	On hold
Current Project Phase	On hold
Next Project Phase	On hold
Next Stakeholder Event	On hold
Project Completion Date	31/10/2030
Summary of works in last quarter: Project on hold.	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-061 - Skye Overhead Line Reinforcement	**Scheme** Skye Overhead Line 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 Edinbane to Ardmore (approximately 160km Fort Augustus 132kV substation to Ardmore 132kV substation).	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/10/2026
Summary of works in last quarter:	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-065a - Beauly 132 kV Substation Redevelopment	**Scheme** Beauly 132 kV Substation Redevelopment
Overview of Works Establish a new 132kV double busbar arrangement at Beauly substation and transfer of the circuits from the existing 132kV busbar to the new busbar. Connect the new 132kV double busbar to the existing 275kV busbar via two new 360MVA 275/132kV transformers. Provision of a third new 360MVA 275/132kV transformer will be undertaken under SHET-RI 065b	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/10/2024
Summary of works in last quarter: Complete the platform construction.	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI	Scheme
SHET-RI-065b - Beauly 3rd SGT Replacement	Beauly 3rd SGT Replacement
Overview of Works Replacement of third existing 275/132kV 120MVA SGT with a new 360MVA 275/132kV transformer. SHET-RI 065a covers establishment of a new 132kV double busbar arrangement at Beauly substation and transfer the circuits from the existing 132kV busbar to the new busbar.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/10/2025
Summary of works in last quarter: See TORI-065a	
Summary of works in next quarter:	
Additional Comments:	

TORI	Scheme
SHET-RI-068 - Fort Augustus -Invergarry-400/132kV Development	Fort Augustus -Invergarry-400/132kV Development

Overview of Works

Upgrade the existing 132kV double circuit OHL between Fort Augustus and proposed Loch Lundie substation, near Invergarry with a new 400kV OHL. The existing 132kV OHL forms part of the Fort Augustus to Fort William FFE/FFW Circuits.

Part of the upgrade is to establish a 400/132kV substation at Invergarry to connect the existing 132kV OHL from Fort William and Invergarry Generation and connect contracted Coire Glas and Loch Fearna HPS schemes.

The new 400kV OHL will terminate into the 400kV busbar at Fort Augustus. The 400kV busbar is part of SHET-RI-064 works.

Proposed Consent Submission	31/08/23
Current Project Phase	Design/Consenting
Next Project Phase	Consenting
Next Stakeholder Event	August 2023
Project Completion Date	31/10/2027

Summary of works in last quarter:

Development of engineering design and environmental surveys to support EIA and Planning SubmissionPAN(2) events to support Town and Country Planning consent application for substation

Ongoing engagement with Statutory Authorities regarding TCP Scoping and s37 application feedback

Summary of works in next quarter:

Develppment of TCP Planning Consent Application

Ongoing engagement with Statutory Authorities regarding TCP submission and s37 application feedback

Additional Comments:

Developer has submitted a Mod App to alter connection date and phasing, in process.

TORI SHET-RI-069 - Kinardochy Reactive Compensation	**Scheme** Kinardochy Reactive Compensation
Overview of Works Reactive Compensation is required at a new Kinardochy substation for voltage support on the 275kV Beauly-Denny overhead line. The Reactive Compensation will require a capability of + 325MVAr and -225MVAr.	
Proposed Consent Submission	Complete
Current Project Phase	Execution
Next Project Phase	Operate
Next Stakeholder Event	TBC
Project Completion Date	31/08/2024
Summary of works in last quarter: Erection of the two new terminal towers, Delivery and initial assembly of the Gas Insulated Switchgear, Delivery and erection of outdoor structures, Completion of interior and exterior fencing.	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-075 - Orkney 132kV Infrastructure Finstown - Ellibster	**Scheme** 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 Station at Ellibister and a 132kV OHL Trident wood pole connection from Ellibister to Finstown Substation. Note that Finstown 132kV Substation is established as part of SHET-RI-019 works.	

Proposed Consent Submission	TBC
Current Project Phase	Internal Governance
Next Project Phase	Optioneering
Next Stakeholder Event	
Project Completion Date	30/04/2025

Summary of works in last quarter: Project on hold.
Summary of works in next quarter: Initial high-level project development, along with initial internal governance activities.
Additional Comments: N/A

TORI SHET-RI-079a - Blackhillock Additional 275/132kV SGTs	**Scheme** Blackhillock Additional 275/132kV SGTs
Overview of Works Reinforce the transmission network at Blackhillock substation by installing an additional new 275/132kV Supergrid Transformer and connecting the existing 132kV GIS busbar to the 275kV AIS busbar and all associated protection, control and ancillary equipment. The transformer is to be rated at 360MVA.	
Proposed Consent Submission	N/A
Current Project Phase	Refinement
Next Project Phase	Execution
Next Stakeholder Event	N/A
Project Completion Date	30/06/2027
Summary of works in last quarter: P&C ITT scope of work is now senior approved and a KLD has been produced. ITT SoW works are proceeding for the 360MVA transformer, the cables, the 132kV & 275kV breakers and the civils scope at Blackhillock.	
Summary of works in next quarter: ITT scope of work progression .	
Additional Comments: Project split from SHET-RI-079b. SHET-RI-079 originally consisted of 2 SGTs and has now been split into delivery of 1 initially, SHET-RI-079a and another for SHET-RI-079b. The installation works required for both TORIs will be integrated as this is the most cost & outage effective manner. The integrated works will also have least impact on Operations.	

TORI	Scheme
SHET-RI-079b - Blackhillock Additional 275/132kV SGTs	Blackhillock Additional SGTs
Overview of Works Reinforce the transmission network at Blackhillock substation by installing additional new 275/132kV Supergrid Transformer and connect the existing 132kV GIS busbar to the 275kV AIS busbar and all associated protection, control and ancilliary equipment. The transformer is to be rated at 360MVA.	
Project Completion Date	31/10/2026
Proposed Consent Submission	N/A
Current Project Phase	Optioneering
Next Project Phase	Development
Next Stakeholder Event	N/A
Summary of works in last quarter: Commence engineering development.	
Summary of works in next quarter:	
Additional Comments: Project split from SHET-RI-079a. SHET-RI-079 originally consisted of 2 SGTs and has now been split into delivery of 1 initially (SHET-RI-079a) and another later if it is triggered (SHET-RI-079b).	

TORI SHET-RI-086 - Craig Murrail Switching Station	**Scheme** Craig Murrail Switching Station
Overview of Works Construct a new 275/33kV substation on the Inveraray to Crossaig OHL near Lochgilphead. The Port Ann GSP is to be transferred to the new Craig Murrail Substation via new 33kV cable circuits.	
Proposed Consent Submission	Granted
Current Project Phase	Refinement
Next Project Phase	Execution
Next Stakeholder Event	TBC
Project Completion Date	30/11/2028
Summary of works in last quarter: Initial Works detailed design is ongoing. Supplementary ground investigation works were completed to inform earthworks model.	
Summary of works in next quarter: Progress the Initial Works contract design deliverables. Submission of deliverables to Planning Authority to clear consent pre-commencement conditions. Prepare for Forestry Contractor mobilisation.	
Additional Comments: N/A	

TORI SHET-RI-088 - Loch Buidhe - Dounreay 275kV Reinforcement	Scheme Loch Buidhe - Dounreay 275kV Reinforcement
Overview of Works Increase the operating temperature of the existing 275kV double circuit OHL between Loch Buidhe and Dounreay (approximately 87km). The double circuit is proposed to be operated at 90°C which will increase the thermal capability of the circuit.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/08/2025
Summary of works in last quarter: SP&I continuing to develop initial needs case of increasing the operating temperature on the existing 275 kV circuit	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-089 - Farigaig SGT2 Upgrade	Scheme Farigaig SGT2 Upgrade
Overview of Works Upgrade the 120MVA 275/132kV SGT2 at Farigaig substation to a 240MVA 275/132kV SGT, to facilitate the connection of generation in the area.	
Proposed Consent Submission	No consent required for TORI 089
Current Project Phase	Refinement
Next Project Phase	Execution
Next Stakeholder Event	N/A
Project Completion Date	30/08/2025
Summary of works in last quarter: Modapp for off-line Tx replacement to be signed by 6th October 2023. Work on Tx in-situ and offline were concentrated on cost justification of One Off Work Costs to SSER. Alternative connection arrangement and associated costs we also considered in the period as SSER considered the grid costs too high.	
Summary of works in next quarter: On acceptance of modapp works will commence on the off-line design and ITT / tender process.	
Additional Comments: Order for SGT has been placed with manufacturer. Delivery in May 2025.	

TORI SHET-RI-090 - Coupar Angus - Errochty 132kV Reconductoring	**Scheme** Coupar Angus - Errochty 132kV Reconductoring
Overview of Works Reconductor approximately 15.4km of the existing 132kV double circuit OHL between Errochty 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.	
Proposed Consent Submission	TBD
Current Project Phase	Project Team to be assigned
Next Project Phase	Optioneering
Next Stakeholder Event	N/A
Project Completion Date	31/10/2026
Summary of works in last quarter: Project has proceeded through internal governance and will be assigned to a project team	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI	Scheme
SHET-RI-093 - East Coast Phase 2 - 400kV Reinforcement	East Coast Phase 2 - 400kV Reinforcement

Overview of Works

Upgrade the existing Blackhillock / Rothienorman / 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 400kV 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 Transmission/SPT Boundary (Boundary 4).

Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/10/2026

Summary of works in last quarter:

Kintore Substation Works –

Fetteresso 400kV upgrade – Principal contractor has been engaged and Initial design has commenced for the 400kV upgrade works.

East Coast OHL 400kV Upgrade Works – Foundation upgrade, and access works continue. Re-condcutoring works on XS2 circuit continue..

Blackhillock PSTs –

Summary of works in next quarter:

East Coast OHL 400kV Upgrade Works – Reconductoring, access and foundation upgrade works continue

Fetteresso 400kV upgrade – Further development of the design.

Additional Comments:

N/A

TORI SHET-RI-106b - Connagill 2nd SGT	Scheme 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.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	18/08/2025
Summary of works in last quarter:	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-107 - North Argyll - Inveraray Reinforcement	**Scheme** North Argyll - Inveraray Reinforcement
Overview of Works Reinforce the double circuit overhead line between North Argyll 275/132kV substation (established as part of SHET-RI-013) and the existing Inveraray to Crossaig double circuit overhead (rebuilt as part of SHET-RI-050), approximately 2.8km away from Inveraray.	
Proposed Consent Submission	Submitted
Current Project Phase	Refinement
Next Project Phase	Execution
Next Stakeholder Event	tbc
Project Completion Date	30/11/2028
Summary of works in last quarter: Initial Works work scope ongoing (detailed design development).	
Summary of works in next quarter: Advancement of Initial Works contract design deliverables. Submission of deliverables to Planning Authority to clear consent pre-commencement conditions.	
Additional Comments: N/A	

TORI SHET-RI-111 - Abernethy 132kV Mesh Corner	Scheme 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 132kV double circuit overhead line (PCN/CAS).	
Proposed Consent Submission	N/A
Current Project Phase	N/A
Next Project Phase	N/A
Next Stakeholder Event	N/A
Project Completion Date	31/10/2022
Summary of works in last quarter: On Hold	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-115 - Melgarve 400/132 kV Substation Additional SGTs	**Scheme** Melgarve 400/132 kV Substation Additional 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 wind generation in the area.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	01/07/2026
Summary of works in last quarter: Project on hold	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-116 - Kergord - Yell 132kV Connection	Scheme 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.	
Proposed Consent Submission	Q1 2025
Current Project Phase	Development
Next Project Phase	Refinement
Next Stakeholder Event	Q2 2024
Project Completion Date	01/04/2027
Summary of works in last quarter: Completion of marine geophysical surveys Completion of all environmental surveys	
Summary of works in next quarter: Completion of OHL and UGC alignment designs	
Additional Comments: N/A	

TORI SHET-RI-117 - Tealing 275kV Busbar Upgrade	**Scheme** Tealing 275kV Busbar Upgrade
Overview of Works At Tealing remove the existing 275kV 2500A rated 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.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	18/11/2022
Summary of works in last quarter:	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-119 - Corriemoillie Transformer Protection Modification	**Scheme** Corriemoillie Transformer Protection 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.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/10/2024
Summary of works in last quarter:	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI	Scheme
SHET-RI-120 - East Coast 132kV Upgrade	East Coast 132kV Upgrade

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.

Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/10/2026

Summary of works in last quarter:

Ongoing System Planning and Asset Management review of the overhead line options between Brechin and the Tealing/Arbroath/Brechin Tee Point.

Summary of works in next quarter:

Ongoing System Planning and Asset Management review of the overhead line options between Brechin and the Tealing/Arbroath/Brechin Tee Point.

Additional Comments:

N/A

TORI SHET-RI-121 - Errochty - Charleston 132kV Reconductoring	**Scheme** Charleston - Abernethy 132kV 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.	
Proposed Consent Submission	TBD
Current Project Phase	Awaiting Project Team
Next Project Phase	Optioneering
Next Stakeholder Event	TBD
Project Completion Date	31/10/2028
Summary of works in last quarter: Now Errochty – Charleston has proceeded through initial internal governance and awaiting Project team allocation	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-123 - Shin - Loch Buidhe 132kV Reconductoring	**Scheme** Shin - Loch Buidhe 132kV Reconductoring
Overview of Works Following the completion of SHET-RI-058, Shin substation 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 double circuit should be reconductored with a minimum summer pre-fault rating of 190MVA.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/10/2030
Summary of works in last quarter:	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI	Scheme
SHET-RI-124 - 2nd Shetland HVDC Link Kergord - Rothienorman	2nd Shetland HVDC Link Kergord - Rothienorman
Overview of Works Construct a 2nd 600MW (tbc) HVDC link from Kergord 132kV substation on Shetland (established under SHET-RI-053) to the Scottish mainland at an HVDC convertor station at Rothienorman substation. The 600MW HVDC link will have approximately 36km of land cable and 320km of subsea cable between Shetland and Rothienorman.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/10/2026
Summary of works in last quarter: Project on hold.	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-126 - Kergord - Yell 132kV 2nd Connection	**Scheme** Kergord - Yell 132kV 2nd 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.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	TBC if 2nd circuit is required
Summary of works in last quarter: Project on hold	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-127 - Dounreay - Spittal 400 kV Double Circuit Cable	**Scheme** Dounreay - Spittal 400 kV Double 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	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/10/2031
Summary of works in last quarter:	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI	Scheme
SHET-RI-128 – Caithness to Peterhead HVDC Link	Caithness to Peterhead HVDC Link

Overview of Works

Transmission reinforcement works associated with the construction of a new HVDC link from the new Spittal 2 275 kV substation (delivered under TORI SHET-RI-153) to Peterhead 400 kV substation.
The HVDC link is approximately 210 km from Spittal 2 to Peterhead 2 Substation (delivered under SHET-RI-180
The works will be coordinated with the NOA recommendations

Proposed Consent Submission	Q3 2024
Current Project Phase	Early Development
Next Project Phase	Development
Next Stakeholder Event	Q2 2024
Project Completion Date	December 2030

Summary of works in last quarter:

- Awarded marine survey contract.
- Completed ground investigation activities at proposed Spittal and Peterhead site locations.
- Continued site selection activities.

Summary of works in next quarter:

- Commence marine survey activity.
- Award underground cable ground investigation contract.
- Progress development of HVDC converter, cable and civil supplier early design contracts.
- Progress planning scoping deliverables at Spittal and Peterhead

Additional Comments:
N/A

TORI SHET-RI-129 - Farigaig SGT1 Upgrade	Scheme 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.	
Proposed Consent Submission	Not Applicable
Current Project Phase	Development
Next Project Phase	Refinement
Next Stakeholder Event	
Project Completion Date	01/07/2026
Summary of works in last quarter: Holding	
Summary of works in next quarter: Design and ITT on confirmation of Consent	
Additional Comments: BayWa waiting for Corriegarth 2 consent. Work at Farigaig to to Tx replacement is driven by Corriegarth 2 connection	

TORI SHET-RI-130a - North Argyll - Craig Murrail 275kV Operation	**Scheme** North Argyll - Craig Murrail 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 replacement of the An Suidhe and Crarae substations to enable connection onto the overhead line operating at 275kV.	
Proposed Consent Submission	Granted
Current Project Phase	Refinement
Next Project Phase	Execution
Next Stakeholder Event	TBC
Project Completion Date	31/11/2028
Summary of works in last quarter: Initial Works detailed design is ongoing. Supplementary ground investigation works were completed to inform earthworks model.	
Summary of works in next quarter: Progress the Initial Works contract design deliverables. Submission of deliverables to Planning Authority to clear consent pre-commencement conditions. Prepare for Forestry Contractor mobilisation.	
Additional Comments: N/A	

TORI SHET-RI-130b - Craig Murrail - Crossaig 275kV Operation	**Scheme** Craig Murrail - Crossaig 275kV 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. This requires the construction of a new Crossaig North 275/132kV Substation and modifications to the existing Crossaig Substation.	
Proposed Consent Submission	Granted
Current Project Phase	Refinement
Next Project Phase	Execution
Next Stakeholder Event	TBC
Project Completion Date	30/11/2028
Summary of works in last quarter: Initial Works detailed design is ongoing. Supplementary ground investigation works in progress to inform earthworks model.	
Summary of works in next quarter: Progress the Initial Works contract design deliverables. Submission of deliverables to Planning Authority to clear consent pre-commencement conditions. Prepare for Forestry Contractor mobilisation.	
Additional Comments: N/A	

TORI SHET-RI-131 - Brechin 132kV Extension	Scheme Brechin 132kV Extension
Overview of Works Construct 2 new circuit breakers at Brechin Grid Supply point.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/10/2024
Summary of works in last quarter: On Hold	
Summary of works in next quarter: On hold	
Additional Comments: N/A	

TORI	Scheme
SHET-RI-132 - Beauly-Blackhillock High Temperature Reconductoring	Beauly-Blackhillock High Temperature Reconductoring
Overview of Works 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.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	30/07/2027
Summary of works in last quarter: Determine way forward based on the ESO CBA analysis	
Summary of works in next quarter: This project has been put on hold.	
Additional Comments: N/A	

TORI SHET-RI-133 - Loch Buidhe SGT Upgrade	**Scheme** Loch Buidhe SGT Upgrade
Overview of Works Replacement of existing Loch Buidhe 240MVA 132/275kV SGTs with 480MVA units.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	30/07/2027
Summary of works in last quarter: Project put on hold.	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-134 – Beauly-Denny 2nd Circuit upgrade from 275kV to 400kV	**Scheme** Beauly-Denny 2nd Circuit upgrade from 275kV 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.	
Proposed Consent Submission	Q2/Q3 2024
Current Project Phase	Development
Next Project Phase	Refinement
Next Stakeholder Event	Q4 2023 (LT519) / Q1 2024 (LT520&LT521)
Project Completion Date	31/10/2029
Summary of works in last quarter: Kinardochy UGC TBC Fort Augustus substation Preparation of 1st pre-application notice (PAN) public consultation. Ground Investigation works completed and contractor demobilised from site. Early Contractor Engagement exercise completed. Substation and OHL Contractors on board. Braco West 400kV substation Site Selection public consultation undertaken. Early Contractor Engagement exercise completed. Substation and OHL Contractors on board. Fasnakyle 400kV substation Site Selection public consultation undertaken. Early Contractor Engagement exercise completed. Substation and OHL Contractors on board.	
Summary of works in next quarter: Kinardochy UGC TBC Fort Augustus substation Undertake first PAN event. Continued engineering design of the substation & OHL tie in works by ECE contractor. Braco West 400kV substation Take feedback from Site Selection public consultation and begin to prepare for PAN event. Undertake Ground Investigation works. Continued engineering design of the substation & OHL tie in works by ECE contractor.	

Fasnakyle 400kV substation Take feedback from Site Selection public consultation and begin to prepare for PAN event. Undertake Ground Investigation works. Continued engineering design of the substation & OHL tie in works by ECE contractor.
Additional Comments: N/A

TORI SHET-RI-136 - Blackhillock 400kV Building Extension	**Scheme** Blackhillock 400kV Building Extension
Overview of Works Extend existing Blackhillock 400kV GIS building to allow space provision for additional bays.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/09/2027
Summary of works in last quarter:	
Summary of works in next quarter:	
Additional Comments: Work ongoing to determine if need for project remains. There is opportunity to eliminate need for additional bays with system studies required to support confirmation. These studies are pending outputs of HND2.	

TORI SHET-RI-137 - Blackhillock-New Deer-Peterhead 400kV OHL	**Scheme** Blackhillock-New Deer-Peterhead 400kV OHL
Overview of Works Establish a new 400kV double circuit overhead line from Blackhillock to New Deer (60km) and New Deer to Peterhead (22km). In an update from the initial scope, the line is to connect to new 400kV busbars at Blackhillock, New Deer and Peterhead.	
Proposed Consent Submission	01/11/2024
Current Project Phase	Design
Next Project Phase	Consenting
Next Stakeholder Event	Q1 2024
Project Completion Date	31/10/2030
Summary of works in last quarter: Confirmation of proposed route. Identification and development of alignment options. Initiation of ECI works.	
Summary of works in next quarter: Issue Report on Consultation ECI Site Walk Overs Public Consultation Events Define Route Access Tracks	
Additional Comments: Project is to connect to proposed 'Blackhillock 2' (TORI199) 'New Deer 2' 400kV substation (SHET-RI-144) and 'Peterhead 2' 400kV substation, to be developed in separate projects, with SHET-RI-137 engaging closely to provide optimised solution.	

TORI SHET-RI-138 - New Deer 400kV Busbar Extension	**Scheme** New Deer 400kV Busbar Extension
Overview of Works Extend 400kV double busbar to form 3-section busbar at New Deer 400kV Substation.	
Proposed Consent Submission	N/A
Current Project Phase	Opportunity
Next Project Phase	Development
Next Stakeholder Event	N/A
Project Completion Date	Q3/Q6 2026
Summary of works in last quarter: Preparation and issue of Scope of Works for the "*Design, Manufacture, Factory Acceptance Testing, Delivery to Site and Final HV Testing of 4 off additional GIS bays".* Preparation of the Scope of Work for the Installation of the 4 off additional GIS bays.	
Summary of works in next quarter: Issuing the preparation of the Scope of Works for the Installation of the 4 off additional GIS bays.	
Additional Comments: N/A	

TORI SHET-RI-139 - 2GW HVDC Link New Deer to England	**Scheme** 2GW HVDC Link New Deer to 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 confirmed). This will be a joint project with National Grid.	
Proposed Consent Submission	N/A
Current Project Phase	initial internal governance
Next Project Phase	Optioneering
Next Stakeholder Event	TBD
Project Completion Date	31/10/2033
Summary of works in last quarter: Continuation of high-level project development, along with initial internal governance activities.	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-140 - Thurso South 275 kV Substation Redevelopment	**Scheme** Thurso South 275 kV Substation Redevelopment
Overview of Works Redevelop the existing Thurso South 275 kV substation into a new 275 kV double busbar arrangement.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	01/06/2025
Summary of works in last quarter: Project on hold.	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-141 - Spittal to New Deer HVDC Link	Scheme Spittal to New Deer HVDC Link
Overview of Works Create an HVDC link between Spittal and New Deer.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/10/2031
Summary of works in last quarter:	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-142 - Caithness to New Deer 2 - 2 x 1GW HVDC Links	**Scheme** Caithness to New Deer 2 - 2 x 1GW HVDC Links
Overview of Works Construct 2 x 1GW HVDC links from Spittal to New Deer 2, including converter stations and associated equipment.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/10/2031
Summary of works in last quarter:	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-143 - Kergord - Gremista GSP 132kV Infrastructure	**Scheme** Kergord - Gremista GSP 132kV Infrastructure
Overview of Works Construct a new 132kV 24km circuit comprised of both overhead wood pole line and underground cable between 132kV feeder bays at Kergord substation and the new Gremista GSP.	
Proposed Consent Submission	All submitted and granted
Current Project Phase	Execution
Next Project Phase	Operation
Next Stakeholder Event	Various community engagements
Project Completion Date	07/11/2025
Summary of works in last quarter: Following mobilisation, access track construction for the cable installation commenced and has made progress in the period. Overhead line woodpole construction commenced in August and is progressing in line with the planned programme.	
Summary of works in next quarter: Cable access track works will continue with cable duct installation due to commence early November in the first section near Kergord. Subject to weather conditions, the first horizontal directional drill will be undertaken in November which will install cable ducts below a watercourse. Overhead line woodpole installation will continue predominantly in the north section of the line. Helicopter operations to distribute materials, including the woodpoles, to the route of the line will continue during this period.	
Additional Comments: N/A	

TORI SHET-RI-144 - New Deer 2 400kV Substation	Scheme New Deer 2 400kV Substation
Overview of Works Establish a new 400kV substation close to the existing New Deer 400kV substation and tie in the proposed 400kV circuits from Blackhillock to New Deer and New Deer to Peterhead (SHET-RI-137).	
Proposed Consent Submission	08/11/2024
Current Project Phase	Development
Next Project Phase	Refinement
Next Stakeholder Event	Q1 2024
Project Completion Date	31/10/2029
Summary of works in last quarter: GI Works have progressed and are due to complete on 20th October. The Ecology surveys, conducted by Environmental Consultant WSP are due to commence on 16th October. The cable alignment between New Deer 2 and New Deer substation has been decided following an Alignment Workshop. ECE has commenced with Siemens BAM, kick off meetings conducted on 20th Sept and 13th Oct. Further key programme dates have been confirmed with the PAC events 1 and 2 programmes. Design targets 2a, 2b and 2c identified prior to Planning Submission in October 2024. Further discussions and investigations into Site 13s watercourse have taken place with WSP hydrogeologist.	
Summary of works in next quarter: • ECE Substation Development leading up to 2a and PAC 1 in Q1 2024. • EIA Scoping Document preparation completion, prior to EIA commencing in Jan 2024. • Result on Consultation issued in Nov 2023. • A call with SEPA is scheduled for 7th November to close out the watercourse issue. • Conclusion of GI works and appraisal of GI results • Define substation design, elevations, access plans and RLB prior to PAN submission in January 2024.	
Additional Comments: N/A	

Arland

TORI SHET-RI-145 - 2GW HVDC Link New Deer 2 to England	Scheme 2GW HVDC Link New Deer 2 to 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.	
Proposed Consent Submission	N/A
Current Project Phase	initial internal governance
Next Project Phase	Optioneering
Next Stakeholder Event	TBD
Project Completion Date	31/10/2033
Summary of works in last quarter: Continuation of high-level project development, along with initial internal governance activities.	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-147 - Tealing 400kV Substation	**Scheme** Tealing 400kV Substation
Overview of Works Establish a new 400kV substation close to the existing Tealing 275kV Substation.	
Proposed Consent Submission	September 2024
Current Project Phase	Development
Next Project Phase	Refinement
Next Stakeholder Event	November 2023
Project Completion Date	31/10/2031
Summary of works in last quarter: Progress EIA Scoping, undertake ground investigations and progress initial design.	
Summary of works in next quarter: EIA scoping Finish Ground Investigation works Use GI data to finalise design Design freeze for consultation	
Additional Comments: N/A	

TORI SHET-RI-148 - Alyth – Tealing 400kV Reinsulation	**Scheme** Alyth – Tealing 400kV Upgrade
Overview of Works Reconductor, reinsulate and any necessary upgrades to the 275kV double circuit overhead line between Alyth and Tealing for 400kV operation.	
Proposed Consent Submission	September 2024
Current Project Phase	Development
Next Project Phase	Refinement
Next Stakeholder Event	November 2023
Project Completion Date	31/10/2031
Summary of works in last quarter: Progress initial tower and foundations conditions surveys and clearance checks.	
Summary of works in next quarter: Prepare and Submit EIA Scoping Engage GI contractor for ECI Complete GI works Identify Foundation & Steelwork upgrade requirements Identify Long-Lead Items	
Additional Comments: N/A	

TORI SHET-RI-149 - Tealing – Glenrothes Westfield 400kV Rebuild	**Scheme** Tealing – Glenrothes Westfield 400kV Upgrade
Overview of Works Reconductor, reinsulate and any necessary upgrades to the 275kV double circuit overhead line between Tealing and Glenrothes-Westfield for 400kV operation.	
Proposed Consent Submission	September 2024
Current Project Phase	Development
Next Project Phase	Refinement
Next Stakeholder Event	November 2023
Project Completion Date	31/10/2031
Summary of works in last quarter: Progress initial tower and foundations conditions surveys and clearance checks.	
Summary of works in next quarter: Conductor Selection Prepare and Submit EIA Scoping Engage GI contractor for ECI Complete GI works Identify Foundation & Steelwork upgrade requirements Identify Long-Lead Items	
Additional Comments: N/A	

TORI SHET-RI-150 - Inverguie Tee – Peterhead 132kV Reconductoring	**Scheme** Inverguie Tee – Peterhead 132kV 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.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/10/2029
Summary of works in last quarter: Has gone through internal governance and will be assigned to a development PM.	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-151 - Peterhead – St Fergus 132kV Line Works -	**Scheme** Peterhead – St Fergus 132kV Line 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 three 132kV disconnectors and associated protection and control equipment for each of the two circuits.	
Proposed Consent Submission	N/A
Current Project Phase	initial internal governance
Next Project Phase	Optioneering
Next Stakeholder Event	TBD
Project Completion Date	31/10/2029
Summary of works in last quarter: Continuation of high-level project development, along with initial internal governance activities**.**	
Summary of works in next quarter: Further optioneering work to look at scope of shared use (tee-in) substation location relative to existing overhead line and developer's substation location.	
Additional Comments: Works are being progressed in conjunction with Salamander Offshore Windfarm development.	

TORI SHET-RI-153 - Spittal 2 400kV Substation	Scheme Spittal 2 400kV Substation
Overview of Works Construct a new 400 kV substation 'Spittal 2' close to the existing Spittal 275 kV substation in Caithness.	
Proposed Consent Submission	June 2024
Current Project Phase	Development (Gate 1-2)
Next Project Phase	Delivery/Refinement (Gate 2-3)
Next Stakeholder Event	February / March 2024
Project Completion Date	31/10/2028
Summary of works in last quarter: Works in the last quarter includeed, Site design development and refinement, GI and site investigations, design studies and surveys and statutory and community stakeholder engagement workshops and events.	
Summary of works in next quarter: Works in the next quarter will include continued site development and refinement, analysis of the GI work conducted. Design studies and further surveys. Continued statutory and community stakeholder engagement workshops and events.	
Additional Comments: N/A	

TORI SHET-RI-155 - Peterhead - Persley Tee 275kV Works	**Scheme** Peterhead - Persley Tee 275kV Works
Overview of Works Overhead line works to bring the VP 275kV overhead line circuit to ground, including any required tower modifications. Design and installation of one 275kV bus bar including a circuit breaker with four 275kV disconnectors and associated protection and control equipment. Following impact from ASTI and need to reinforce the north-east coast of Scotland to enable future Scotwind and generation connection, there's need to upgrade Peterhead – Kintore circuit from 275kV to 400kV. Peterhead – Persley 275kV OHL falls within this circuit and now needs to be built to 400kV capable.	
Proposed Consent Submission	Q4 2023
Current Project Phase	Development
Next Project Phase	Refinement
Next Stakeholder Event	TBC
Project Completion Date	31/05/2027
Summary of works in last quarter: Continued engagement with the associated Developer. Ongoing Environmental and Engineering works. Redesign of substation (Sole use and TCA works) to 400kV capable due to effect of Peterhead – Kintore upgrade works (PKUP).	
Summary of works in next quarter: Engineering Design review and section 37 submission preparations.	
Additional Comments: N/A	

TORI SHET-RI-157 - Alcemi Score 2 Substation 400kV Switchgear	**Scheme** Alcemi Score 2 Substation 400kV Switchgear
Overview of Works Overhead line works to bring the 400kV circuit to ground, including any required modifications. Design and installation of one 400kV circuit breaker with three 400kV disconnectors and associated protection and control equipment for the circuit.	
Proposed Consent Submission	Q4 2024 / Q1 2025
Current Project Phase	Opportunity Assessment
Next Project Phase	Development
Next Stakeholder Event	01/04/2024
Project Completion Date	31/10/2029
Summary of works in last quarter: Continued engagement with the Developer. Continuation of high-level project development, along with initial internal governance activities. Completion of options assessment.	
Summary of works in next quarter: Further network studies by Network Planning to ascertain an alternative point of connection for the project.	
Additional Comments: Due to ASTI impact and updated SLD from SP&I which recommended that existing New Deer – Peterhead 400kV OHL (VND1/VND2) be diverted into the second 400kV substation that is to be constructed at Peterhead, this means the customer will be unable to make a tee connection to VND1/VND2 as this circuit will physically not be in existence once the second 400kV substation is completed and energise in 2030. Option assessment has been completed and project referred to SP&I to advise of a new point of connection. A change request was submitted to enable scope change.	

TORI SHET-RI-165 - Alcemi Substation 400kV Switchgear	**Scheme** Alcemi Substation 400kV Switchgear
Overview of Works Overhead line works to bring the 400kV circuit to ground, including any required modifications. Design and installation of one 400kV circuit breaker with three 400kV disconnectors and associated protection and control equipment for the circuit.	
Proposed Consent Submission	Q4 2024 / Q1 2025
Current Project Phase	Opportunity Assessment
Next Project Phase	Development
Next Stakeholder Event	01/04/2024
Project Completion Date	31/10/2029
Summary of works in last quarter: Continued engagement with the Developer. Continuation of high-level project development, along with initial internal governance activities. Completion of options assessment.	
Summary of works in next quarter: Further network studies by Network Planning to ascertain an alternative point of connection for the project.	
Additional Comments: Due to ASTI impact and updated SLD from SP&I which recommended that existing New Deer – Peterhead 400kV OHL (VND1/VND2) be diverted into the second 400kV substation that is to be constructed at Peterhead, this means the customer will be unable to make a tee connection to VND1/VND2 as this circuit will physically not be in existence once the second 400kV substation is completed and energise in 2030. Option assessment has been completed and project referred to SP&I to advise of a new point of connection. A change request was submitted to enable scope change.	

TORI SHET-RI-166 - Tealing – Arbroath 132kV Line Works	**Scheme** Tealing – Arbroath 132kV Line 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.	
Proposed Consent Submission	09/11/2023
Current Project Phase	Development
Next Project Phase	Refinement
Next Stakeholder Event	WC 30/10/23
Project Completion Date	30/04/2026
Summary of works in last quarter: Continued engagement with the associated Developer. Ongoing Environmental and Engineering works.	
Summary of works in next quarter: OHL Design to be completed EA ongoing Consents to be submitted Engage Contractor for OHL Design	
Additional Comments: N/A	

TORI SHET-RI-167 - Keith 275kV Sync Comp	**Scheme** Keith 275kV Sync Comp
Overview of Works Installation of a new 275kV disconnector switch on the 275kV cable circuit side of the 275/132kV Super Grid Transformer at Keith substation.	
Proposed Consent Submission	N/A
Current Project Phase	Internal Governance
Next Project Phase	Optioneering
Next Stakeholder Event	TBD
Project Completion Date	01/08/2024
Summary of works in last quarter: On Hold	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-168 - Melvich to Connagill 132kV Connection	**Scheme** Melvich to Connagill 132kV Connection
Overview of Works Transmission reinforcement works associated with the construction of a new 5.2 km, 132 kV overhead line between Melvich Community wind farm 132/33 kV substation and Connagill substation. The works include the connection to a 132kV bay at Connagill and a single 132kV busbar at Melvich Community Wind Farm.	
Project Completion Date	31/10/2027
Proposed Consent Submission	Jan-24
Current Project Phase	Opportunity
Next Project Phase	Development
Next Stakeholder Event	
Summary of works in last quarter: Determine requirement for this TORI alongside SHET-RI-191. Conclude wider optioneering works for connection into Connagill and develop the overhead line solution to suit.	
Summary of works in next quarter:	
Additional Comments: It is expected that this TORI will ultimately be superseded SHET-RI-191 - Strathy Switching Collector Station Connagill-Strathy double circuit OHL	

TORI SHET-RI-170 – 3rd SGT at Keith 275/132kV	**Scheme** 3rd SGT at Keith 275/132kV
Overview of Works Install a new 480MVA 275/132/33kV SGT at Keith 132kV Substation and approx. 2.5km of Cable between the new SGT and Blackhillock 275kV Substation.	
Project Completion Date	31/10/2026
Proposed Consent Submission	N/A
Current Project Phase	Opportunity
Next Project Phase	Development
Next Stakeholder Event	N/A
Summary of works in last quarter: A 3rd SGT at Keith Substation has been concluded to not be technically practicable, with input from Network Connections, SP&I and Development. A Load Management Scheme is the agreed method of connecting Keith Battery Storage BEGA (APP 820). A change control was approved requesting the closure of LT456, enabling the relevant steps to allow for the creation of a new project to implement a load management scheme.	
Summary of works in next quarter: Creation of a new project to enable Keith Battery Storage BEGA connection. Communication with developer regarding connection proposal.	
Additional Comments: N/A	

TORI SHET-RI-171 - OHL Cloiche / Dell to Melgarve	Scheme OHL Cloiche / Dell to Melgarve
Overview of Works New double circuit 132kV overhead line to facilitate connection of Cloiche Wind farm and Dell Wind farms to the existing Melgarve substation.	
Project Completion Date	30/07/2027
Proposed Consent Submission	Dec 2023
Current Project Phase	Design
Next Project Phase	Consenting
Next Stakeholder Event	N/A
Summary of works in last quarter: Undertake Ground Investigation works Ongoing development of EIA to support s37 submission	
Summary of works in next quarter: Complete Ground Inverstigation works Use GI data to finalise design Design freeze to allow for completion of EIA Preparation of s37 submission	
Additional Comments:	

TORI SHET-RI-172 - Dalwhinnie 400kV Substation	Scheme Dalwhinnie 400kV Substation
Overview of Works Development of a new 400kV AIS substation to facilitate connection of contracted and future renewable generation	
Proposed Consent Submission	October 2025
Current Project Phase	Optioneering
Next Project Phase	Design
Next Stakeholder Event	
Project Completion Date	31/10/2029
Summary of works in last quarter: Project incepted,resourced and kicked off	
Summary of works in next quarter: Commence site selection process	
Additional Comments: N/A	

TORI SHET-RI-173 -Golticlay 132/33kV Collector Substation	Scheme Golticlay 132/33kV Collector Substation
Overview of Works Establishment of a 132kV double busbar complete with two bus couplers, one bus section, four feeder bays to connect to the line between Golticlay 132/33kV Collector Substation and 132kV circuits between Loch Buidhe to Spittal; and two feeder bays to connect two 90MVA 132/33kV transformers. Installation of two 90MVA 132/33kV transformers complete with high voltage switchgears. The works also include construction of approximately two 3.5km 132kV double circuits overhead line between Golticlay 132/33kV Collector Substation and 132kV Loch Buidhe to Spittal circuits.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	30/10/2027
Summary of works in last quarter:	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-174 -Upgrade of Keith SGTs	Scheme Upgrade of Keith SGTs
Overview of Works Replace the existing 132/275kV 240MVA SGTs at Keith 132kV Substation with larger 480/360MVA units.	
Proposed Consent Submission	N/A
Current Project Phase	initial internal governance
Next Project Phase	Optioneering
Next Stakeholder Event	TBD
Project Completion Date	31/10/2028
Summary of works in last quarter: Continuation of high-level project development, along with initial internal governance activities**.**	
Summary of works in next quarter:	
Additional Comments: N/A	

TORI SHET-RI-176 -Pauls Hill/Glenfarclas Circuit Turn In	**Scheme** Pauls Hill/Glenfarclas Circuit Turn In
Overview of Works Move the existing open point from Keith 132kV Substation to Pauls Hill substation and then turn in the Pauls-Hill/Glenfarclas circuit to Blackhillock 132kV Substation. This includes the Tee connection onto the FK circuit to facilitate the connection of both Craig Watch and Littlewood windfarms.	
Proposed Consent Submission	October 2024
Current Project Phase	Opportunity
Next Project Phase	Development
Next Stakeholder Event	TBC
Project Completion Date	30/06/2027
Summary of works in last quarter: Project has now been kicked off and will continue project development, including fully resourcing the team and securing funding. Engineering consultants have been identified and will begin working on the project up until the end of the Development phase.	
Summary of works in next quarter: Environmental consultant to be assigned to the project. Option Assessment Report to be produced assessing the OHL route into Blackhillock 132kV substation and Tee point locations on the FK circuit.	
Additional Comments: N/A	

TORI SHET-RI-177 - Tomatin Additional SGTs	Scheme Tomatin Additional SGTs
Overview of Works Install a new 275kV indoor double busbar and two additional 275/132kV Super Grid Transformers at the Tomatin 275/132kV Substation.	
Proposed Consent Submission	April 25
Current Project Phase	Opportunity
Next Project Phase	Development
Next Stakeholder Event	February 24
Project Completion Date	31/10/2028
Summary of works in last quarter: Development to continue with optioneering of any site extension to Tomatin substation.	
Summary of works in next quarter: Continue optioneering to extend Tomatin substation. Environmental surveys to begin.	
Additional Comments:	

TORI SHET-RI-178 - 275kV Switchgear on Blackhillock to Kintore Circuit	Scheme SHET-RI-178 - 275kV Switchgear on Blackhillock to Kintore Circuit
Overview of Works Creation of a new Tee off compound containing three disconnectors and a circuit breaker on the Blackhillock to Kintore 275kV OHL.	
Proposed Consent Submission	27/11/24
Current Project Phase	Opportunity
Next Project Phase	Development
Next Stakeholder Event	TBC
Project Completion Date	31/10/2028
Summary of works in last quarter: Continue project development, including fully resourcing the team and securing funding. Engage engineering consultants on the project, up until the end of the Development phase.	
Summary of works in next quarter:	
Additional Comments:	

TORI	Scheme
SHET-RI-179 - Construction of a new Peterhead 132kV Substation	Construction of a new Peterhead 132kV Substation
Overview of Works Construct a second 132kV Substation at Peterhead	
Proposed Consent Submission	Q3 2024
Current Project Phase	Development
Next Project Phase	Refinement
Next Stakeholder Event	Q1 2024
Project Completion Date	31/07/2028
Summary of works in last quarter: Ground Investigation works completed and contractor demobilised from site. Early Contractor Engagement exercise completed; Balfour Beatty appointed. Design development of 132kV substation layout and how the layout interfaces with the other schemes in the Netherton Hub development. Other surveys to be carried out including environmental, topographic/utility surveys, noise surveys.	
Summary of works in next quarter: Preparation for PAN event Continued engineering design of the substation by ECE contractor.	
Additional Comments: Community Liaison Group (CLG) to be set up for the Peterhead 2030 development works.	

TORI SHET-RI-180 - Second 400kV Peterhead Substation	**Scheme** Second 400kV Peterhead Substation
Overview of Works Construct a second 400kV Substation at Peterhead	
Proposed Consent Submission	Q3 2024
Current Project Phase	Development
Next Project Phase	Refinement
Next Stakeholder Event	Q3/Q4 (OHL), Q1 2024 (Substation)
Project Completion Date	31/07/2028
Summary of works in last quarter: Ground Investigation works completed and contractor demobilised from site. Early Contractor Engagement exercise completed; Balfour Beatty appointed. Design development of 132kV substation layout and how the layout interfaces with the other schemes in the Netherton Hub development. Other surveys to be carried out including environmental, topographic/utility surveys, noise surveys. Optioneering of New Deer – Peterhead 400kV (VND1/VND2) Overhead Line diversion into 400kV substation.	
Summary of works in next quarter: Preparation for PAN event Continued engineering design of the substation by ECE contractor.	
Additional Comments: Community Liaison Group (CLG) to be set up for the Peterhead 2030 development works.	

TORI SHET-RI-181 - Beauly to Loch Buidhe to Dounreay 400kV	**Scheme** Beauly to Loch Buidhe to Dounreay 400kV
Overview of Works This project is looking to create a 400kV connection between Beauly and Dounreay through Loch Buidhe Substation. This requires the establishment of two 400kV busbars one in each of the substations Loch Buidhe and Dounreay, the installation of two SGTs in each of those substations, and 153km of 400kV double circuit OHL	
Proposed Consent Submission	
Current Project Phase	Optioneering
Next Project Phase	Development
Next Stakeholder Event	
Project Completion Date	
Summary of works in last quarter: Development and refinement of OHL routes, publication of report on consultation, identification of alignment options, technology studies and stakeholder engagement events and workshops.	
Summary of works in next quarter:	
Additional Comments: This project has been superseded by two TORIs to build 400 kV infrastructure between Beauly and Spittal as recommended by HND.	

TORI SHET-RI-182 - Loch Buidhe to Spittal 2 400kV Reinforcement	**Scheme** Loch Buidhe to Spittal 2 400kV Reinforcement
Overview of Works Construction of a new 400 kV double circuit OHL between Loch Buidhe and Spittal	
Proposed Consent Submission	November 2024
Current Project Phase	Development
Next Project Phase	Delivery/Refinement
Next Stakeholder Event	February/March 2024
Project Completion Date	August 2030
Summary of works in last quarter: Development and refinement of OHL routes, , , technology studies and stakeholder engagement events and workshops.	
Summary of works in next quarter: Refinement of OHL routes, identification of alignment options, publication of report on consultation, technology studies and stakeholder engagement events and workshops.	
Additional Comments:	

TORI SHET-RI-183 - SHET-RI-183-New 132kV Dundee Substation	**Scheme** SHET-RI-183-New 132kV Dundee Substation
Overview of Works Construction of a new 132kV double busbar substation in Dundee, to replace Dudhope GSP. This busbar will be fed by turning in the current Dudhope/Milton of Craigie 132kV circuits.	
Proposed Consent Submission	Spring 2024
Current Project Phase	Opportunity Assessment
Next Project Phase	Development
Next Stakeholder Event	November 2023
Project Completion Date	31/10/2027
Summary of works in last quarter: Progressing site selection process, engaging relevant stakeholders and developing initial design and site requirements.	
Summary of works in next quarter: Site Selection Develop site design & layout Engage relevant stakeholders Engage Environmental Consultant EA Assessment Route Alignment Selection	
Additional Comments:	

TORI SHET-RI-184-Coupar Angus 2 Tee V2	Scheme Coupar Angus 2 Tee V2
Overview of Works Establish 2x new 132 kV tee points of the HCS/HCN circuits between Coupar Angus GSP and Tealing/Charleston Tee for the connection to a new Coupar Angus 2 132/33 kV GSP substation.	
Proposed Consent Submission	N/A
Current Project Phase	Assignment of Project team
Next Project Phase	Optioneering
Next Stakeholder Event	TBD
Project Completion Date	31/08/2029
Summary of works in last quarter: Initial internal governance complete. Project team to be assigned.	
Summary of works in next quarter:	
Additional Comments:	

TORI SHET-RI-185- Kintore - Tealing 400 kV OHL	**Scheme** TKUP - Kintore - Tealing 400 kV OHL
Overview of Works Establish a new 400 kV double circuit overhead line between Kintore 400 kV substation and Tealing 400 kV substation.	
Proposed Consent Submission	October 2024
Current Project Phase	Development
Next Project Phase	Delivery/Refinement
Next Stakeholder Event	February/ March 2024
Project Completion Date	31/10/2030
Summary of works in last quarter: Development and refinement of OHL Routes, technology studies and stakeholder engagement events and workshops.	
Summary of works in next quarter: Refinement of OHL routes, identification of alignment options, publication of report on consultation,technology studies and stakeholder engagement events and workshops.	
Additional Comments:	

TORI SHET-RI-187-St Fergus 132kV Substation	Scheme St Fergus 132kV Substation
Overview of Works Establish a new 132kV St Fergus double busbar substation at the site of the existing St Fergus 132kV Switching Station. Split the double busbars and establish an open point between them.	
Proposed Consent Submission	N/A
Current Project Phase	Initial internal governance
Next Project Phase	Optioneering
Next Stakeholder Event	TBD
Project Completion Date	31/10/2033
Summary of works in last quarter: Continuation of high-level project development, along with initial internal governance activities**.**	
Summary of works in next quarter:	
Additional Comments:	

TORI	Scheme
SHET-RI-188-St Fergus to New Deer 2 132kV Reinforcement	St Fergus to New Deer 2 132kV Reinforcement

Overview of Works

New Deer 2 400kV Substation

Establish a new 132kV busbar at New Deer 2 substation at install 2x240MVA 400/132kV transformers.

Construct a new 132kV double circuit overhead line from New Deer 2 to St Fergus substation (Approx. 26 km).

St Fergus Substation (SHET-RI-187)

Install 2 new 132kV bay at St Fergus 132kV substation

Proposed Consent Submission	N/A
Current Project Phase	Initial internal governance
Next Project Phase	Optioneering
Next Stakeholder Event	TBD
Project Completion Date	31/10/2033

Summary of works in last quarter:

Continuation of high-level project development, along with initial internal governance activities**.**

Summary of works in next quarter:

Additional Comments:

TORI	Scheme
SHET-RI-189 - Strichen-Fraserburgh to St Fergus 132kV OHL Reconductoring	Strichen-Fraserburgh to St Fergus 132kV OHL Reconductoring
Overview of Works Upgrade a section of the existing Strichen/Fraserburgh to St Fergus Switching Station 132kV SF1/SF2 OHL.	
Proposed Consent Submission	N/A
Current Project Phase	Initial internal governance
Next Project Phase	Optioneering
Next Stakeholder Event	TBD
Project Completion Date	31/10/2027
Summary of works in last quarter: Continuation of high-level project development.	
Summary of works in next quarter: Continuation of high-level project development.	
Additional Comments: N/A	

TORI	Scheme
SHET-RI-191 - Strathy Switching Collector Station Connagill-Strathy double circuit OHL	Strathy Switching Collector Station Connagill-Strathy double circuit OHL

Overview of Works

Install a new 275kV double circuit (initially energised at 132kV) between Connagill 275/132kV substation and a new 132kV switching collector station located at Strathy North Wind Farm substation to enable the connection of renewable generation.

Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/07/2029

Summary of works in last quarter:

Initial internal governance activities, internally separated out OHL and Switching Station scope to allow phasing of delivery under TORI 191. Development of OHL routes and Switching Station location options. Site visit with project team.

Summary of works in next quarter:

Development and refinement of OHL routes options and alignments. Engage OHL consultants and GI contractors. Undertake additional environmental surveys. Stakeholder engagement events and workshops.

Additional Comments:

SHET-RI-168 - Melvich to Connagill 132kV Connection has been superseded by this TORI.

TORI	Scheme
SHET-RI-193 - Western Isles 1.8GW HVDC Link	Western Isles 1.8GW HVDC Link

Overview of Works

Establish a 1.8GW HVDC link with associated equipment and converter stations between the Western Isles (on Lewis) and the 400kV Beauly 2 GIS Switching Station (established under SHET-RI-194). The HVDC infrastructure will interface with a new 400kV double busbar substation on Lewis and the 400kV double busbar substation at Beauly. The infrastructure on Lewis also includes a new 132kV double busbar and installation of three 360MVA 400/132kV Super Grid Transformers on Lewis to accommodate onshore and offshore generation from Western Isles.

Proposed Consent Submission	September 2024
Current Project Phase	Opportunity Assessment & Early Development
Next Project Phase	Development
Next Stakeholder Event	Lewis converter & AC substation site selection and cable route consultation
Project Completion Date	April 2031

Summary of works in last quarter:

Gate 1 Project Governance review
Evaluation & assessment of converter & AC substation sites
Selection of HVDC converter equipment and HVDC cable suppliers
Tendering for Marine Survey scope

Summary of works in next quarter:

Confirm Lewis site selection and commence GI works on site.
Commence EIA scope on Lewis
Perform Marine survey operations on marine cable route
Selection of civils contractor for Lewis site construction

Additional Comments:

n/a

TORI SHET-RI-194 - Beauly 2 400kV Switching Station	**Scheme** Beauly 2 400kV Switching Station
Overview of Works Switching Station	
Proposed Consent Submission	tbc
Current Project Phase	Optioneering
Next Project Phase	Design
Next Stakeholder Event	tbc
Project Completion Date	31/10/2029
Summary of works in last quarter: • Site Selection to be completed • Feedback to stakeholders on site selection • Progression of design	
Summary of works in next quarter:	
Additional Comments: n/a	

TORI	Scheme
SHET-RI-195, Skye HVDC Link	Skye HVDC Link
Overview of Works Establish a 400MW HVDC link with associated equipment and converter stations between Skye (East Coast of Skye, location to be determined) and the 400kV double busbar at Beauly (established under SHET-RI-194). The HVDC cable is to be approximately 100km. A 25km Double circuit 132kV OHL will be constructed from Edinbane Collector Substation to a new Skye HVDC Converter Station located on the East coast of Skye. The HVDC infrastructure will interface with the 132kV double busbar at Edinbane and the 400kV double busbar at Beauly.	
Proposed Consent Submission	TBC
Current Project Phase	Pre Gate 0
Next Project Phase	Gate 0
Next Stakeholder Event	TBC
Project Completion Date	30/04/2034
Summary of works in last quarter: The project will be in the development phase to further assess the need and carry out options analysis. If the need to is confirmed, we will progress with work required to prepare a LOTI submission to Ofgem.	
Summary of works in next quarter:	
Additional Comments:	

TORI SHET-RI-196 - Whitehouse Substation 275kV Switchgear	**Scheme** Whitehouse Substation 275kV Switchgear
Overview of Works Construct a new 275kV line circuit breaker bay on the 275kV Craig Murrail - Crossaig West circuit at the future Whitehouse 275kV Substation.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/10/2034
Summary of works in last quarter: Project initiated through internal governance and initial high-level project development commenced.	
Summary of works in next quarter:	
Additional Comments:	

TORI	Scheme
SHET-RI-197 - Kintyre to North Wales HVDC Link	Kintyre to North Wales HVDC Link
Overview of Works Construction of a new AC/DC converter station, with the AC end connected to the Creag Dhubh 275kV double busbar substation. The DC circuit is to be a bi-pole, solid return design, routed through the sea towards North Wales (landing point to be confirmed).	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/10/2034
Summary of works in last quarter: Project initiated through internal governance and initial high-level project development commenced.	
Summary of works in next quarter: Project is progressing through the internal gate process.	
Additional Comments:	

TORI SHET-RI-198 - Beinn Glass Tee 132kV Switching Station	Scheme Beinn Glass Tee 132kV Switching Station
Overview of Works Construct a new 132kV switching station at the site where the Beinn Glass 132kV circuit tees into the Taynuilt to Creag Dhubh 132kV tower line. At the new switching station, install a new 132kV line circuit breaker and associated disconnectors, protection panels, battery systems etc.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/10/2035
Summary of works in last quarter: On Hold	
Summary of works in next quarter:	
Additional Comments:	

TORI	Scheme
SHET-RI-199 - Blackhillock 2 400kV Substation	Blackhillock 2 400kV Substation
Overview of Works Establish a new 400kV substation close to Blackhillock 400kV substation and tie in the proposed 400kV circuits as part of the NOA BBNC/BPNC upgrade.	
Proposed Consent Submission	30/07/2024
Current Project Phase	Development
Next Project Phase	Refinement
Next Stakeholder Event	November 2023
Project Completion Date	31/10/2028
Summary of works in last quarter: The project have now internally confirmed that the preferred site has been changed from Site 10 to Site 4, due to the feedback received from the public consultation event in March 23. SiemensBAM have been appointed as the ECE contractor for the project.	
Summary of works in next quarter: GI works to be initiated at the preferred site. ECE deliverables to facilitate the design freeze to be completed. Environmental Impact Assessment works.	
Additional Comments: N/A	

TORI SHET-RI-200 - Loch Buidhe 400-275kV substation	**Scheme** Loch Buidhe 400-275kV substation
Overview of Works This project is looking to establish a new 400kV substation adjacent to the existing 275kV Loch Buidhe substation. Install 2 x 1200MVA, 400/275kV supergrid transformers (SGT1 and SGT2).	
Proposed Consent Submission	TBD
Current Project Phase	Internal Governance
Next Project Phase	Optioneering
Next Stakeholder Event	TBD
Project Completion Date	31/07/2029
Summary of works in last quarter: Continuation of high-level project development, along with initial internal governance activities**.**	
Summary of works in next quarter: Continuation of high-level project development, along with initial internal governance activities	
Additional Comments:	

TORI	Scheme
SHET-RI-201 - Foyers Substation Extension and Connection to Loch Kemp	Foyers Substation Extension and Connection to Loch Kemp
Overview of Works Foyers Substation Extension and Connection to Loch Kemp Extend the existing Foyers 275kV busbar to include a new 275kV bay to connect the new circuit from the Loch Kemp Pumped Storage 275/18kV Substation. Construct a 275kV busbar with three bays at the Loch Kemp 275kV/18kV Substation. The Loch Kemp Pumped Storage 275/18kV Substation will be connected to the existing Foyers 275kV Substation by approximately 10.5km of single circuit 275kV underground cable.	
Proposed Consent Submission	
Current Project Phase	
Next Project Phase	
Next Stakeholder Event	
Project Completion Date	31/10/2030
Summary of works in last quarter:	
Summary of works in next quarter:	
Additional Comments:	

TORI SHET-RI-203 - Fetteresso 132kV Busbar Works	Scheme Fetteresso 132kV Busbar Works
Overview of Works Fetteresso 132kV Busbar Works Add a bus section to the Fetteresso 132kV busbar.	
Proposed Consent Submission	N/A
Current Project Phase	Initial internal governance
Next Project Phase	Optioneering
Next Stakeholder Event	TBD
Project Completion Date	30/06/2029
Summary of works in last quarter: Continuation of high-level project development, along with initial internal governance activities**.**	
Summary of works in next quarter:	
Additional Comments:	

TORI	Scheme
SHET-RI-205 - New East Coast 275 kV Substation	New East Coast 275 kV Substation

Overview of Works

Decommissioning of the existing Fiddes 132/33 kV substation, including all buildings, bunds, plinths, GTs and 132 kV Quad Booster. Switchgear, GTs and Quad Booster should obtain asset condition reports to determine if they should be scrapped or placed into spared. All buildings, plinths and bunds should be broken down to below ground level and made available to others for use.

Decommissioning of the existing 132 kV single circuit overhead line between Craigiebuckler/Tarland/ Fiddes Tee Point and Brechin substation (CF-FB circuits).
Construction of a new 275 kV double-busbar at Brechin with a single bus section, two bus couplers and a minimum of six feeder bays to turn-in/out XT1/XT2 between Kintore and Tealing and interconnect Brechin 275/132 kV substations. The site should have space provision to house the SGTs and ancillary equipment and potential four future feeder bays.

Construction of two 275/132 kV 240 MVA SGTs at Brechin 275 kV substation including two 275 kV circuit breakers, two 275 kV line isolators, two 132 kV circuit breakers and two 132 kV line isolators to interconnect Brechin 275 kV and 132 kV substations.

Construction of two 132 kV circuit breakers and four 132 kV line isolators at Brechin 132 kV substation to interconnect Brechin 275 kV and 132 kV substations.
Construction of approximately 4.5 km of 132 kV double-circuit overhead line between Brechin 275 kV substation and Brechin 132 kV substation

Proposed Consent Submission	N/A
Current Project Phase	Initial internal governance
Next Project Phase	Optioneering
Next Stakeholder Event	TBD
Project Completion Date	30/06/2032

Summary of works in last quarter:

Initial government activities complete. Awaiting allocation of a project team.

Summary of works in next quarter:

Initial government activities complete. Awaiting allocation of a project team.

Additional Comments: