



Annual Report of the Managing Director of Transmission 2013 - 2014

Introduction

- (1) Special Condition 21 of SP Transmission's licence requires it to appoint a Managing Director of Transmission (MDT) to be responsible for the conduct of the transmission business.
- (2) SP Transmission plc (SPT) is required to arrange for the MDT to be provided with the services of persons, premises, systems and other resources as may be reasonably required by the MDT for the efficient and effective management and operation of the transmission business in accordance with SPT's statutory duties and licence obligations.
- (3) The above licence condition also requires that the MDT provide an annual report to the Directors of the licensee regarding the provision of resources referred to above in respect of the previous calendar year. The report is also to state the opinion of the MDT as to whether adequate arrangements have been made to enable SPT to comply with its obligations in the ensuing year. It should also describe the differences between the provision of resources in that year and in the previous year, and the reason for these differences.
- (4) The previous RPI-X framework ended on 31 March 2013 and has been replaced by the new RIIO framework (Revenue = Incentives + Innovation + Outputs). Under the RIIO framework, there is a much greater emphasis on network companies playing a full role in developing a sustainable energy sector and delivering services that provide value for money for customers. A key feature is agreement on the set of outputs that companies will be expected to deliver as part of the framework. The process for setting the controls is designed to conclude the negotiation in advance for companies who submit business plans that are acceptable to Ofgem. The company was fast-tracked in the RIIO process and the new RIIO-T1 price control, which became effective from 1 April 2013, will operate until 31 March 2021.

Arrangements for Provision of Resources

- (5) The Energy Networks division of ScottishPower is responsible for the management and operation of the three GB licensed networks in the group. Two of these licensees - SP Transmission plc (SPT) and SP Distribution plc (SPD) - hold Transmission and Distribution licences respectively for Central and Southern Scotland. SP Manweb plc (SPM) holds the distribution licence for Merseyside and North Wales. SP Power Systems Ltd ('PowerSystems') is the ScottishPower subsidiary that provides network management and operational services to these licence holders.
- (6) Within the structure described above, PowerSystems provides services to SPT under a Service Agreement. This sets out the network investment and operational services that PowerSystems is required to provide. These include an annually updated investment plan approved by SPT, and service targets that PowerSystems is expected to meet.

- (7) The Service Agreement includes a requirement that PowerSystems carry out its functions in accordance with relevant statutory and licence obligations. SPT has step-in rights in the event of default or material breach by PowerSystems.
- (8) SPT has been provided with a General Consent by Ofgem under Condition B3 of its Licence in relation to the contracting out of operational control of network assets to an affiliated company. In accordance with the terms of that consent, the Service Agreement with PowerSystems includes a covenant that PowerSystems will refrain from any action that is likely to cause SPT to breach its statutory or licence requirements, and that it will provide information required by SPT to monitor PowerSystems' performance or to meet requirements for information by the Authority.
- (9) As referred to in previous reports, SPT has an agreement in place with Iberdrola Engineering and Construction ("IEC") whereby IEC provides technical and management support for delivering the Transmission capital investment programme.
- (10) The prevention of harm to employees, contractors and members of the public and the protection of business assets and operational capability is a key priority for the regulated business. The organisation has continued to strive for improved performance and both internal and external assessments have again returned positive findings.
- (11) PowerSystems, on behalf of SPT, SPD and SPM, continues to hold accreditation to ISO 9001: Quality Management, ISO 14001: Environmental Management, BS OHSAS 18001: Occupational Health & Safety & BSI-PAS55: Asset Management. The accreditation provides assurance to stakeholders on the efficient and effective management of transmission and distribution assets. The main business areas within the regulated business achieved Integrated Management System certification in 2012.
- (12) In respect of financial year 2012-13, the regulatory accounts were approved by the directors on 12 July 2013. Regulatory accounts for the financial year 2013-14 were approved in 26 June 2014.
- (13) In respect of financial year 2012-13, on 12 July 2013 the directors approved a Certificate of Availability of Resources that confirmed their reasonable expectation that SPT would have sufficient financial resources and financial facilities for the subsequent 12 months.
- (14) Adequate finance was available to the transmission business during the year ending 31 December 2013
- (15) For the year ending 31 December 2014, adequate staff and resources will be available to the transmission business for the planned programme of works.
- (16) On 26 June 2014, the directors approved a Certificate of Availability of Resources that confirmed their reasonable expectation that SPT would have sufficient financial resources and financial facilities for the subsequent 12 months.

SP Transmission activities in 2013

- (17) The following paragraphs provide a summary of key projects undertaken during 2013 and the significant amount of pre-engineering and other preparatory works that are

also being progressed to deliver the customer and strategic reinforcement requirements for 2020.

- (18) In 2013 activity continued to focus on development and construction works for the connection of numerous wind farm generation projects and associated reinforcement requirements. In moving towards this target, a further large windfarm - Harestanes (c 164MW of new capacity was connected to the Transmission System in September 2013. This wind farm, coupled with Fallago, brings the cumulative output delivered in early-RIIO-T1 to 344MW (14% of total target).
- (19) The modernisation of the existing network continued with a range of projects across the main asset groups – switchgear, transformers, overhead lines and underground cables. The works to modernise the grid supply point at Dewar Place and improve the reliability of supply to customers in Edinburgh is substantively complete. The replacement of transformers at Ayr, Bainsford, Paisley and the second unit at Drumchapel were completed during 2013. Major refurbishment, involving full reconductoring, of the Kilmarnock South to Strathaven (XV) and Drumchapel to Windyhill (YD) routes have been completed. These schemes are delivering key network improvements to customers with the outputs agreed under RIIO-T1. In accordance with a key strategy agreed as part of TPCR4, the company is nearing completion of a programme to remove all poor condition and performance gas compression cables from service and replace with modern polymer insulated cables.
- (20) There was a forecast increase in electricity demand in the east of Glasgow due to the 2014 Commonwealth Games. As a result, reinforcement works took place around Dalmarnock GSP to increase capacity and improve security of supply as this area of Glasgow is undergoing extensive redevelopment. Dalmarnock 132kV GSP was commissioned during summer 2012; the final 132kV gas compression underground cable circuit in Glasgow was replaced during 2012/13 and associated transmission network reconfiguration works were completed during 2013/14 as planned.

SP Transmission activities in 2014

- (21) In 2014, activity in SPT continues to focus on the connection of numerous wind farm generation projects and associated local and wider reinforcement requirements as well as continuing with underlying substation and overhead line asset replacement.
- (22) SPT is working closely with stakeholders to connect windfarms in accordance with proposals set out in its Business Plan for RIIO-T1. This plan will increase the renewable generation portfolio by a further 2500MW by 2020/21 in its licence area. It is not anticipated that new wind farms will be connected to the Transmission System in 2014. There is, however, significant development and construction works in progress on new wind farm capacity across our franchise area, including more than nine projects in South-West Scotland, totalling over 800MW. The initial works comprising extension of the existing 275kV network from Coylton to New Cumnock is on course for completion by the end of 2015. The next phases of the work are scheduled for completion by 2016/17 and will facilitate connection of the aforementioned generation capacity. There continues to be significant interest in further renewable connections in this area, which is driving wider reinforcements in later years of RIIO-T1.
- (23) In accordance with long-term plans agreed with stakeholders, work continues on a number of major projects that will enhance the capability and capacity of the transmission network. This includes key projects to facilitate the delivery of the Government's target for renewable generation in Scotland.

- (24) The company has been making good progress with a project to increase reactive compensation in Central Scotland to secure the network for increased power flows. The installation and commissioning of shunt compensation plant at Windyhill and Elvanfoot were completed in 2013. This enabled an increase in power transfer capacity from 2800MW to 3150MW on the Scotland-England interconnector. The remaining works at Moffat and Longannet remain on schedule for completion during 2014 which will realise the full increase in transfer capacity to 3300MW.
- (25) We are also at the construction phase of a further upgrade to boundary B6 to increase the capacity from 3300MW to 4400MW through two complementary projects. East-West Upgrade project construction continues with substation works progressing at Strathaven, Wishaw, Kaimes and Smeaton south of Edinburgh. Overhead line re-insulation works to 400kV on circuits from Wishaw to Strathaven is on course for completion during 2014. The remaining work to re-insulate the next leg from Wishaw to Kaimes is scheduled for completion in 2016 in accordance with outage plans agreed by the System Operator.
- (26) The complementary project to East-West upgrade will be the first use of series compensation on overhead lines in the UK. The principal contract on this technically complex project was awarded in summer 2013 and site works at all three locations have commenced (Eccles, Moffat and Gretna). The project is on schedule for completion during 2015/16. A fifth shunt compensation plant will also be installed and commissioned at Cockenzie within the same timeframe.
- (27) In February 2012 National Grid and SPT announced the award of a £1bn contract to build the first ever sub-sea electricity link between Scotland and England/Wales. The link will be the longest high capacity High Voltage Direct Current (HVDC) cable in the world and will increase the capacity of electricity flowing between Scotland and England by more than 2000MW. The project has continued to focus on the detailed engineering design for the HVDC converter stations, commencing civil works at these terminal locations, the undersea route and production of power cable and major electrical equipment. Some problems have been experienced with the manufacture of the cable and this is currently being addressed by the contractor. Every effort is being made to achieve commercial operation in 2016/17, although there remains uncertainty in the extent to which the difficulties experienced with the manufacture of the cable will impact on the project programme.
- (28) The wider works reinforcement projects described above form part of an ambitious investment plan agreed under RIIO-T1 to increase power transfer capacity from Scotland to England from 3300MW to close to 7000MW by 2021. The under-sea link is one of several strategic projects designed to transport more power from Scotland to England and complements existing reinforcement projects like the construction of a new 400kV double-circuit overhead link between Beaulay (near Inverness) and Denny (near Falkirk). This circuit is necessary to increase power transfers to central Scotland, arising from new renewable generation in the north of Scotland.
- (29) In December 2009, the Scottish Government granted S37 consent for the Beaulay-Denny 400kV overhead line, subject to appropriate visual mitigation measures. Since then, extensive liaison has taken place with the local community to develop visual mitigation measures in an attempt to fully comply with planning conditions attached to the S37 consent. This has taken considerable time and a submission was made to the Scottish Government in August 2011 with a large number of detailed proposals to satisfy the Stirling Visual Impact Mitigation Scheme (SVIMS). In December 2011, formal notice of consent for the Beaulay-Denny project was provided to SPT by Scottish Ministers. A full tender and contract award assessment process was largely completed during 2012 and work is well underway on all of the major contracts. The Denny North 275kV substation has been energised during 2014. The new circuits to

Scottish Hydro Electric Transmission Limited will be completed by the end of 2015 with all remaining works, including Stirling Visual Impact Mitigation Scheme, completed by the end of 2016.

- (30) Whilst there has been significant construction activity associated with new renewable generation activity there has also been significant reinforcement works being undertaken to improve security of supply to existing customers. An increase in underlying electricity demand in and around the west of Glasgow has necessitated the establishment of a new Grid Supply Point near Glasgow city centre. Construction work is nearly complete and SPT is on schedule to finish this project during 2014.
- (31) In addition to the current works in and around Glasgow, there are several other proposals for Grid Supply Point (GSP) reinforcements during the RIIO-T1 period across central (eg. Bonnybridge, Cupar) and southern Scotland (eg Galashiels, Tongland). They are in various stages of the design/ development phase with construction works commencing in 2014.
- (32) During the year, a number of modernisation projects are being undertaken to maintain or improve security of supply for customers. There is significant asset replacement activity at Cockenzie, Devol Moor, Killermont, and Bonnybridge with substantive completion expected during 2014. In addition, major engineering works associated with the replacement of worn-out switchgear and transformers will commence at several sites including Chapelcross, Dalmally, Sighthill and Windyhill substations. These works will contribute to the delivery of key asset health outputs to improve the quality and reliability of electricity supplies to customers.
- (33) In accordance with the company's asset strategy, asset replacement and refurbishment work was undertaken to improve the asset health of a number of 400kV, 275kV and 132kV overhead line routes. On several suburban routes (AC, AF & BZ) overhead lines are being undergrounded, as it is not feasible to modernise them due to proximity to domestic premises and they will complete this year. In addition, construction works are ongoing to modernise CL/CK 132kV routes (Windyhill to Dalmally) and will commence on XG/XQ routes (Neilston to East Kilbride) and XS route (Kaimes to Cockenzie) in 2014. On completion, they will deliver all of the 132kV (c160cct km) and (along with schemes already complete (paragraph 14)) over 40% of the 400/275kV overhead line reconductoring baseline output for RIIO-T1.
- (34) The aforementioned major refurbishment works are supported by a programme of minor works to maintain the reliability and performance on other overhead lines until they are due for major works in future. This approach ensures that the network assets are modernised in an efficient manner without compromising long-term customer service.
- (35) The annual maintenance programme, which ensures that the network continues to operate efficiently and with a high degree of reliability, continues to be delivered in accordance with policy.
- (36) Capital expenditure is forecast to increase over the next few years as significant investment is undertaken to accommodate new connections. As previously mentioned, forecasts also include the construction of the West Coast HVDC link which is a significant investment. The company will continue to borrow to finance these activities as forecast investment will be in excess of net cash inflow from operating activities for the year ended 2014. This will be financed either through loans from the parent company or debt issued directly by the company. As noted in last year's report, Iberdrola S.A. has provided legally enforceable undertakings to SPT as required by the latter's licence, for example that it will refrain from any action

that would then be likely to cause the licensee to breach any of its statutory or licence obligations.

Conclusion

- (37) In view of the arrangements described above, and the resources made available, I am satisfied that adequate arrangements have been made in order to as far as possible secure compliance with statutory and licence obligations in the year 2014.

A handwritten signature in black ink, appearing to be 'FM', written over a horizontal line.

Frank Mitchell
Managing Director, SP Transmission plc