

TRANSMISSION OWNER MAJOR PROJECTS STATUS UPDATE - SEPTEMBER 2012

KEY explaining individual columns

Ref No cross refers to the associated map showing the geographical location of projects.

TO gives details of the Transmission Owner Scottish Hydro Electric Limited (SHTL) Scottish Power Transmission (SPT) and National Grid Electricity Transmission (NGET).

Project/Component describes the project.

Area/Transmission Boundary provides the geographical area and boundary zone(s) showing where projects are and the boundaries they will affect where relevant.

Increase in Transfer Capacity or Generation Accommodated shows how much the network capacity is expected to grow allowing greater transfer of electricity across the boundaries and/or allowing new generation to connect.

Current Project Stage: Scoping – Identification of broad need case and consideration of number of design and reinforcement options to solve boundary constraint issues;

Optioneering – TO believes that the need case is firm; design of a number of design options provided for public consultation so that a preferred design solution can be identified;

Design – Designing the preferred solution into greater levels of detail and preparing for the planning process;

Planning – Continuing with public consultation and adjusting the design as required all the way through the planning application process;

Construction – Planning consent has been granted.

RAG Status (Project Stage) presents an assessment by the TO of any issues affecting the particular project stage and how they impact on the expected completion of that stage. This and the other RAG Status column only apply to projects where the TO believes that the need case is firm and has not moved (although the need case might not yet have been submitted to Ofgem for assessment). So, projects at the earliest 2 stages (scoping and optioneering) do not generally have a RAG rating. Where a project does have a RAG status: Green means that particular project stage is within 6 months of expected completion date; Amber indicates a delay of 6-12 months; and Red a delay of over 12 months.

Issues presents any substantive issues or risks identified by the TO.

Comments provides information on mitigating actions, recent or upcoming milestones, etc.

Earliest completion date refers to the date included in the ENSG 2020 Vision Update Report from Feb 2012. This indicated the earliest date a project could be completed. This is not necessarily the same as the delivery date (see below).

Delivery date is the TO's view of when the work will be completed. Implicit in some of these dates are certain assumptions about planning permission, but these entries do not prejudice those decisions. Also, these entries are not used for regulatory purposes, and might not reflect the dates in the transmission licences: for some projects, the date in this table differs from the existing date in the TO's transmission licence; for others, a date will only be determined and put into the licence at a later date.

RAG Status (against delivery date) is an assessment by the TO of meeting that delivery date: Green indicates within 6 months of required delivery date; Amber indicates a delay of 6-12 months; and Red a delay of over 12 months. Where the TO does not yet have a firm view of the delivery date, this entry is blank.

Weblink provides web references for further project information from the TO.

Ref No	TO	Project / Component	Area / Transmission Boundary, where appropriate	Increase in Transfer Capacity or generation accommodated (MW)	Current Project Stage: 1. Scoping 2. Optioneering 3. Design 4. Planning 5. Construction	RAG Status (Project Stage) - TO view	Issues (including reasons for slippage, etc.)	Comments (Mitigating actions, etc.)	Earliest completion date (as per 2012 ENSG)	Delivery Date - TO view	RAG Status (Against Delivery Date) - TO view	Weblink (where available)
1HP	SHTL	Beaully-Denny 400kV line	Northern Scotland (B1)	850	5. Construction		Overall completion of the Project remains on target	No additional comments	2014 Q4	2014 Q4		http://www.sse.com/BeaullyDenny/
3H	SHTL	Knocknagael 275/132kV Substation	Northern Scotland (B1)	50	Complete Handed over to Operations	Complete	Complete	Knocknagael substation is now fully energised and complete with the exception of minor snagging works.	2012 Q2	2012 Q2	Complete	http://www.sse.com/knocknagael/
3NHP	SHTL	Eastern HVDC Link	NE Scotland (B4) to NE England (B6, B7, B7a)	2000	1. Scoping	See 'RAG Status Notes'	Scope definition under review. There is potential for a multi-terminal solution including a link via the SPT territory at Torness.	No additional comments	2018 Q2	To be confirmed	See 'RAG Status Notes'	http://www.sse.com/EasternHVDClink/
4H	SHTL	Beaully - Blackhillock - Kintore 275kV Reconductoring	Northern Scotland (B1)	300	5. Construction		No significant or reportable issues	Phase 1 (Beaully-Knocknagael) complete Phases 2 & 3 (Knocknagael-Blackhillock) commenced. Phase 4 (through to Kintore) to follow	2014 Q4	2014 Q4		http://www.sse.com/Beaullykintore/

Ref No	TO	Project / Component	Area / Transmission Boundary, where appropriate	Increase in Transfer Capacity or generation accommodated (MW)	Current Project Stage: 1. Scoping 2. Optioneering 3. Design 4. Planning 5. Construction	RAG Status (Project Stage) - TO view	Issues (including reasons for slippage, etc.)	Comments (Mitigating actions, etc.)	Earliest completion date (as per 2012 ENSG)	Delivery Date - TO view	RAG Status (Against Delivery Date) - TO view	Weblink (where available)
7H	SHETL	Beauly - Dounreay - 2nd 275kV circuit	Northern Scotland (B0)	100	5. Construction		Some contractor delays.	Little float in the Contractors programme and potential for delay. Extra resources deployed.	2012 Q4	2013 Q2		http://www.sse.com/dounreaybeauly/
9H	SHETL	Shetland HVDC Link	Island Link	600	3. Design		Due to the Caithness to Blackhillock reconfiguration, this project is now proposed to connect into HVDC switching station in Caithness. Resurvey and re-consenting work is underway.	No additional comments	2017 Q4	2017 Q4		http://www.sse.com/Shetland/
11HP	SHETL	East Coast 400kV Upgrade	Northern Scotland (B2/B4)	TBC	4. Planning		No significant or reportable issues	No additional comments	2017 Q1	2017 Q1		http://www.sse.com/ECR400kV/
12H	SHETL	Beauly - Mossford 132kV Line & Switch Substation	Northern Scotland (Radial circuit)	300	4. Planning (OHL) 5. Construction (S/stn)		Line consent awaited. Due Oct 2012	No additional comments	2014 Q4	2014 Q4		http://www.sse.com/beauly-mossford/
13HP	SHETL	Hunterston - Kintyre 240MVA AC subsea link	Northern Scotland (B3) to Central Scotland (B3)	Up to 350MW additional generation	4. Planning		No significant or reportable issues	No additional comments	2015 Q4	2015 Q4		http://www.sse.com/Kintyre-Hunterston/
14H	SHETL	Western Isles HVDC Link	Island Link	450	4. Planning		No significant or reportable issues	No additional comments	2015 Q4	2015 Q4		http://www.sse.com/WesternIsles/
17H	SHETL	Orkney 132kV Subsea Link	Island Link	180	3. Design		No significant or reportable issues	No additional comments	2015 Q4	2015 Q4		http://www.sse.com/Orkney-Caithness/
21H	SHETL	Caithness-Moray HVDC Reinforcement	Northern Scotland (B1)	600	3. Design		Delay caused by reconfiguration for a direct link between Caithness & Blackhillock, Moray.	Reconfiguration now complete and retendering progressing.	2016 Q4	2017 Q4		N/A
1HP	SPT	Beauly - Denny 400kV OHL from SHETL area to new substation at Denny	Northern Scotland (B1) to Central Scotland (B4)	1200 (B4)	5. Construction		No significant or reportable issues	No additional comments	2015	2015		http://www.spenergynetworks.co.uk/serving_our_customers/beauly_denny.asp?NavID=1&SubNavID=4

Ref No	TO	Project / Component	Area / Transmission Boundary, where appropriate	Increase in Transfer Capacity or generation accommodated (MW)	Current Project Stage: 1. Scoping 2. Optioneering 3. Design 4. Planning 5. Construction	RAG Status (Project Stage) - TO view	Issues (including reasons for slippage, etc.)	Comments (Mitigating actions, etc.)	Earliest completion date (as per 2012 ENSG)	Delivery Date - TO view	RAG Status (Against Delivery Date) - TO view	Weblink (where available)
1P	SPT	Incremental Reinforcement: (a) Series Compensation (b) East-West 400kV Upgrade	Central Scotland (B6) to Northern England (B6)	1100 (B6)	5. Construction		No significant or reportable issues	No additional comments	2015	2015		N/A
1NP	SPT	Western HVDC link	Central Scotland (B6) to NW England (B6, B7, B7a)	2200 (B6)	5. Construction		Land acquisition at Hunterston has proved to be protracted.	Compulsory purchase process has been initiated to obtain land at Hunterston	2015	2015 Q4		http://www.westernhvdclink.co.uk/
2NP	SPT	Central 400kV Upgrade (Denny – Wishaw)	Northern to Central Scotland (B4), Central Scotland (B5) and Central Scotland to Northern England (B6)	1700 (B5)	3. Design		No significant or reportable issues	Central 400kV upgrade is preferred solution. This includes 17km of new 400kV double circuit overhead line from Denny to Wishaw. This will increase boundary capacity by 1700MW	2017	2017		N/A
3NHP	SPT	Torness - Lackenby HVDC part of Eastern HVDC	Scotland (B6) to Northern England (B6, B7, B7a)	TBC	2. Optioneering	See 'RAG Status Notes'	Development of an Integrated offshore approach to incorporate 4GW wind contracted in Forth for connection 2019-21.	Multi-terminal options being developed by NGET/SPT/SHETL.	2018	To be confirmed	See 'RAG Status Notes'	N/A
1NP	NGET	Western HVDC link - HVDC cable and convertors	Central Scotland (B6) to NW England (B6, B7, B7a)	2200	5. Construction		Application for outline planning consent for the Southern converter station was rejected by Flintshire County Council in March 2012. Delay currently within project timescale tolerance	Detailed planning consent application was submitted to Flintshire County Council addressing concerns in July 2012. Outcome expected in October 2012.	2015	2015 Q4		http://www.westernhvdclink.co.uk/
2NP	NGET	Scotland-England Reinforcement (Series and shunt compensation)	Central Scotland (B6) to Northern England (B6)	1000	4. Planning (series comp) 5. Construction (shunt comp)		First application of Series Compensation in UK. Sub-Synchronous Resonance risk currently being evaluated. Times scales for delivery of projects	Planning permission granted in March 2012. Entering into procurement phase for series compensation.	2015	2014		N/A
3NHP	NGET	Eastern HVDC Link	NE Scotland (B4) to NE England (B6, B7, B7a)	2200 1000 700	2. Optioneering	See 'RAG Status Notes'	No significant or reportable issues	As a result of offshore wind generation development in the Firth of Forth area, alternative design options are being developed by NGET, SPT and SHETL to accommodate possible additional generation. End of Scoping/ optioneering phase 2012/13 Q4	2018	2018 Q2	See 'RAG Status Notes'	N/A
4N	NGET	Western HDVC Link: - Deeside / Connah's Quay substation	Northern Wales and NW England	N/A	5. Construction		No significant or reportable issues	Construction started on Deeside substation only.	2015	2015 Q2		N/A

Ref No	TO	Project / Component	Area / Transmission Boundary, where appropriate	Increase in Transfer Capacity or generation accommodated (MW)	Current Project Stage: 1. Scoping 2. Optioneering 3. Design 4. Planning 5. Construction	RAG Status (Project Stage) - TO view	Issues (including reasons for slippage, etc.)	Comments (Mitigating actions, etc.)	Earliest completion date (as per 2012 ENSG)	Delivery Date - TO view	RAG Status (Against Delivery Date) - TO view	Weblink (where available)
5N	NGET	Scotland-England Reinforcement (Harker-Hutton reconductoring)	Northern England (B7)	1400	5. Construction		Volume of work in a single outage season is high	Detailed Design & Delivery phase started in May 2012. Progressing to meet outages in March 2013.	2014	2014 Q1		N/A
6N	NGET	North Wales (New 400 kV, Pentir – Wylfa Transmission circuit)	North Wales (NW1)	2600	2. Optioneering	See 'RAG Status Notes'	The Planning Act 2008 requires that this application for development consent be examined by the determining authority (Planning Inspectorate) and determined by the Secretary of State.	Route selection stage prior to public consultation which is due to start in September 2012. This first phase will introduce the proposed work in North Wales, the developments NGET are considering and the technologies that could be used.	2018	2017 Q4	See 'RAG Status Notes'	N/A
7N	NGET	North Wales (Second Pentir – Trawsfynydd 400 kV Transmission circuit)	North Wales (NW2)	3100	2. Optioneering	See 'RAG Status Notes'	The Planning Act 2008 requires that this application for development consent be examined by the determining authority (Planning Inspectorate) and determined by the Secretary of State.	Cable route selection and Bryncir substation. Bryncir substation would be a new development – Optioneering mid-2013	2016	2016 Q2	See 'RAG Status Notes'	N/A
8N	NGET	North Wales (Deeside – Trawsfynydd series compensation)	North Wales	TBC	2. Optioneering	See 'RAG Status Notes'	Sub-synchronous Resonance risk not fully evaluated. Lack of land availability at Pentir may lead to extended period of site selection	Site selection process to commence when ongoing requirements are confirmed in light of new Anglesey-Pembroke HVDC cable	2015	2017 Q2	See 'RAG Status Notes'	N/A
9N	NGET	North Wales (Reconductor Trawsfynydd – Treuddyn)	North Wales (NW3)	1500	5. Construction		Winter outages for 2012 stage of work may lead to incomplete work and compressed programme in 2014 to catch up	Full sanction achieved and full PMI released in March 2012 for delivery 2012-14	2014	2014 Q4		N/A
10N	NGET	Wylfa-Pembroke HVDC Link	North Wales (NW1, NW2, NW3, NW4)	2000-2500	2. Optioneering	See 'RAG Status Notes'	Technology risk for a 2-2.5GW VSC link	Site identification process to commence when customer requirements are known for current round of offers	2017	2020 Q4	See 'RAG Status Notes'	N/A
11N	NGET	Central Wales (Mid Wales 400kV substation and Transmission circuit)	Central Wales	N/A	4. Planning		The Planning Act 2008 requires that this application for development consent be examined by the determining authority (Planning Inspectorate) and determined by the Secretary of State.	The preferred route corridor and siting area have been announced. A series of public information events are now being held.	2016	2016		http://www.midwalesconnection.com/
12N	NGET	Humber - Killingholme South New Substation (KISO); and new transmission circuit from KISO to West Burton	NE England (EC1)	2900	2. Optioneering	See 'RAG Status Notes'	The Planning Act 2008 requires that this application for development consent be examined by the determining authority (Planning Inspectorate) and determined by the Secretary of State.	No additional comments	2018	2018 Q2	See 'RAG Status Notes'	N/A
13N	NGET	East Anglia (Reconductoring (i) Bramford-Norwich) + (ii) Bramford substation reconfiguration	East Anglia (EC5)	1700	5. Construction		No significant or reportable issues	Bramford-Norwich project underway. Tree clearing and landscaping.	2015	i) 2013 Q4 ii) 2016 Q4		N/A

Ref No	TO	Project / Component	Area / Transmission Boundary, where appropriate	Increase in Transfer Capacity or generation accommodated (MW)	Current Project Stage: 1. Scoping 2. Optioneering 3. Design 4. Planning 5. Construction	RAG Status (Project Stage) - TO view	Issues (including reasons for slippage, etc.)	Comments (Mitigating actions, etc.)	Earliest completion date (as per 2012 ENSG)	Delivery Date - TO view	RAG Status (Against Delivery Date) - TO view	Weblink (where available)
14N	NGET	East Anglia (New Bramford – Twinstead 400kV Transmission circuit)	East Anglia (EC5)	2500	4. Planning		The Planning Act 2008 requires that this application for development consent be examined by the determining authority (Planning Inspectorate) and determined by the Secretary of State.	Published connection options report on 29th May 2012 and received feedback from stake holders and members of the public. Publication of interim alignment statement is next step. Moving forward in 2012, examine the detail design involving discussion with stakeholders, land owners and others. Anticipating to submit consent application in autumn 2013	2018	2017 Q4		http://www.bramford-twinstead.co.uk/
15N	NGET	London (Uprate Hackney – Tottenham – Waltham Cross circuit to 400kV+ Pelham Rye House reconductoring)	London (B14)	400	4. Planning		The Planning Act 2008 requires that this application for development consent be examined by the determining authority (Planning Inspectorate) and determined by the Secretary of State.	Stage 3 consultations May 2012. Development Consent Order (DCO) application planned for Q4 2012. Construction is planned to commence in February 2014.	2015	2016 Q4		http://www.northlondonreinforcement.com/
16N	NGET	South West (Hinkley Point – Seabank and associated infrastructure Works)	SW England (B13)	2400	4. Planning		The Planning Act 2008 requires that this application for development consent be examined by the determining authority (Planning Inspectorate) and determined by the Secretary of State.	Bridgewater –Seabank route alignment consultation – Summer 2012 At the end of this phase, NGET will finalise draft proposals which will be presented to the public during last stage of consultation. The Preferred Route Corridor for the proposed Hinkley Point C Connection has now been selected. The next stage of consultation will determine where the connection will run within the chosen route corridor. NGET will consider and evaluate areas where undergrounding sections of the proposed 400kV line or other parts of Western Power Distribution's network may be appropriate. This will be subject to further	2019	2019		http://www.hinkleyconnection.co.uk/