

# Transmission Owner Reinforcement Instruction (TORI) Quarterly Update Report Q1 January 2021 – March 2021

March 2021



## **Transmission Owner Reinforcement Instruction (TORI)**

### **Quarterly Update Report Q1**

### **January 2021 – March 2021**

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

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

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

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



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<b>TORI</b> SHET-RI-007a - Beauly - Blackhillock 400 kV Double Circuit OHL	<b>Scheme</b> Beauly - Blackhillock 400 kV Double Circuit OHL
<b>Overview of Works</b> Establish a new double circuit 400kV overhead line approximately 130km from Beauly to Blackhillock. The new OHL is connected to the Beauly 400kV AIS busbar and the Blackhillock 400kV GIS busbar.	
<b>Project Completion Date</b>	31/12/2027
<b>Summary of works in last quarter:</b> Project on hold.	
<b>Summary of works in next quarter:</b> Project is to be kicked following the results of the Network Options Assessment (NOA) 2020/21, where the project has been given a proceed signal.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-007b - Beauly 400 kV Busbar	<b>Scheme</b> Beauly 400 kV Busbar
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	30/03/2027
<b>Summary of works in last quarter:</b> See TORI-042	
<b>Summary of works in next quarter:</b> See TORI-042	
<b>Additional Comments:</b> See TORI-042	



<b>TORI</b> SHET-RI-009 - East Coast Onshore 275kV Upgrade	<b>Scheme</b> East Coast Onshore 275kV Upgrade
<b>Overview of Works</b> Establish new busbar at Alyth, to be built at 400kV but initially operate at 275kV, with reactive compensation support. Now includes Errochty Thermal Relay Works scope.  Re-profile the existing Kintore-Tealing-Kincardine 275kV circuits and the existing Tealing-Westfield-Longannet 275kV circuits for higher temperature operation.  Install 275kV Phase shifting transformers on each of the Kintore – Tealing circuits (XT1/XT2) at Tealing substation.	
<b>Project Completion Date</b>	31/10/2023
<b>Summary of works in last quarter:</b> Principal Contractor for new Alyth Substation appointed in December 2020. Principal Contractor for OHL Re-profiling works appointed in January 2021.	
<b>Summary of works in next quarter:</b> Engage with appointed Contractors in design phase for both the new Substation and the OHL Re-profiling works. Conclude preparations to allow mobilisation for main works in Q2 (April 21 onwards).	
<b>Additional Comments:</b> N/A	





<b>TORI</b> SHET-RI-013 - North Argyll Substation	<b>Scheme</b> North Argyll Substation
<b>Overview of Works</b> 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 North Argyll and Dalmally Substations.	
<b>Project Completion Date</b>	30/04/2025
<b>Summary of works in last quarter:</b> Preferred Alignment for project including Tower positions has progressed. Survey work to confirm Preferred Tower positions is ongoing.	
<b>Summary of works in next quarter:</b> Further consultation with stakeholders on the Preferred Alignment of Towers, is planned for April 2021.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-019 - Dounreay - Orkney 220kV Subsea HVAC Cable Link 1	<b>Scheme</b> Dounreay - Orkney 220kV Subsea HVAC Cable Link 1
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	30/04/2025
<b>Summary of works in last quarter:</b> Continue engagement with developers in relation to meeting Ofgem's conditionality of 135MW of generation to be achieved by Q4 2021 and review programme in context of developer's request for an extension to Q4 2022. Engagement to continue with regards to the conditionality, and Completion Date will be reviewed as appropriate.	
<b>Summary of works in next quarter:</b> Continue engagement with Orkney developers regarding progress to 135MW requirement.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-020 - Dounreay - Orkney 220kV Subsea HVAC Cable Link 2	<b>Scheme</b> Dounreay - Orkney 220kV Subsea HVAC Cable Link 2
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	30/04/2025
<b>Summary of works in last quarter:</b> Project on hold.	
<b>Summary of works in next quarter:</b> Project on hold.	
<b>Additional Comments:</b> Completion date to be reviewed in accordance with SHET-RI-019 - Dounreay - Orkney 220kV Subsea HVAC Cable Link 1 programme review.	



<b>TORI</b> SHET-RI-025a - Peterhead-Rothienorman 400 kV OHL upgrade	<b>Scheme</b> Peterhead-Rothienorman 400 kV OHL upgrade
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	30/09/2023
<b>Summary of works in last quarter:</b> Please see project update for SHET-RI-025d North East 400kV Reinforcement.	
<b>Summary of works in next quarter:</b> Please see project update for SHET-RI-025d North East 400kV Reinforcement.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-025b - Eastern Subsea HVDC Link	<b>Scheme</b> Eastern Subsea HVDC Link
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/10/2029
<b>Summary of works in last quarter:</b> Ongoing Seabed Survey Works. Ongoing consultation with Ofgem regarding Initial Needs Case submission. Ongoing offshore and onshore environmental assessment works. Supplier Engagement workshops completed. Onshore Engineering investigation works to commence. Ongoing land negotiations for the Peterhead area.	
<b>Summary of works in next quarter:</b> Ongoing Seabed Survey Works. Recommendation from Ofgem regarding Initial Needs Case submission. Ongoing offshore and onshore environmental assessment works. Ongoing onshore Engineering investigation works. Initial land agreements to be agreed for works at Peterhead area.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-025c - Peterhead 400 kV Busbar	<b>Scheme</b> Peterhead 400 kV Busbar
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/10/2023
<b>Summary of works in last quarter:</b> Sub station platform earthworks commenced with stone importation and formation of perimeter bunds. Foundations for GIS building ongoing and foul water drainage pipes/manholes being installed. Cable sealing end compound established and excavation, shuttering and pouring concrete for new tower foundation completed. 132kV Cable route established and soil stripping carried out. New welfare and car parking area now fully established.	
<b>Summary of works in next quarter:</b> Continuation on foundation works for sub station buildings, drainage and perimeter fence installation to platform. Further cable sealing end compound works will continue with foundations for several structures. 132kV cable route will see all access roads installed, Horizontal directional drilling been carried out and duct installation for cables.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-025d - North East Reinforcement	<b>Scheme</b> North East Reinforcement
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/10/2023
<b>Summary of works in last quarter:</b> <b>OHL Works</b> - Complete OHL design and Site investigations. Section 37 Pre commencement conditions to be discharged. Commence Contract negotiations and award for Construction Contract. Project Execution funding approved.  <b>Kintore SGT Works</b> – Initial design phase main contract awarded. EU Regulated Transformer Tender has also commenced.  <b>Rothienorman Substation Works</b> - Procurement activities progressing well with tenders having been released. Substation tender assessment underway with anticipated Construction contract awards forecasted for July/August 2021.  <b>New Deer Substation Works</b> - Project awaits confirmation of substation framework award. Contract awards forecast for summer 2022.	
<b>Summary of works in next quarter:</b> <b>OHL Works</b> - Award Construction Contract and mobilise to site ahead of outages commencing in June 2021. Discharge Pre-commencement conditions. Prepare and issue tender documentation for the Substation scope of works.  <b>Kintore SGT Works</b> – Transformer tender conclusion.  <b>Rothienorman Substation Works</b> - Procurement activities to conclude with preferred bidders identified. Project to obtain approval to progress to execution phase, including funding authorisation.  <b>New Deer Substation Works</b> - Awaiting completion of substation framework procurement.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-026 - Blackhillock 275 kV QBs	<b>Scheme</b> Blackhillock 275 kV QBs
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/10/2026
<b>Summary of works in last quarter:</b> Design development work continuing the project alongside the East Coast 400kV works.	
<b>Summary of works in next quarter:</b> Design development work continuing the project alongside the East Coast 400kV works.	
<b>Additional Comments:</b> N/A	





<b>TORI</b> SHET-RI-028 – Thurso South to Gills Bay 132kV OHL	<b>Scheme</b> Thurso South to Gills Bay 132kV OHL
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/03/2025
<b>Summary of works in last quarter:</b> Complete Engineering and Design review and updates Statutory and Public Consultation	
<b>Summary of works in next quarter:</b> Develop and submit new switching station consent application Re-engage with landowners and secure outstanding land option agreements	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-033 - Second 2 GW East Coast HVDC Link Peterhead to England	<b>Scheme</b> Second 2 GW East Coast HVDC Link Peterhead to England
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/10/2031
<b>Summary of works in last quarter:</b> Work to be carried out establishing parameters of Initial Needs Case to be submitted to regulator.	
<b>Summary of works in next quarter:</b> Continued development of initial needs case scope.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-042 - Western Isles - Beaully HVDC Link	<b>Scheme</b> Western Isles - Beaully HVDC Link
<b>Overview of Works</b> Establish a 600MW HVDC link with associated equipment and converter stations between the Western Isles (Arnish on Lewis) and the 400kV double busbar at Beaully (established under SHET-RI-007b). The HVDC cable is to be approximately 79km of subsea cable, and approximately 80km of land cable. The HVDC infrastructure will interface with a new 132kV double busbar at Arnish (Lewis) and the 400kV double busbar at Beaully.	
<b>Project Completion Date</b>	30/03/2027
<b>Summary of works in last quarter:</b> Project team to commence preparations for AR4 and be ready for generator success to allow Ofgem approval and the project to progress. Customer notices for move of energisation date.	
<b>Summary of works in next quarter:</b> Engagement with stakeholders to commence focussing on developer commitment and providing assurance to Ofgem that continued pre-construction costs are justified. Review of the proposed site for the Beaully converter station and AC substation. Customer notices for move of energisation date.	
<b>Additional Comments:</b> Engagement with BEIS continues regarding confirmation of Contracts for Difference Allocation Round 4 timeline, programme adjusted to accommodate proposed delay.	



<b>TORI</b> SHET-RI-043 - Lewis Infrastructure	<b>Scheme</b> Lewis Infrastructure
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	30/03/2027
<b>Summary of works in last quarter:</b> Project team reviewed preparations required for SHET-RI-043 - Lewis Infrastructure in the event that SHET-RI-042 - Western Isles - Beaully HVDC Link gains Ofgem approval following Allocation Round 4 in early 2022.	
<b>Summary of works in next quarter:</b> Bird surveys for new OHL between Balallan, Stornoway and Arnish to commence and land options at Arnish to be confirmed.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-046 - Taynuilt-North Argyll Rebuild	<b>Scheme</b> Taynuilt-North Argyll Rebuild
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/10/2028
<b>Summary of works in last quarter:</b> Project on hold.	
<b>Summary of works in next quarter:</b> If Developer sign their connection offer the initial Governance documents are to be prepared and development progressed.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-050a - Inveraray - Port Ann Reinforcement	<b>Scheme</b> Inveraray - Port Ann Reinforcement
<b>Overview of Works</b> Reinforce the 132kV Transmission network in the Kintyre Peninsula. Rebuild approximately 37km of double circuit OHL between Inveraray and Port Ann. The towers will be built for 275kV operation, but initially operated at 132kV.	
<b>Project Completion Date</b>	30/07/2021
<b>Summary of works in last quarter:</b> Overhead line works: The first section of new build overhead line was successfully energised between Inveraray Switching Station and An Suidhe Substation. Foundation works are complete and 109 out of 129 total towers are fully erected. Substation: Installation works complete	
<b>Summary of works in next quarter:</b> Overhead line works: Complete offline assembly and erection works. Substation: Commissioning	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-050b - Port Ann - Crossaig Reinforcement	<b>Scheme</b> Port Ann - Crossaig Reinforcement
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/10/2023
<b>Summary of works in last quarter:</b> Completed Part A contract award and commenced initial works to discharge of Section 37 Consent and Planning conditions. Completed Forestry tender and finalising contract negotiations in advance of forestry contract award.	
<b>Summary of works in next quarter:</b> Discharge of Section 37 Consent and Planning conditions. Execute Part B contract, award forestry Contract and commence site works	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-052 - Lairg-Loch Buidhe 132kV Reinforcement	<b>Scheme</b> Lairg-Loch Buidhe 132kV Reinforcement
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	30/04/2022
<b>Summary of works in last quarter:</b> Progress the construction of the site access roads and the substation platform. Construct AIS concrete bases. Construct the substation Control Building. Install site-wide drainage system and earthing grid on the platform. Commence the Loch Buidhe access track and terminal tower platform. Construct main OHL site compound/laydown areas and progress the Public Road Improvements. Construct the access roads and spurs to the towers via the 3 main access points. Commence the foundations for several towers.	
<b>Summary of works in next quarter:</b> Progress the substation platform including below-ground earthing, drainage and backfilling around structures. Continue the erection of the Control Building and progress the internal fit-out. Complete the AIS & gantry foundations and erect support structures. Commence the installation of electrical equipment. Complete the Loch Buidhe CSEC including foundations, structures and equipment. Progress the HV cable trench and draw-pit. Progress the OHL access tracks, spurs & working pads. Progress the install of the piled foundations. Commence the erection of several L7c towers. Undertake the replacement of the earthwire with OPGW (with outage) for Cassley – Shin route.	
<b>Additional Comments:</b> N/A	





<b>TORI</b> SHET-RI-053 - Shetland 600 MW HVDC Link and Kergord 132kV Substation	<b>Scheme</b> Shetland 600 MW HVDC Link and Kergord 132kV Substation
<b>Overview of Works</b> Construct a 600MW HVDC link from Shetland to the Scottish mainland at an HVDC switching station in the vicinity of Noss Head in Caithness. The HVDC switching station works will integrate with the Caithness-Moray Transmission Reinforcement (part of SHET-RI-031)  The HVDC link includes a 600MW HVDC converter station and 132kV Substation at Kergord in Shetland. The new 132kV Substation at Kergord will be the collection point for generation in Shetland.  The 600MW HVDC link will have approximately 13km of land cable and 284km of subsea cable between Shetland and the HVDC switching station in Caithness.	
<b>Project Completion Date</b>	31/03/2024
<b>Summary of works in last quarter:</b> Continue bulk earthworks to create platform at Kergord, Shetland Commence bulk earthworks at Noss Head, Caithness for HVDC Switching Station Commence site accommodation/access works for land cable mobilisation Complete cable and accessory manufacturing for 600MW Type Test Continue detail design for all work packages. Mobilise Land Cable installation team to Shetland	
<b>Summary of works in next quarter:</b> Substantially complete civil design and primary electrical design for both sites. Continue platform construction at Kergord and commence substructure construction of HVDC Converter Station. Complete bulk earthworks at Noss Head and commence substructure construction of Switching Station. Complete site accommodation and access works including public road improvements to Noss Head and Kergord sites. Commence 600MW Cable Type Test and commence land and subsea cable manufacturing. Commence offshore pre-lay survey work and mobilise Horizontal Directional Drill in Caithness and site establishment for land cable installation works in Caithness and Shetland.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-058 - Beauly-Loch Buidhe 275kV OHL Reinforcement	<b>Scheme</b> Beauly-Loch Buidhe 275kV OHL Reinforcement
<b>Overview of Works</b> 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 L3/1 construction approximately 40km, as well as works at Beauly, Loch Buidhe and Shin substations.	
<b>Project Completion Date</b>	31/10/2021
<b>Summary of works in last quarter:</b> System Studies in progress to reassess Derogation requirement and required scope of reinforcement.	
<b>Summary of works in next quarter:</b> System Studies in progress to reassess Derogation requirement and required scope of reinforcement. Project now has a proceed signal from the National Grid System Operator published NOA (Network Options Assessment) report.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-059 - Third 2GW East Coast HVDC Link Peterhead to England	<b>Scheme</b> Third 2GW East Coast HVDC Link Peterhead to England
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/10/2033
<b>Summary of works in last quarter:</b> Project on hold.	
<b>Summary of works in next quarter:</b> Project on hold.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-061 - Skye Overhead Line Reinforcement	<b>Scheme</b> Skye Overhead Line Reinforcement
<b>Overview of Works</b> 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).	
<b>Project Completion Date</b>	31/12/2025
<b>Summary of works in last quarter:</b> Conclude the alignment design and undertake wider consultation with key stats and landowners in advance of planned public consultation events in Q3 of 2021.	
<b>Summary of works in next quarter:</b> Prepare initial needs case submission to be issued to Ofgem and undertake public consultation on selected preferred alignment	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-064 - Fort Augustus Substation 400/132kV Development	<b>Scheme</b> Fort Augustus Substation 400/132kV Development
<b>Overview of Works</b> Develop the existing Fort Augustus substation to include a new 400kV and a new 132kV busbar. The new 400kV busbar is to be connected to the new 132kV busbar via two new 480MVA 400/132kV Super grid transformers.	
<b>Project Completion Date</b>	31/10/2021
<b>Summary of works in last quarter:</b> Installation of the 400kV Gas Insulated Switchgear continued, both super grid transformers were delivered to site, the 132kV building was made wind and watertight and installation of the 132kV Gas Insulated Switchgear began.	
<b>Summary of works in next quarter:</b> Completion of the Super grid transformer installation and installation of the 132kV and 400kV Gas Insulated Switchgear installation. Commencement of outages to energise the 400kV equipment and preparation for 132kV outages in the following quarter.	
<b>Additional Comments:</b> Transformer installation delayed due to COVID19 travel restrictions, alternative arrangements now in place.	



<b>TORI</b> SHET-RI-065a - Beauly 132 kV Substation Redevelopment	<b>Scheme</b> Beauly 132 kV Substation Redevelopment
<b>Overview of Works</b> 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	
<b>Project Completion Date</b>	31/10/2024
<b>Summary of works in last quarter:</b> Continue design work to create detailed design and begin collating tender information Collate environmental and noise studies and complete 3D model for submission of planning application submission.	
<b>Summary of works in next quarter:</b> Hold two public consultations prior to submission of planning and take onboard feedback. Complete design stage by stages Submit planning application	
<b>Additional Comments:</b> N/A	



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



<b>TORI</b> SHET-RI-066 - Fort Augustus Substation 400/275kV Development	<b>Scheme</b> Fort Augustus Substation 400/275kV Development
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	01/12/2027
<b>Summary of works in last quarter:</b> Project is currently on hold.	
<b>Summary of works in next quarter:</b> Project is currently on hold.	
<b>Additional Comments:</b> N/A	





<b>TORI</b> SHET-RI-068 - Fort Augustus -Invergarry-400/132kV Development	<b>Scheme</b> Fort Augustus -Invergarry-400/132kV Development
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/12/2027
<b>Summary of works in last quarter:</b> Following amendment of the completion date following the Modification Application, the project commenced the optioneering and undertook some initial stakeholder engagement.	
<b>Summary of works in next quarter:</b> Continuation of optioneering the routes and substation location option will continue into the next quarter. It is expected that candidate corridors and substation locations will emerge, and a programme of stakeholder consultation will be established.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-069 - Kinardochoy Reactive Compensation	<b>Scheme</b> Kinardochoy Reactive Compensation
<b>Overview of Works</b> Reactive Compensation is required at a new Kinardochoy substation for voltage support on the 275kV Beauldy-Denny overhead line. The Reactive Compensation will require a capability of +225MVar and -225MVar.	
<b>Project Completion Date</b>	31/08/2024
<b>Summary of works in last quarter:</b> Progression of the procurement event for the Overhead Line works. Completion of the Environmental Impact Assessments and Submission of planning and section 37 consent applications. Commence trunk road bridge assessments for main transformer delivery.	
<b>Summary of works in next quarter:</b> Appointment of principal contractors for both the substation and overhead line construction works. Undertake further ground investigation works and commence detailed design development.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-072 - Blackhillock-Kintore 400 kV OHL Upgrade	<b>Scheme</b> Blackhillock-Kintore 400 kV OHL Upgrade
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	30/09/2027
<b>Summary of works in last quarter:</b> Project on hold.	
<b>Summary of works in next quarter:</b> Project on hold.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-075 - Orkney 132kV Infrastructure Finstown - Ellibster	<b>Scheme</b> Orkney 132kV Infrastructure Finstown - Ellibster
<b>Overview of Works</b> 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 Ellibster and a 132kV OHL Trident wood pole connection from Ellibster to Finstown Substation. Note that Finstown 132kV Substation is established as part of SHET-RI-019 works.	
<b>Project Completion Date</b>	30/04/2025
<b>Summary of works in last quarter:</b> Project on hold.	
<b>Summary of works in next quarter:</b> Project on hold.	
<b>Additional Comments:</b> Project to be progressed in liaison with SHET-RI-019.	



<b>TORI</b> SHET-RI-079 - Blackhillock Additional 275/132kV SGTs	<b>Scheme</b> Blackhillock Additional 275/132kV SGTs
<b>Overview of Works</b> Reinforce the transmission network at Blackhillock substation by installing two additional new 275/132kV Supergrid Transformers. The transformers are to be rated at 360MVA.	
<b>Project Completion Date</b>	30/06/2025
<b>Summary of works in last quarter:</b> Project to continue to progress and work towards initial design deliverables.	
<b>Summary of works in next quarter:</b> Project to continue to progress and work towards initial design deliverables.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-086 - Craig Murrail Switching Station	<b>Scheme</b> Craig Murrail Switching Station
<b>Overview of Works</b> It is proposed that a new 132 kV switching station will be constructed near the Port Ann tee point (Craig Murrail) cutting into the Crossaig-Inveraray 132 kV double circuit. Disconnect Port Ann from tee points on the 132kV OHL and connect Port Ann GSP directly onto the new 132kV double busbars.	
<b>Project Completion Date</b>	31/10/2024
<b>Summary of works in last quarter:</b> Substation Site Selection Assessment Report is being prepared.	
<b>Summary of works in next quarter:</b> Consultation with stakeholders to commence in Q2 2021.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-088 - Loch Buidhe - Dounreay 275kV Reinforcement	<b>Scheme</b> Loch Buidhe - Dounreay 275kV Reinforcement
<b>Overview of Works</b> Reconductor the existing 275kV double circuit OHL between Loch Buidhe and Dounreay (approximately 87km). The double circuit is to be reconducted with a high temperature conductor, with a summer pre-fault rating of 900MVA.	
<b>Project Completion Date</b>	31/08/2025
<b>Summary of works in last quarter:</b> System Studies in progress to assess the required scope of reinforcement.	
<b>Summary of works in next quarter:</b> System Studies in progress to assess the required scope of reinforcement. Works to be considered alongside SHET-RI-058.	
<b>Additional Comments:</b> Project is at early conceptual design stage.	



<b>TORI</b> SHET-RI-089 - Farigaig SGT2 Upgrade	<b>Scheme</b> Farigaig SGT2 Upgrade
<b>Overview of Works</b> Upgrade the 120MVA 275/132kV SGT2 at Farigaig substation to a 240MVA SGT, to facilitate the connection of generation in the area.	
<b>Project Completion Date</b>	30/08/2024
<b>Summary of works in last quarter:</b> No works planned in the next quarter due to the Customer submitting a Modification Application to delay their connection date, with the project currently on hold.	
<b>Summary of works in next quarter:</b> The Modification Application has been signed by the Developer, with the project now on hold until 2023 when activities will recommence.	
<b>Additional Comments:</b> N/A	





<b>TORI</b> SHET-RI-090 - Coupar Angus - Errochty 132kV Reconductoring	<b>Scheme</b> Coupar Angus - Errochty 132kV Reconductoring
<b>Overview of Works</b> 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 <sup>2</sup> ) and will operate at 75°C to give a minimum summer pre-fault rating of 176MVA.	
<b>Project Completion Date</b>	31/10/2026
<b>Summary of works in last quarter:</b> Project on hold.	
<b>Summary of works in next quarter:</b> Project on hold.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-093 - East Coast Phase 2 - 400kV Reinforcement	<b>Scheme</b> East Coast Phase 2 - 400kV Reinforcement
<b>Overview of Works</b> 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).	
<b>Project Completion Date</b>	31/10/2026
<b>Summary of works in last quarter:</b> The Overhead Line Consent Application has been submitted following the completion of the Environmental Impact Assessment and relevant consultations. The invitation to tender for the design and construction work for the Overhead Line has progressed with a view to Contract award in early July.  On the Kintore Substation, the invitation to tender for the required works is current out and is to be returned within December, with an award of the required packages made in this quarter. Detailed Design will progress following this, with an update expected in this quarter on progress of the consent application.	
<b>Summary of works in next quarter:</b> Assess compliance of OHL tender returns, proceed to 'best and final offer' (BAFO) and award OHL Contract. Undertake and complete tree resilience survey works. Continue refinement of conductor suitability to reduce noise impact on local receptors and mitigate further impact on tower extension numbers. Works for the Fetteresso Substation Upgrade are to commence within Project Development within the next quarter, with the required upgrade works to be assessed.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-098 - Dunoon GL1-GL2 OHL Rebuild	<b>Scheme</b> Dunoon GL1-GL2 OHL Rebuild
<p><b>Overview of Works</b> 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>	
<b>Project Completion Date</b>	30/11/2025
<p><b>Summary of works in last quarter:</b> Continued ornithological surveys. Identified a preferred route for the overhead line. Continued engagement with key stakeholders. Identified tower type.</p>	
<p><b>Summary of works in next quarter:</b> Identify proposed alignments for the overhead line. Undertake consultation on the proposed alignments. From consultation feedback identify a proposed alignment. Commence Environmental Impact Assessment. Continue with ornithological surveys. Continue engagement with stakeholders.</p>	
<p><b>Additional Comments:</b> N/A</p>	



<b>TORI</b> SHET-RI-099 - Beauly-Keith 132kV Reconductoring	<b>Scheme</b> Beauly-Keith 132kV Reconductoring
<b>Overview of Works</b> Reconductor approximately 108km of the existing 132kV double circuit OHL between Beauly and Keith 132kV substations. This double circuit is to be reconducted with a minimum summer pre-fault rating of 176MVA.	
<b>Project Completion Date</b>	31/10/2022
<b>Summary of works in last quarter:</b> Keith substation busbar disconnector upgrade complete in Q1 2021. Beauly substation busbar disconnector upgrade and busbar modifications forecast for completion in Q1 2021. Elgin & Nairn substation transformer protection modifications complete in Q1 2021.	
<b>Summary of works in next quarter:</b> Keith substation line disconnector modifications forecast for completion in Q2 2021. Beauly substation line disconnector modifications forecast for completion in Q2 2021. Circuit inter tripping protection modifications and commissioning forecast for completion in Q2 2021	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-105 - Rothienorman s/s & Rothienorman - Kintore Reconductoring	<b>Scheme</b> Rothienorman s/s & Rothienorman - Kintore Reconductoring
<b>Overview of Works</b> 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).	
<b>Project Completion Date</b>	20/08/2021
<b>Summary of works in last quarter:</b> Substation testing complete and in readiness to energise.	
<b>Summary of works in next quarter:</b> Energisation outage and turn-in sequence to progress.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-106b - Connagill 2nd SGT	<b>Scheme</b> Connagill 2nd SGT
<b>Overview of Works</b> At Connagill substation, install a 2nd 275/132kV 120/240MVA supergrid transformer, to enable the connection of wind generation in the local area to the Dounreay – Loch Buidhe 275kV circuit.	
<b>Project Completion Date</b>	01/04/2024
<b>Summary of works in last quarter:</b> Project Development work to continue.	
<b>Summary of works in next quarter:</b> Project Development work to continue.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-107 - North Argyll - Inveraray Reinforcement	<b>Scheme</b> North Argyll - Inveraray Reinforcement
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	30/04/2025
<b>Summary of works in last quarter:</b> Overhead Line Route Selection Assessment Report is being completed.	
<b>Summary of works in next quarter:</b> Consultation with stakeholders to commence in Q2 2021.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-109 - Loch Buidhe - Spittal 132kV Reconductoring	<b>Scheme</b> Loch Buidhe - Spittal 132kV Reconductoring
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	30/06/2027
<b>Summary of works in last quarter:</b> Project on hold.	
<b>Summary of works in next quarter:</b> Developer triggering the reinforcement work has now signed their offer. The project will be formally kicked off and progressed to early stage development.	
<b>Additional Comments:</b> N/A	





<b>TORI</b> SHET-RI-111 - Abernethy 132kV Mesh Corner	<b>Scheme</b> Abernethy 132kV Mesh Corner
<b>Overview of Works</b> 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).	
<b>Project Completion Date</b>	31/10/2022
<b>Summary of works in last quarter:</b> Progress with Regional Development Plan and further optioneering to identify most economical solution to accommodate contracted generation.	
<b>Summary of works in next quarter:</b> Continue to progress with Regional Development Plan and further optioneering to identify most economical solution to accommodate contracted generation.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-113 - Kintyre-Hunterston Subsea Cable Intertrip Scheme	<b>Scheme</b> Kintyre-Hunterston Subsea Cable Intertrip Scheme
<b>Overview of Works</b> Between Crossaig substation and Carradale GSP install an intertrip scheme which will monitor the two 220kV Crossaig – Hunterston subsea cables. Following the loss of both subsea cables (N-2) an intertrip signal will be sent to applicable users to switch out.	
<b>Project Completion Date</b>	31/10/2020
<b>Summary of works in last quarter:</b> Project to be completed alongside Carradale GSP works.	
<b>Summary of works in next quarter:</b> Project to be completed alongside Carradale GSP works.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-115 - Melgarve 400/132 kV Substation Additional SGTs	<b>Scheme</b> Melgarve 400/132 kV Substation Additional SGTs
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/10/2026
<b>Summary of works in last quarter:</b> Initial review of the existing Melgarve substation has been undertaken against the functional requirements.	
<b>Summary of works in next quarter:</b> Continuation of development works will be undertaken in the next quarter including drafts and options for the general arrangement of the substation through an Options Assessment Report.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-116 - Kergord - Yell 132kV Connection	<b>Scheme</b> Kergord - Yell 132kV Connection
<b>Overview of Works</b> On Shetland install a new 132kV single circuit between the Kergord 132kV substation (established as part of SHET-RI-053) and a new tee point on Yell, to enable the connection of renewable generation.	
<b>Project Completion Date</b>	31/03/2024
<b>Summary of works in last quarter:</b> Project is being developed alongside the TORI-053 project. Land referencing and bird surveys underway along potential OHL routes to take forward to route selection from Kergord to Yell. Subsea routes reviewed and survey contractor procured.	
<b>Summary of works in next quarter:</b> Continue to refine the OHL routes and move to a preferred option. Undertake subsea and landfall surveys between Yell and the Shetland mainland. Hold a public stakeholder consultation on proposed routes and locations.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-117 - Tealing 275kV Busbar Upgrade	<b>Scheme</b> Tealing 275kV Busbar Upgrade
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/12/2021
<b>Summary of works in last quarter:</b> Outage taken on Reserve bus bar 1 to dismantle and install the new equipment. Stage 1 commissioning commences.	
<b>Summary of works in next quarter:</b> Energisation complete on phase 1 of the Reserve busbar 1 works and outage taken on the second phase of the reserve bus 1 works with all dismantling works completed and rebuild of the bus bar completed and energised.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-119 - Corriemoillie Transformer Protection Modification	<b>Scheme</b> Corriemoillie Transformer Protection Modification
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/10/2024
<b>Summary of works in last quarter:</b> Development and engineering design work to begin.	
<b>Summary of works in next quarter:</b> Design work being progressed.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-120 - East Coast 132kV Upgrade	<b>Scheme</b> East Coast 132kV Upgrade
<p><b>Overview of Works</b></p> <p>Construct a new Grid Supply Point substation near Fiddes connected to the 275kV double circuit tower line XT1/XT2 between Kintore and Tealing.</p> <p>Construct a new 132kV double circuit overhead line between Brechin and the Tealing/Arbroath/Brechin Tee Point.</p> <p>Reconductor the existing double circuit tower line between Tealing and the Tealing/Arbroath/Brechin Tee Point.</p> <p>Dismantle the existing Fiddes 132/33kV substation.</p> <p>Dismantle the existing 132kV single circuit overhead line between the Craigiebuckler/Tarland/Fiddes Tee Point and the Brechin Substation.</p>	
<b>Project Completion Date</b>	31/10/2026
<p><b>Summary of works in last quarter:</b></p> <p>Continue with Optioneering and Project Development to identify optimum reinforcement strategy.</p>	
<p><b>Summary of works in next quarter:</b></p> <p>Following completion of Public Consultation, commence determining the alignment for the new Arbroath Tee to Tealing 132kV Overhead Line. Complete Optioneering for Fiddes Substation and the Fiddes to Fetteresso Overhead Line works and undertake consultation as required for these.</p>	
<p><b>Additional Comments:</b></p> <p>N/A</p>	



<b>TORI</b> SHET-RI-121 - Charleston - Abernethy 132kV Reconductoring	<b>Scheme</b> Charleston - Abernethy 132kV Reconductoring
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/10/2022
<b>Summary of works in last quarter:</b> Continue with Optioneering and Project Development to identify optimum reinforcement strategy to accommodate contracted generation.	
<b>Summary of works in next quarter:</b> Continue with Optioneering and Project Development to identify optimum reinforcement strategy to accommodate contracted generation.	
<b>Additional Comments:</b> N/A	





<b>TORI</b> SHET-RI-123 - Shin - Loch Buidhe 132kV Reconductoring	<b>Scheme</b> Shin - Loch Buidhe 132kV Reconductoring
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/12/2023
<b>Summary of works in last quarter:</b> System Studies ongoing.	
<b>Summary of works in next quarter:</b> System Studies ongoing. Works to be considered alongside SHET-RI-058.	
<b>Additional Comments:</b> Project is at early conceptual design stage.	



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



<b>TORI</b> SHET-RI-126 - Kergord - Yell 132kV 2nd Connection	<b>Scheme</b> Kergord - Yell 132kV 2nd Connection
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/10/2026
<b>Summary of works in last quarter:</b> Project on hold.	
<b>Summary of works in next quarter:</b> Project on hold.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-127 - Dounreay - Spittal 400 kV Double Circuit Cable	<b>Scheme</b> Dounreay - Spittal 400 kV Double Circuit Cable
<b>Overview of Works</b> 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	
<b>Project Completion Date</b>	31/10/2031
<b>Summary of works in last quarter:</b> Initial Development and optioneering works to progress.	
<b>Summary of works in next quarter:</b> Change to contracted background has resulted in a change to scope of TORI. Initial Development and optioneering works to progress.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-129 - Farigaig SGT1 Upgrade	<b>Scheme</b> Farigaig SGT1 Upgrade
<b>Overview of Works</b> Upgrade the 120MVA 275/132kV SGT1 at Farigaig substation to a 240MVA SGT, to facilitate the connection of generation in the area.	
<b>Project Completion Date</b>	01/04/2024
<b>Summary of works in last quarter:</b> Initial Development and optioneering works to progress.	
<b>Summary of works in next quarter:</b> Project Team assessing the works planned for the Farigaig SGT2 Upgrade and reviewing implementing these on the SGT1 Upgrade.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-130a - North Argyll - Craig Murrail 275kV Operation	<b>Scheme</b> North Argyll - Craig Murrail 275kV Operation
<b>Overview of Works</b> Reinforce the network in the Argyll and Kintyre network to enable 275kV operation of the network from Creag Dhubh substation (established as part of SHET-RI-013) to Craig Murrail Substation. This will require the upgrade of substations on this circuit for 275kV operation.	
<b>Project Completion Date</b>	31/10/2025
<b>Summary of works in last quarter:</b> Substation Site Selection Assessment Report is being prepared.	
<b>Summary of works in next quarter:</b> Consultation with stakeholders to commence in Q2 2021.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-130b - Craig Murrail - Crossaig 275kV Operation	<b>Scheme</b> Craig Murrail - Crossaig 275kV Operation
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/10/2026
<b>Summary of works in last quarter:</b> Substation Site Selection Assessment Report is being prepared.	
<b>Summary of works in next quarter:</b> Consultation with stakeholders to commence in Q2 2021.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-131 - Brechin 132kV Extension	<b>Scheme</b> Brechin 132kV Extension
<b>Overview of Works</b> Construct 2 new circuit breakers at Brechin Grid Supply point.	
<b>Project Completion Date</b>	31/10/2024
<b>Summary of works in last quarter:</b> Optioneering and Project Development to continue alongside related reinforcement, SHET-RI-120.	
<b>Summary of works in next quarter:</b> Continue optioneering and project development alongside related reinforcement, SHET-RI-120.	
<b>Additional Comments:</b> N/A	





<b>TORI</b> SHET-RI-132 - Beauly-Blackhillock High Temperature Reconductoring	<b>Scheme</b> Beauly-Blackhillock High Temperature Reconductoring
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/10/2026
<b>Summary of works in last quarter:</b> Subject to acceptance.	
<b>Summary of works in next quarter:</b> Initial Development and optioneering works to progress.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-134 – Beaully-Denny 2 <sup>nd</sup> Circuit upgrade from 275kV to 400kV	<b>Scheme</b> Beaully-Denny 2 <sup>nd</sup> Circuit upgrade from 275kV to 400kV
<b>Overview of Works</b> 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	
<b>Project Completion Date</b>	31/10/2029
<b>Summary of works in last quarter:</b> The initial Governance documents are to be prepared and development progressed.	
<b>Summary of works in next quarter:</b> Initial Development and optioneering works to progress.	
<b>Additional Comments:</b> N/A	



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



<b>TORI</b> SHET-RI-136 - Blackhillock 400kV Building Extension	<b>Scheme</b> Blackhillock 400kV Building Extension
<b>Overview of Works</b> Extend existing Blackhillock 400kV GIS building to allow space provision for additional bays.	
<b>Project Completion Date</b>	31/08/2024
<b>Summary of works in last quarter:</b> Project initiated, driven by regional connection activity.	
<b>Summary of works in next quarter:</b> Initial development and optioneering works to progress.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-137 - Blackhillock-New Deer-Peterhead 400kV OHL	<b>Scheme</b> Blackhillock-New Deer-Peterhead 400kV OHL
<b>Overview of Works</b> Establish a new 400kV double circuit overhead line from Blackhillock to New Deer (60km) and New Deer to Peterhead (22km).	
<b>Project Completion Date</b>	31/10/2031
<b>Summary of works in last quarter:</b> Project initiated. Project driven by regional connection activity and wider system requirements.	
<b>Summary of works in next quarter:</b> Initial development and optioneering works to progress. Project to be prepared for submission for evaluation in Network Options Assessment (NOA).	
<b>Additional Comments:</b> N/A	



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



<b>TORI</b> SHET-RI-139 - 2GW HVDC Link New Deer to England	<b>Scheme</b> 2GW HVDC Link New Deer to England
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/10/2033
<b>Summary of works in last quarter:</b> Project initiated.	
<b>Summary of works in next quarter:</b> Initial development and optioneering works to progress.	
<b>Additional Comments:</b> N/A	



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





<b>TORI</b> SHET-RI-142 - Dounreay to Spittal 400 kV Cable	<b>Scheme</b> Dounreay to Spittal 400 kV Cable
<b>Overview of Works</b> Extend the 400kV double busbar at Dounreay 400kV substation to form 4 sections, Install a new single 400kV underground cable circuit from Dounreay 400kV substation to Spittal 400kV substation. The 400kV cable circuit will interface at Dounreay and Spittal substation via 400kV fully equipped feeder bays.	
<b>Project Completion Date</b>	31/10/2031
<b>Summary of works in last quarter:</b> Subject to acceptance	
<b>Summary of works in next quarter:</b> Subject to acceptance	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-143 - Kergord - Gremista GSP 132kV Infrastructure	<b>Scheme</b> Kergord - Gremista GSP 132kV Infrastructure
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	30/04/2025
<b>Summary of works in last quarter:</b> New TORI following re-categorisation of local works.	
<b>Summary of works in next quarter:</b> Initial Development and optioneering works to progress.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-144 - New Deer 2 400kV Substation	<b>Scheme</b> New Deer 2 400kV Substation
<b>Overview of Works</b> Establish a new 400kV substation close to the proposed New Deer 400kV substation and tie in the proposed 400kV circuits from New Deer to Peterhead.	
<b>Project Completion Date</b>	31/10/2033
<b>Summary of works in last quarter:</b> Project initiated. Project driven by regional connection activity.	
<b>Summary of works in next quarter:</b> Initial development and optioneering works to progress.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-145 - 2GW HVDC Link New Deer 2 to England	<b>Scheme</b> 2GW HVDC Link New Deer 2 to England
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/10/2033
<b>Summary of works in last quarter:</b> Project initiated. Project driven by regional connection activity.	
<b>Summary of works in next quarter:</b> Initial development and optioneering works to progress.	
<b>Additional Comments:</b> N/A	



<b>TORI</b> SHET-RI-146 - Clash Gour 275/132kV Collector Substation	<b>Scheme</b> Clash Gour 275/132kV Collector Substation
<b>Overview of Works</b> 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.	
<b>Project Completion Date</b>	31/10/2026
<b>Summary of works in last quarter:</b> Subject to acceptance	
<b>Summary of works in next quarter:</b> Subject to acceptance	
<b>Additional Comments:</b> N/A	