



**Transmission Owner
Reinforcement Instruction (TORI)**
Quarterly Update Report Q3
July 2022 – September 2022

September 2022



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

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

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

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

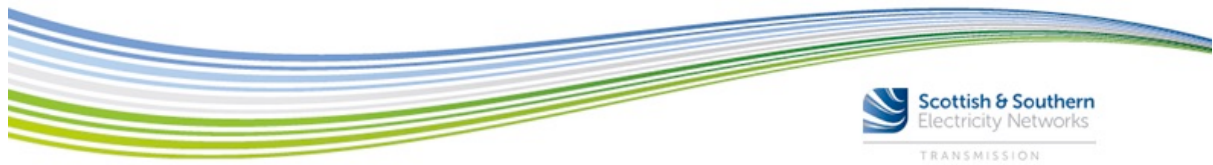


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TORI SHET-RI-007a - Beaully - Blackhillock 400 kV Double Circuit OHL	Scheme Beaully - Blackhillock 400 kV Double Circuit OHL
Overview of Works Establish a new double circuit 400kV overhead line approximately 110km from Beaully to Blackhillock. In an update from initial scope, the new OHL is to connect to a new 400kV busbar at Beaully and a new 400kV busbar at Blackhillock.	
Project Completion Date	31/10/2030
Summary of works in last quarter: Corridors developed with supporting documentation for Stakeholder Consultation. Community Events currently ongoing.	
Summary of works in next quarter: Following completion of stakeholder consultation, feedback to be incorporated and project progressed to routeing stage. Bird and ecological surveys to commence. Progressing towards additional consultation in Q1 2023. Project is being developed in parallel to SHET-RI-137 Blackhillock – New Deer – Peterhead 400kV OHL with shared project team. Routing work is to be coordinated with site selection of the new substations at Beaully (SHET-RI-007b) and Blackhillock (TORI 199) to optimise solution.	
Additional Comments: Project is being developed in parallel to SHET-RI-137 Blackhillock – New Deer – Peterhead 400kV OHL with shared project team. New Beaully 400kV Busbar to be connected to is captured in scope of SHET-RI-007b. A new TORI has been raised to capture the new Blackhillock 400kV Busbar to be connected to (TORI 199) which is to go to SDB next month.	



TORI SHET-RI-007b - Beauly 400 kV Busbar	Scheme Beauly 400 kV Busbar
Overview of Works Construct a new 400kV double busbar at Beauly 2 400kV switching station comprising of a bus section breaker, two bus couplers and 14 feeder bays (17 feeder bays in total) Construct a new 400kV GIS double busbar at Beauly substation and interface with the existing 275kV busbar. The 400kV double busbar is to comprise of one bus section breaker, two bus couplers, and feeder bays for circuit connections.	
Project Completion Date	30/03/2027
Summary of works in last quarter: <ul style="list-style-type: none"> • SDB Gate 0 • Project set up • Commencement of site selection including site visit 	
Summary of works in next quarter: <ul style="list-style-type: none"> • Project set-up continues, for example: risk register established, lessons learned register established, P6 programme developed, project budget approved. • Site selection concluded (appointment of consultant to support with this) • Engagement with statutory consultees • Preparation for first public consultation event in Q1 2023 • Bird / ecology surveys commence • Scope of works for Early Contractor engagement developed <p>Site selection process is being started following confirmation of the requirement of this project to support the outputs of the Networks Options Assessment Refresh. Appointment of consultants is being undertaken to support this and initial consultation is being planned.</p>	
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.	
Project Completion Date	31/10/2023
Summary of works in last quarter: Errochty Thermal Relay Works (LT43): All works complete – no further works required. OHL Works (LT162): All works complete to programme to date. Alyth Substation Works (LT139): Progressed with the construction of both the GIS & Statcom buildings as well as the wider site civil works. Mechanical & Electrical phase also commenced as structures start to be delivered and installed. Oversee the installation of the DNO supply. Tealing Substation (LT208): Continued to develop design and commenced construction works associated with the installation of the 2 Phase Shifting Transformers.	
Summary of works in next quarter: Errochty Thermal Relay Works (LT43): All works complete – no further works required. OHL Works (LT162): All works complete to programme to date. Alyth Substation Works (LT139): Complete the construction of both the GIS & Statcom buildings and commence installation of plant & equipment, as well as completion of the wider site civil works. Complete the installation of all outdoor aluminium structures and busbars. Complete the installation of the DNO supply. Tealing Substation (LT208): Continue with the design and construction works associated with the installation of the 2 Phase Shifting Transformers.	
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. Space provision only is to be provided for additional feeder bays. Establish a new 275 kV double circuit OHL between Creag Dhubh (North Argyll) substation and a tie in point on existing Sloy – Windyhill SPEN circuit near Dalmally.	
Project Completion Date	30/04/2026
Summary of works in last quarter: Invitations to tender were issued for both Creag Dhubh substation and overhead line work scope.	
Summary of works in next quarter: Continue procurement activities including review of tender returns.	
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.	
Project Completion Date	30/04/2027
Summary of works in last quarter: Continue engagement with Orkney developers.	
Summary of works in next quarter: Continue engagement with Orkney developers and confirm FNC conditionality has been approved by Ofgem.	
Additional Comments: N/A	



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.	
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.	
Project Completion Date	30/09/2023
Summary of works in last quarter: Please see project update for SHET-RI-025d North East 400kV Reinforcement.	
Summary of works in next quarter: Please see project update for SHET-RI-025d North East 400kV Reinforcement.	
Additional Comments: N/A	



TORI 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.	
Project Completion Date	31/10/2029
Summary of works in last quarter: Tenders launched on 12 th August for both HVDC cables and converters. Progressing acquisition of land in Peterhead area. Ongoing discussions with Crown Estate Scotland Lease Agreement. Progressing NDAs and Crossing Agreements with third parties. Marine licence application submitted on 30 th June 2022. Progressing internal governance milestone activities.	
Summary of works in next quarter: Supply chain engagement with tenderers. Additional Ground Investigation works at Peterhead (Scotland) and Wrenhall (England) to be undertaken. Prepare tender pack of OHL diversion activities at Peterhead. Determination of Section 37 application for OHL works. Release of tender for offshore UXO survey package. Conclude terms for land purchase in Peterhead.	
Additional Comments: Conclude 400kV AC Scope of Works for HVDC converter interface at Peterhead.	



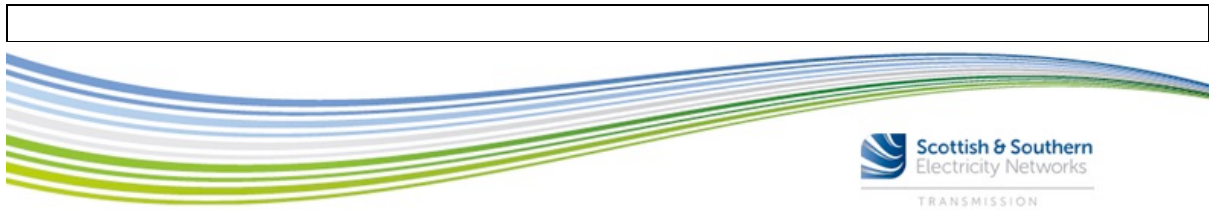
TORI SHET-RI-025c - Peterhead 400 kV Busbar	Scheme Peterhead 400 kV Busbar
<p>Overview of Works</p> <p>Construct a new 400kV substation close to the existing 275kV substation at Peterhead. Install two new 1200MVA 400/275kV supergrid Transformers and approx. 500m of 275kV cable between the new 400kV busbar 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.</p> <p>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.</p>	
Project Completion Date	31/10/2023
<p>Summary of works in last quarter:</p> <p>Civil works progressed well, with various areas of the platform being built up to finished compound level and chippings spread externally.</p> <p>GE-UK completed the installation of SGT4 and SGT5- commissioning complete on SGT4.</p> <p>Hitachi started on site June with all 8 GIS bays being delivered and installed in final position within the GIS hall.</p> <p>All protection and control relay panels were delivered to site from Sri Lanka, installed commenced end of June.</p> <p>275kV ducting crossed gas main with both circuits (VV1/VV2) and future duct install complete.</p>	
<p>Summary of works in next quarter:</p> <p>All civil works will be complete in the forth coming months.</p> <p>GE-UK are continuing the oiling up and commissioning stage of SGT5, due to demobilise from site early October on completion of all works.</p> <p>All 8 GIS bays will be connected and gassed up, with external GIB structures and connections on VND1/VND2 circuits. Hitachi will continue the installation prior to HV-testing (High Voltage)-9th November 2022.</p> <p>Cable glanding and terminating of protection and control panels will continue with commissioning ongoing into 2023. A fibre connection between the new 400kV and 275kV substation will be installed late October 2022.</p> <p>275kV ducting will continue to be installed between new and existing Substation.</p>	

Additional Comments:

N/A



TORI	Scheme
SHET-RI-025d - North East Reinforcement	North East Reinforcement
<p>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 400/132kV, 240MVA SGT's and two 132/33kV, 120MVA GTs to connect the Rothienorman GSP to the 400kV Rothienorman Busbar.</p>	
Project Completion Date	31/10/2023
<p>Summary of works in last quarter: OHL Works – Works complete on HR1 circuit and progressing well on HR2, this being the final circuit between Blackhillock and Rothienorman. All works progressing in line with the schedule. Kintore Substation Works – Completion of the building and equipment bases. Commence installation of electrical equipment. Factory acceptance testing of Transformers with delivery expected in October 2022. Rothienorman Substation Works - Completion of the SGT bunds on site. Factory Acceptance Tests for the SGT's</p>	
<p>Summary of works in next quarter: OHL Works - Complete works on HR1 circuit between Blackhillock and Rothienorman, and removal of Keith cross and OHL diversion. Pre-outage works to progress ahead of 400kV energisation sequence.. All works progressing in line with the schedule. Kintore Substation Works – Panel FAT completed and control panel arrive on site, installation of equipment commences. OHL foundation works completed. SGTS arrive on site and installation commences Rothienorman Substation Works – Transportation and Delivery of 2 SuperGrid Transformers - installation to commence. Concrete bases and earthing to complete, Cable works to commence.</p>	
<p>Additional Comments: N/A</p>	



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.	
Project Completion Date	31/10/2026
Summary of works in last quarter: Continued with Design development work, including undertaking of System Studies required, to provide technology requirements to potential suppliers. PQQ issued to potential suppliers to confirm suitability of available technologies (allowing for inclusion of alternative technologies to PSTs), footprint of potential units and lead times.	
Summary of works in next quarter: Review PQQ responses and progress development of Works Information for those able to provide suitable technology solutions.	
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.	
Project Completion Date	31/03/2026
Summary of works in last quarter: Engage with Developers further to outcome of CfD4 auction expected in July to ascertain any potential impact on programme. Continued engagement with landowners to secure outstanding land agreements. Continued development of Needs Case and CBA (MSIP submission now January 2023).	
Summary of works in next quarter: Continued engagement with Developers further to outcome of CfD4 auction expected in to ascertain any potential impact on programme. Continued engagement with landowners to secure outstanding land agreements. Continued development of Needs Case and CBA for MSIP submission.	
Additional Comments: N/A	



TORI SHET-RI-033 - Second 2 GW East Coast HVDC Link Peterhead to England	Scheme Second 2 GW 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.	
Project Completion Date	31/10/2031
Summary of works in last quarter: Continued high-level project development, along with initial internal governance activities.	
Summary of works in next quarter: Continued high-level project development, along with initial internal governance activities.	
Additional Comments: N/A	



TORI SHET-RI-042 - Western Isles - Beaully HVDC Link	Scheme Western Isles - Beaully HVDC Link
Overview of Works Establish a 1800MW HVDC link with associated equipment and converter stations between the Western Isles and the 400kV double busbar on the mainland. The HVDC cable is to be approximately 79km of subsea cable, and approximately 80km of land cable. The HVDC infrastructure will interface with a new 132kV/275kV double busbar on the Isle of Lewis and a 400kV double busbar on the mainland at a to be developed Beaully Hub.	
Project Completion Date	30/03/2027
Summary of works in last quarter: Following the publication of the Holistic Network Design with the recommendation of an 1800MW HVDC link to connect offshore and onshore, the previously proposed 600MW project is now on hold. Subsequently, SSENT have progressed the scope and development of an 1800MW link from the Western Isles to the mainland, utilising the already developed plans, analysis, subsea and onshore cable routes, and consents from the 600MW option, where feasible.	
Summary of works in next quarter: Following the publication of the Holistic Network Design with the recommendation of an 1800MW HVDC link to connect offshore and onshore, the 600MW project is now on hold.	
Additional Comments: N/A	



TORI SHET-RI-043 - Lewis Infrastructure	Scheme Lewis Infrastructure
Overview of Works Build a new 132kV single circuit OHL between existing Stornoway substation, the new Arnish substation (provided under SHET-RI-042 - Western Isles - Beaully HVDC Link) and a new AC switching station at Balallan on the Isle of Lewis. Dismantle the existing 132kV single circuit OHL between Balallan and the existing Stornoway substation.	
Project Completion Date	30/03/2027
Summary of works in last quarter: Discussions on how best to proceed with project continued.	
Summary of works in next quarter: Project being restarted in line with revised Western Isles HVDC Link dates and scope, a review of the required scope is to be undertaken.	
Additional Comments: N/A	



TORI SHET-RI-046 - Taynuilt-North Argyll Rebuild	Scheme 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.	
Project Completion Date	31/10/2028
Summary of works in last quarter: Project on hold.	
Summary of works in next quarter: Project on hold.	
Additional Comments: N/A	



TORI 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 towers will be built for 275kV operation, but initially operated at 132kV.	
Project Completion Date	31/10/2023
Summary of works in last quarter: Key activities focussed on the installation of the primary and secondary protection equipment at An Suidhe Substation as well as continuing access track, tower foundations and tower erection on the overhead lines. The project has now completed 83 tower foundations out of 148 with 48 new towers fully constructed.	
Summary of works in next quarter: Completion of works at An Suidhe substation and continue installation, erection and wiring of towers.	
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.	
Project Completion Date	24/06/2022
Summary of works in last quarter: Close out the outstanding works/defects and progress (under Outage) the CS Route OPGW, OHL tie-in to Dalchork and remote end works. As built information collation.	
Summary of works in next quarter: Due to the cables/cable terminations Operational Restriction imposed by Operations on the project a portion of the outstanding works could not be undertaken; as much will be done in this quarter but the balance will need to be carried out (under Outage) next year 2023. Further as built information collation.	
Additional Comments: N/A	



TORI SHET-RI-053 - Shetland 600 MW HVDC Link and Kergord 132kV Substation	Scheme 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.	
Project Completion Date	01/07/2024
Summary of works in last quarter: Noss Head DC Switching Station: Continued with HVDC equipment installation and completed civil works. Kergord HVDC Converter: Continued HVDC equipment installation, M&E building services and external civil works. Continued M&E fitout to AC substation. HVDC Cable: Laid first 100km of offshore cable including cable pull-in to Noss Head (Caithness) and commenced offshore cable burial. Continued offshore cable manufacturing.	
Summary of works in next quarter: Noss Head DC Switching Station: Complete HVDC equipment installation and commence Stage 1 commissioning Kergord HVDC Converter: Substantial completion of the HVDC Building and civil works. HVDC equipment and cable installation will continue and AC Gas Insulated Switchgear will be installed in AC Substation. HVDC Cable: Complete land cable installation in Shetland and complete burial and protection of first 100km of offshore cable. Continue offshore cable manufacturing.	
Additional Comments: N/A	



TORI SHET-RI-058 - Beauly-Loch Buidhe 275kV OHL Reinforcement	Scheme Beauly-Loch Buidhe 275kV OHL Reinforcement
Overview of Works This project is to reinforce the existing BSW/BSE Beauly, Shin to Loch Buidhe 132kV double circuit with a higher capacity 275kV double circuit OHL. The reinforcement will include a new double circuit steel lattice tower construction approximately 40km, as well as works at Beauly, Loch Buidhe and Shin substations.	
Project Completion Date	31/10/2030
Summary of works in last quarter: Review strategic options and continue early option development.	
Summary of works in next quarter: Reinforcement will be now be constructed at 400 kV based on NOA7 Refresh Option BLN4, with an EISD of 2031. Refreshed TORI-058 and LCP documentation being prepared by SP&I.	
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.	
Project Completion Date	31/10/2033
Summary of works in last quarter: Project on hold.	
Summary of works in next quarter: Project on hold.	
Additional Comments: N/A	



TORI 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).	
Project Completion Date	31/12/2025
Summary of works in last quarter: Submit s37 consent application and Ofgem Final Needs Case. Undertake project construction tenders for the various parts of the project – OHL, UGC, SS, etc.	
Summary of works in next quarter: Continue to engage with key stakeholders following submission of the Section 37 and Final Needs Case for this project. Conclude the Tenders and identify the preferred contractors to provide the detailed design and progress the construction works.	
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 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. Third new 360MVA 275/132kV transformer will be undertaken under SHET-RI 065b	
Project Completion Date	31/10/2024
Summary of works in last quarter: Receive Planning Consent for Substation Pre-commencement works for Planning Consent Super Grid Transformer procurement	
Summary of works in next quarter: Discharge Pre-commencement Planning Conditions Mobilise to site Access road and tree clearance enabling works Temporary accommodation to complete Main works site compound earthworks to commence Supergrid Transformer Procurement / Place Design and Construct Contract	
Additional Comments: N/A	



TORI SHET-RI-065b - Beauly 3rd SGT Replacement	Scheme 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.	
Project Completion Date	31/10/2025
Summary of works in last quarter: See TORI-065a	
Summary of works in next quarter: See TORI-065a	
Additional Comments:	



TORI SHET-RI-066 - Fort Augustus Substation 400/275kV Development	Scheme Fort Augustus Substation 400/275kV Development
Overview of Works Develop the existing Fort Augustus substation to include a new 275kV busbar. The 275kV busbar is connected to the 400kV busbar via two 1200MVA 400/275kV Supergrid transformers. The 400kV busbar is part of SHET-RI-064 works.	
Project Completion Date	TBC
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-068 - Fort Augustus -Invergarry-400/132kV Development	Scheme Fort Augustus -Invergarry-400/132kV Development
Overview of Works Upgrade the existing 132kV double circuit OHL between Fort Augustus and Invergarry substation 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. The new 400kV OHL will terminate into the 400kV busbar at Fort Augustus. The 400kV busbar is part of SHET-RI-064 works.	
Project Completion Date	31/10/2027
Summary of works in last quarter: Prepared and issued report on Consultation Commenced further environmental and engineering surveys on proposed alignment Issue Scoping Documents Commenced EIA Continued engagement with ECU and Landowners Pre-Application Consultation Events for substation planning applications	
Summary of works in next quarter: Review and progress Consultation feedback Continued engagement with landowners and stakeholders Ongoing Environmental and Engineering works Prepare for substation pre application notices and consultation	
Additional Comments: N/A	



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 Beauldy-Denny overhead line. The Reactive Compensation will require a capability of +325MVar and -225MVar.	
Project Completion Date	31/08/2024
Summary of works in last quarter: Completion of the substation platform formation, Commencement of the GIS building foundations, Construction of the permanent access track to the substation, Transfer of the Beauldy-Denny circuits onto the two temporary towers.	
Summary of works in next quarter: Cladding of the GIS building and commencement of the internal fit out, Completion of the perimeter fencing and site drainage, Completion of the STATCOM building foundation and main transformer base.	
Additional Comments: N/A	



TORI SHET-RI-072 - Blackhillock-Kintore 400 kV OHL Upgrade	Scheme Blackhillock-Kintore 400 kV OHL Upgrade
Overview of Works Replace the existing 55km XH1/XH2 275kV double circuit OHL with a 400kV double circuit OHL. The new 400kV OHL will terminate on the 400kV busbars at Blackhillock and Kintore substations. A new connection arrangement is required at Cairnford substation to allow connection to the proposed 400kV OHL.	
Project Completion Date	30/09/2027
Summary of works in last quarter: Project superseded by SHET-RI-137 Blackhillock – New Deer – Peterhead	
Summary of works in next quarter: Project superseded by SHET-RI-137 Blackhillock – New Deer – Peterhead	
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.	
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-079 - Blackhillock Additional 275/132kV SGTs	Scheme Blackhillock Additional 275/132kV SGTs
Overview of Works Reinforce the transmission network at Blackhillock substation by installing two additional new 275/132kV Supergrid Transformers. The transformers are to be rated at 360MVA.	
Project Completion Date	30/06/2025
Summary of works in last quarter: Further progress cable routing assessment from 132kV GIS building to new SGT. Further technical assessments to progress substation and transformer design including buried services, structural assessment, noise impact and earthing study to feed in to works information for invitations to tender.	
Summary of works in next quarter: Refine outline design and align programme to reinforcement driver.	
Additional Comments: N/A	



TORI SHET-RI-086 - Craig Murrail Switching Station	Scheme Craig Murrail Switching Station
Overview of Works Construct a new 275kV substation on the Inveraray to Crossaig OHL near Lochgilphead. The Port Ann GSP is to be connected to Craig Murrail via new 33kV cable circuits.	
Project Completion Date	30/04/2027
Summary of works in last quarter: Town & Country Planning application for Craig Murrail substation and the Section 37 application for the overhead line amendments have been submitted. The tender process for the substation and underground cables works commenced.	
Summary of works in next quarter: Engagement with the overhead line, substation and underground cable supply chain participating in the tender process. Interface with the relevant stakeholders following submission of the Town & Country planning and Section 37 applications.	
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.	
Project Completion Date	31/08/2025
Summary of works in last quarter: Continuing to develop initial needs case of increasing the operating temperature on the existing 275 kV circuit.	
Summary of works in next quarter: SP&I continuing to develop initial needs case of increasing the operating temperature on the existing 275 kV circuit	
Additional Comments: N/A	



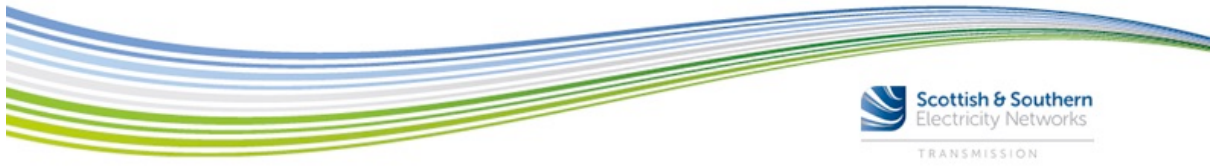
TORI SHET-RI-089 - Farigaig SGT2 Upgrade	Scheme Farigaig SGT2 Upgrade
Overview of Works Upgrade the 120MVA 275/132kV SGT2 at Farigaig substation to a 240MVA SGT, to facilitate the connection of generation in the area.	
Project Completion Date	30/08/2024
Summary of works in last quarter: <ul style="list-style-type: none"> • Confirm 275kV CB (circuit breaker) suitable for point on wave switching. If not obtain costs for required modifications or replacement if more cost effective • Confirm whether existing SGT protection scheme can be retained / re-used (potential saving) • Prepare works information for Part A tender for substation works • Issue Part A ITT to contractors in Q3 2022 	
Summary of works in next quarter: <ul style="list-style-type: none"> • At the request of the user RES the replacement of the SGT2 transformer will revert from an online build to an offline build solution. This request is via a User MODAPP which is the driver for SHET-RI-089. • The MODAPP will result in the project completion date being deferred by circa 12 months to 30/08/2025 	
Additional Comments: Order for SGT has been placed with manufacturer. Require delivery to site in February 2024. Instruction to manufacturer to proceed with manufacture to be issued by 31 October 2022. This allows manufacturer 16 months for manufacture and deliver to site.	



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 reconducted with UPAS conductor (1 x 300mm ²) and will operate at 75°C to give a minimum summer pre-fault rating of 176MVA.	
Project Completion Date	31/10/2026
Summary of works in last quarter: Project on hold.	
Summary of works in next quarter: Project on hold.	
Additional Comments: N/A	



TORI SHET-RI-093 - East Coast Phase 2 - 400kV Reinforcement	Scheme 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).	
Project Completion Date	31/10/2026
Summary of works in last quarter: Kintore Substation Works – TBC Fetteresso 400kV upgrade – Completion of internal assessment regarding whether 1 or 2 SGTs are required for the project scope. East Coast OHL 400kV Upgrade Works – TBC	
Summary of works in next quarter: Kintore Substation Works – TBC Fetteresso 400kV upgrade – Substation and Transformer ITT documentation to be issued to Framework Contractors. East Coast OHL 400kV Upgrade Works – TBC Blackhillock PSTs – Pre Qualification Questionnaire to be issued for equipment supply.	
Additional Comments: N/A	



TORI SHET-RI-098 - Dunoon GL1-GL2 OHL Rebuild	Scheme Dunoon GL1-GL2 OHL Rebuild
<p>Overview of Works Rebuild approximately 18km of double circuit overhead line between Dunoon substation and the SHET – SPT boundary.</p> <p>This project interfaces with Scottish Power Transmission (SPT), and any works required beyond the SHET-SPT boundary will be the responsibility of SPT.</p>	
Project Completion Date	30/05/2026
<p>Summary of works in last quarter: Complete Part A Tender. Carry out s37 pre application Event Carry out EIA, submit s37 to ECU. Continue Landowner negotiations</p>	
<p>Summary of works in next quarter: Due to works required to re-align the proposed OHL, the Section 37 will be prepared and submitted within this quarter, required pre-application events and the EIA will now be completed in this quarter, with landowner negotiations and tenders ongoing.</p>	
<p>Additional Comments: N/A</p>	



TORI SHET-RI-105 - Rothienorman s/s & Rothienorman - Kintore Reconductoring	Scheme Rothienorman s/s & Rothienorman - Kintore Reconductoring
Overview of Works Establish a new double busbar at Rothienorman to be built at 400kV, but initially operate at 275kV. Re-conductor the 275kV double circuit overhead line between the new double busbar at Rothienorman and Kintore substation (MX1, MX2).	
Project Completion Date	20/08/2021 (energised)
Summary of works in last quarter: This project is complete, and assets are now under the control of our Operations team	
Summary of works in next quarter: Monitoring and closing of any outstanding defect issues	
Additional Comments: None	



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.	
Project Completion Date	01/04/2024
Summary of works in last quarter: Commenced procurement of the SGT with completion of works information and engagement with suppliers	
Summary of works in next quarter: Continued procurement of SGT and commencement of further works information for remaining substation works. Handover of the project from Development to Delivery.	
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 Inveraray 132kV switching station. This reinforced circuit will connect to the double circuit overhead line from Crossaig (rebuilt as part of SHET-RI-050) approximately 2.8km away from Inveraray.	
Project Completion Date	30/04/2027
Summary of works in last quarter: ITT documentation issued to Framework Contractors. Ongoing work to review and compile EIA ready for submission in early October 2022.	
Summary of works in next quarter: Engagement with the overhead line supply chain participating in the tender process and interface with the relevant stakeholders in as part of the upcoming Section 37 consent application	
Additional Comments: N/A	



TORI SHET-RI-109 - Loch Buidhe - Spittal 132kV Reconductoring	Scheme Loch Buidhe - Spittal 132kV Reconductoring
Overview of Works Reconductor the existing 90km 132kV tower line between Loch Buidhe and Spittal substations. The 132kV overhead line is to be reconducted with a higher capacity conductor than the existing conductor and should have a minimum summer pre-fault rating of 176MVA.	
Project Completion Date	30/06/2027
Summary of works in last quarter: Commence MSIP Application Lidar survey commissioned Energyline commissioned Environmental consultant commissioned and environmental surveys scoped Access track route established	
Summary of works in next quarter: Lidar data captured Energyline assessment output received Bird surveys commenced Gate 1 complete (including all activities e.g. DAR, PIL and PSR)	
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).	
Project Completion Date	31/10/2022
Summary of works in last quarter: On Hold	
Summary of works in next quarter: Project on hold.	
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.	
Project Completion Date	01/07/2026
Summary of works in last quarter: Following the termination of a Wind Farm connection in the area, systems studies concluded the two additional SGTs are no longer required. The project will be put on hold.	
Summary of works in next quarter: Project on hold	
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.	
Project Completion Date	01/04/2027
Summary of works in last quarter: Design and project planning ongoing. .	
Summary of works in next quarter: Re-planning project due to all customer connections now moved to 2027	
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.	
Project Completion Date	18/11/2022
Summary of works in last quarter: All works completed on Seagreen circuit 1 & 2 and import connection has been provide to both along with 1 st export on circuit 1. Circuit 3 primary works are completed and awaiting seagreen availability to complete outstanding testing	
Summary of works in next quarter: Circuit 3 works completed and import connection provide and project progressing to close out status	
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.	
Project Completion Date	31/10/2024
Summary of works in last quarter: Delivery team progressed with review and coordination with generator connection works. Works to progress to meet 2024 completion. Continued discussions on how best to proceed with project	
Summary of works in next quarter: Continued discussions on how best to proceed with project	
Additional Comments: N/A	



TORI SHET-RI-120 - East Coast 132kV Upgrade	Scheme 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.	
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 - Charleston - Abernethy 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 reconducted with a conductor capable of a minimum summer pre-fault rating of 150MVA.	
Project Completion Date	31/10/2022
Summary of works in last quarter: On Hold.	
Summary of works in next quarter: Project on hold.	
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 reconducted with a minimum summer pre-fault rating of 190MVA.	
Project Completion Date	31/12/2023
Summary of works in last quarter: System Studies ongoing. Works to be considered alongside SHET-RI-058. Continued discussions on how best to proceed with project	
Summary of works in next quarter: SP&I Network Planning team undertaking strategic studies alongside SHET-RI-058 to assess 132kV double circuit overhead line between Shin substation and Loch Buidhe substation	
Additional Comments: N/A	



TORI SHET-RI-124 - 2nd Shetland HVDC Link Kergord - Rothienorman	Scheme 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.	
Project Completion Date	31/10/2026
Summary of works in last quarter: Project on hold.	
Summary of works in next quarter: Project on hold.	
Additional Comments: N/A	



TORI 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.	
Project Completion Date	TBC if 2 nd circuit is required
Summary of works in last quarter: Project on hold – not required at present.	
Summary of works in next quarter: Project on hold.	
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	
Project Completion Date	31/10/2031
Summary of works in last quarter: Project to enter the initial development stages alongside TORI 128.	
Summary of works in next quarter: TORI 127 to be updated to NOA7 refresh option DSDC (Dounreay 400kV substation, Thurso 400kV substation and 400kV OHL rebuild from Dounreay – Thurso – Spittal)	
Additional Comments: N/A	



TORI SHET-RI-128 – Caithness to Peterhead HVDC Link	Scheme 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 145 km from Spittal 2 to Peterhead (115 km subsea cable and 30 km underground cable). The works will be coordinated with the NOA recommendations	
Project Completion Date	31/10/2029
Summary of works in last quarter: Begin initial project development works	
Summary of works in next quarter: TORI to be updated to 2 GW bi-pole HVDC link with metallic return as per NOA7 Refresh option PSDC.	
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.	
Project Completion Date	01/07/2025
Summary of works in last quarter: Internal governance milestone scheduled for September 2022. Hand over to connection delivery team to progress project to construction ready.	
Summary of works in next quarter: Prepare and Issue ITT to Substation Contractor.	
Additional Comments:	



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.	
Project Completion Date	30/04/2027
Summary of works in last quarter: Town & Country Planning Applications for An Suidhe 33kV/275kV and Crarae 33kV/275kV substations, and the Section 37 application for movement of towers on the existing Inveraray to Crossaig overhead line to link to the new substations submitted. The tender process for the substation contracts commenced.	
Summary of works in next quarter: Engagement with the overhead line and substation supply chain participating in the tender process. Interface with the relevant stakeholders following submission of the Town & Country planning and Section 37 applications.	
Additional Comments: N/A	



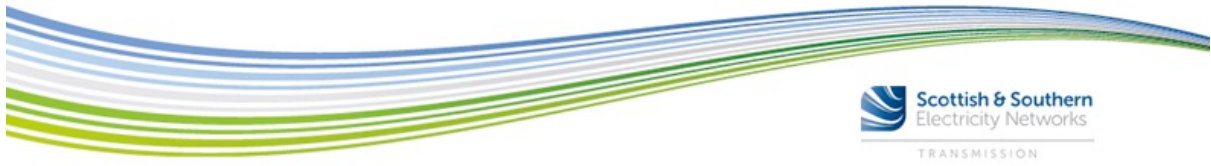
TORI SHET-RI-130b - Craig Murrail - Crossaig 275kV Operation	Scheme Craig Murrail - Crossaig 275kV Operation
Overview of Works Reinforce the network in the Argyll and Kintyre network to enable 275kV operation of the network from Craig Murrail substation to a new double busbar substation to be established at Crossaig. This requires the construction of a new Crossaig North 275/132kV Substation adjacent to the existing Crossaig Substation.	
Project Completion Date	30/04/2027
Summary of works in last quarter: The tender process for the Crossaig North Substation works commenced. Documentation for the Town & Country Planning and Section 37 consent applications being finalised ahead of submission.	
Summary of works in next quarter: Engagement with the overhead line and substation supply chain participating in the tender process. Town & Country Planning Application for Crossaig North 275kV substation, and Section 37 application for movement of towers on existing Inveraray to Crossaig overhead line to link to new substation to be submitted.	
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.	
Project Completion Date	31/10/2024
Summary of works in last quarter: Continue optioneering and project development alongside related reinforcement, SHET-RI-120.	
Summary of works in next quarter: Continue optioneering and project development alongside related reinforcement, SHET-RI-120.	
Additional Comments: N/A	



TORI SHET-RI-132 - Beauly-Blackhillock High Temperature Reconductoring	Scheme 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 reconducted comprise the existing 275kV overhead lines between Beauly and Knocknagael, and between Knocknagael and Blackhillock. The substation at Knocknagael is adjacent to the existing Foyers line tee point.	
Project Completion Date	30/07/2027
Summary of works in last quarter: Optioneering works concluded. Additional system analysis underway to ensure the correct solution and required rating increase is achieved.	
Summary of works in next quarter: Conclusion of system analysis to confirm the required rating increase from the reconductoring and progress the project through to the development stage.	
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.	
Project Completion Date	30/07/2027
Summary of works in last quarter: Initial development works Site visit	
Summary of works in next quarter: Engineering design development works	
Additional Comments: N/A	



TORI SHET-RI-134 – Beaully-Denny 2 nd Circuit upgrade from 275kV to 400kV	Scheme Beaully-Denny 2 nd Circuit upgrade from 275kV to 400kV
Overview of Works Upgrade the existing Beaully / Fasnakyle/ Fort Augustus / Tummel-Kinardochy / Braco West / Bonny Bridge 275kV circuit to 400kV, mirroring the ratings of the existing 400kV circuit, along the route	
Project Completion Date	31/10/2029
Summary of works in last quarter: Continue Initial development Scope creation	
Summary of works in next quarter: Determine if wayleaves are required to be updated for new operating voltage Interface programmes to be created including new sites on Beaully - Deane line	
Additional Comments: N/A	



TORI SHET-RI-135 - Edinbane 132kV Substation	Scheme Edinbane 132kV Substation
Overview of Works Construct a 132kV Collector Switching Station at Edinbane These works will include provision of reactive compensation equipment to accommodate additional generation onto the Skye 132kV system.	
Project Completion Date	31/07/2026
Summary of works in last quarter: Continued development of optioneering scope.	
Summary of works in next quarter: Continued development of optioneering scope.	
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.	
Project Completion Date	31/08/2024 – TO BE UPDATED
Summary of works in last quarter: Scope of work has changed significantly with development of additional connection requirements triggering the need for a second 400kV busbar at Blackhillock (Blackhillock 2 – TORI 199). Review ongoing to determine whether need for extension of existing 400kV building is needed (this may be needed to facilitate connection between existing and new 400kV Busbar).	
Summary of works in next quarter: Further investigation required to determine if need for project remains. This is pending findings of ongoing system studies. Change Control required to reflect change in scope and drivers, update completion date and budgets.	
Additional Comments: N/A	



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).	
Project Completion Date	31/10/2031
Summary of works in last quarter: Corridors developed with supporting documentation prepared for Stakeholder Consultationr. Community Events currently ongoing.	
Summary of works in next quarter: Project is being developed in parallel to SHET-RI-007a Beauly - Blackhillock 400kV OHL with shared project team. Project is to connect to proposed 'Blackhillock 2' (TORI199) 'New Deer 2' 400kV substation (SHET-RI-144) and 'Peterhead 2' 400kV substation, site selection to be developed in separate project, with SHET-RI-137 engaging closely to provide optimised solution. Routeing to be progressed, incorporating feedback from stakeholder consultation and substation site selections, working towards further engagement in Q1 2023.	
Additional Comments:	



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.	
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: Continuation of high-level project development, along with initial internal governance activities.	
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.	
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: Continuation of high-level project development, along with initial internal governance activities.	
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.	
Project Completion Date	01/06/2025
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-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.	
Project Completion Date	31/10/2031
Summary of works in last quarter: Project requirement being assessed.	
Summary of works in next quarter: Option to be withdrawn and replaced by reinforcement SHET-RI-128.	
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.	
Project Completion Date	31/10/2031
Summary of works in last quarter: Coordination required with ScotWind and Offshore Transmission Network Review workstream.	
Summary of works in next quarter: Option to be withdrawn and replaced by reinforcement SHET-RI-128.	
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 between Kergord substation and Gremista GSP, terminated onto new 132kV feeder bays at Kergord and Gremista. Construct a new Tee point for the connection of a wind farm.	
Project Completion Date	30/04/2025
Summary of works in last quarter: SHEPD start civils works at Gremista to construct Grid Supply Point platform base S37 consultation period ongoing for OHL	
Summary of works in next quarter: SHEPD ongoing civils works at Gremista to construct Grid Supply Point platform base S37 consultation period completes for OHL Tender appraisals on going for GSP/UGC/OHL project works	
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).	
Project Completion Date	31/10/2029
Summary of works in last quarter: Project team established and initial Level 1 site selection works commenced and ongoing.	
Summary of works in next quarter: Environmental consultant to be appointed to complete Level 2 assessment for site selection with a preferred site to be selected by end of quarter (required to inform routing work for OHL project SHET-RI-137). Working towards public consultation in Q1 2023.	
Additional Comments: N/A	



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.	
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: Continuation of high-level project development, along with initial internal governance activities.	
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.	
Project Completion Date	31/10/2031
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: N/A	



TORI SHET-RI-148 - Alyth – Tealing 400kV Reinsulation	Scheme Alyth – Tealing 400kV Reinsulation
Overview of Works Re-insulate the 275kV double circuit overhead line between Alyth and Tealing for 400kV operation.	
Project Completion Date	31/10/2031
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: N/A	



TORI SHET-RI-149 - Tealing – Glenrothes Westfield 400kV Rebuild	Scheme Tealing – Glenrothes Westfield 400kV Rebuild
Overview of Works Rebuild the 275kV double circuit overhead line between Tealing and Glenrothes-Westfield for 400kV operation.	
Project Completion Date	31/10/2031
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: 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 reconducted with a conductor capable of a minimum summer pre-fault rating of 226MVA.	
Project Completion Date	31/10/2029
Summary of works in last quarter: 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: 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.	
Project Completion Date	31/10/2029
Summary of works in last quarter: Initial high-level project development, along with initial internal governance activities for project inception.	
Summary of works in next quarter: Initial high-level project development, along with initial internal governance activities for project inception.	
Additional Comments: N/A	



TORI SHET-RI-153 - Spittal 2 275 kV Substation	Scheme Spittal 2 275 kV Substation
Overview of Works Construct a new 275 kV substation 'Spittal 2' close to the existing Spittal 275 kV substation in Caithness.	
Project Completion Date	31/05/2028
Summary of works in last quarter: Initial project development works to commence.	
Summary of works in next quarter: Continue to develop options post HND	
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.	
Project Completion Date	31/05/2027
Summary of works in last quarter: Initial high-level project development, along with initial internal governance activities for project inception.	
Summary of works in next quarter: Continuation of high-level project development, along with initial internal governance activities.	
Additional Comments: N/A	



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.	
Project Completion Date	31/10/2029
Summary of works in last quarter: Initial high-level project development, along with initial internal governance activities for project inception.	
Summary of works in next quarter: Continuation of high-level project development, along with initial internal governance activities.	
Additional Comments: N/A	



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.	
Project Completion Date	30/04/2026
Summary of works in last quarter: Continuation 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: 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.	
Project Completion Date	01/08/2024
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: 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
Summary of works in last quarter: Begin initial development works	
Summary of works in next quarter: Continue to develop as part of the wider optioneering works for connection into Connagill	
Additional Comments: N/A	



TORI SHET-RI-171 - OHL Cloiche / Dell to Melgarve	Scheme OHL Cloiche / Dell to Melgarve
Overview of Works	
Project Completion Date	30/04/2026
Summary of works in last quarter: Developed as part of the Melgarve cluster works	
Summary of works in next quarter: Finalisation of OHL route. Statutory and Public consultation November 2022.	
Additional Comments: N/A	