SP Energy Networks, RIIO-T2 Business Plan December 2019 Submission







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RIIO-T2 Competition Plan

EMBRACING MARKETS AND COMPETITION

We have a responsibility to develop and maintain an economic, efficient and coordinated transmission network. We extensively use market driven competition to do this for the benefit of consumers.

We are proud of the extensive purchasing model we have developed and have confidence that it will continue to succeed. We believe this model meets, and goes beyond, Ofgem's principles of Best Practice.

Our various procurement tools and extensive use of our Disaggregated Contracting Model provides us with considerable flexibility to engage with a wide range of suppliers and procure work from the market at competitive prices. We will

continue to develop this model in RIIO-T2.

At a glance:

We're currently using eight times more contractors – our shift to a disaggregated contracts model helped us move from using just 5 contractors before RIIO-T1 to currently engaging with over 40. We have worked with over 150 contractors throughout RIIO-T1, many of them SMEs.

Our structure promotes purchasing independence – our procurement team sit apart from senior management and make purchasing decisions based on transparent and objective criteria.

We are supportive of effective competition with almost 96% of our regulated transmission construction activities delivered by the market.

In RIIO-T2:

We will continue to improve upon the effectiveness of our disaggregated procurement model.

We will consider ways in which our new eprocurement tool can be used to improve our existing tendering processes.

We will share high-level data on our competitive tendering activities with Ofgem on an annual basis.

1.0 NATIVE COMPETITION

1.1 What are we currently doing?

We have a responsibility to develop and maintain an economic, efficient and coordinated transmission network. We extensively use market driven competition for the benefit of consumers. In doing so, we have developed an effective procurement model and monitoring practices which strongly reflect Ofgem's principles of Best Practice. We will continue to utilise extensive market driven competition throughout RIIO-T2.

1.1.1 Ensuring Purchasing Independence

As part of the wider Iberdrola Group, the ScottishPower Group's procurement resources are organised to drive purchasing independence and cost efficiencies – which benefits us at SPEN.

The Energy Networks Procurement team is part of the ScottishPower Group's corporate procurement function, however it is embedded within the Energy Networks business – their remit is delivering and managing purchasing and contracting, solely for SPEN.

The Head of the Energy Networks Procurement team reports directly to ScottishPower's Procurement and Insurance Director (and indirectly to Iberdrola's Chief Procurement Officer). In order to actively promote procurement independence, the Head of Energy Networks Procurement has no direct reporting line into the CEO of SPEN or SPEN's Senior Management team.



Figure 1 - ScottishPower Group Procurement structure

The Head of Energy Networks Procurement, and his team, adhere to the Iberdrola Group's Global Purchasing Policy and UK Utilities Contract Regulations. The objectives of the team are set by SP's Procurement and Insurance Director and the Head of Energy Networks Procurement. These objectives are set with a specific focus on continuing to increase competition and savings in the tendering processes for SPEN as well as timely contract award.

The Energy Networks Procurement team is also responsible for preparing the SPT Annual Procurement Plan. This Procurement Plan looks one year in advance at forthcoming projects and contracts due to be procured. The Plan details the forthcoming tendering processes required – including the type, value and timescales for each of the tenders. Based on this Plan, team resourcing is adjusted to make sure the size of the procurement team is suitable for the volume of tendering work due over the coming year. This flexible approach to resourcing, ensures there is adequate staff resource during the identified forthcoming procurement peaks.

We actively support competition in transmission with almost 96% of our regulated transmission construction activities delivered by the market. The remaining 4%, covering some operational and maintenance activities, is deliberately delivered in-house due to the specialist nature of the work.

SPEN's expansive network covers parts of Scotland, England and Wales – that's why we strongly believe, that for SPEN, delivering the more specialised maintenance activities using our in-house resources is the most cost-effective option for consumers.

Within SPT, we have a mobile workforce operating across Scotland, who can undertake this more specialised maintenance work. In addition to the cost benefits of managing a mobile, flexible workforce – this also allows us to effectively target our internal resources at, and be reactive to, urgent maintenance and repairs – optimising the security and reliability of our network.

We use our in-house team to undertake the more specialised maintenance activities for substations, routine overhead line repair works and some targeted minor refurbishment activities. However, high volume works such as tree felling, civils, overhead line refurbishment and cable maintenance are all openly tendered for.

Our Flexible Tendering Procedures deliver benefits for consumers

V Route 132kV Overhead Line Modernisation Case Study

Network Issue:

The V Overhead Line (OHL) route was identified for major modernisation during RIIO-T1 due to its age and condition. It was concluded that this line had not reached the end of its anticipated life, and that with refurbishment, its lifespan could be extended by 40 years. The identified solution was to undertake major refurbishment of the Galashiels, Hawick and Gretna/Harker Tee Route (V Route).

Tender scope:

The tender included the replacement of all key components such as conductors, insulators and conductor end fittings. A separate tender for the temporary access works, necessary to support the OHL works, was undertaken in parallel, at the same time. However, after various pricing rounds it was clear there was no commercial benefit in awarding the access works separately. The most economical solution was therefore to include the access works within the OHL work contract.

As the contract included a number of environmental requirements and difficult crossings (including road, rail and residential), SPT asked tenderers to clearly demonstrate their understanding of the challenges and the suitability of their proposed methodology for these crossings. The tenderers solutions were therefore considered as part of the assessment process.

Outcome:

8 contractors were identified by us during the selection process, with 5 submitting offers.

Following 5 rounds of pricing, an offer was placed for the lowest cost, technically and commercially compliant solution for SPT, which included the introduction of a new Catenary System for use on our transmission **network.** Our extensive tendering activities not only led to the introduction of a new contractor to SPT OHL projects but it also secured XXX% savings*.

* when compared with our last purchase comparator and estimated volumes.

1.1.2 Driving efficiencies through a Disaggregated Contracting Model

Before the start of RIIO-T1, we primarily issued tenders and awarded contracts using an 'Engineering, Purchasing and Construct' (EPC) model, where single large turnkey contracts were awarded for project works. Due to the nature of these large-scale contracts, the supply base we used was narrow – with only 5 contractors.

Since 2010, we have purposely moved towards a disaggregated model of contracting for less specialised, construction or maintenance activities. With SPT effectively acting as our own EPC contractor, separate contracts for individual disciplines are openly tendered and awarded, including:

- Civils
- Building works
- Cable supply and installation
- Balance of Plant
- Overhead line works
- Overhead line access
- Enabling works
- Demolition works
- Equipment supply

Moving to this disaggregated model has helped us expand our supply base to target smaller, more specialised contractors and to contract directly with equipment suppliers. This widens our supplier options and reduces our reliance on large contractors. We are currently contracting with over 50 suppliers and have used in excess of 150 different suppliers throughout RIIO T1. This includes a significant number of SMEs who, in the past, would only have operated as subcontractors for larger suppliers.

Actively Seeking New Suppliers delivers benefits for consumers

Increasing Competition in 132kV Cable Supply and Installation case study

Network Issue:

This project was part of SPT's requirements to facilitate renewable generation in South West Scotland. Significant reinforcement works were required, including the extension of an existing substation to house 2 new supergrid transformers. A new 132kV cable system was also required to facilitate the connection of the super grid transformers.

Tender Scope:

Given the 132kV cable market in the UK has limited competition, it can be a challenging and lengthy process to introduce a new supplier. As the Energy Networks Procurement team recognised this as an area where competition was limited, we actively engaged with potential new suppliers in advance of any of the new tenders being issued. This allowed completion of the approval assessment and attainment of approval by SPEN's Standards team, which is required to be considered ahead of any award.

Outcome:

The tender was issued to 5 suppliers, with 3 technically compliant bids received. This included one from a new supplier. In the end, the lowest cost, technically compliant offer was received from the **new supplier**. The Energy Network's Procurement team's proactive behaviour resulted in **savings of XXX% being** achieved*.

*when compared with last purchase comparator and estimated volumes.

Our disaggregated model has also significantly increased competition in tenders, with typically between 4 and 8 suppliers tendering for each package of works. This lets us continually pursue and identify ongoing cost efficiencies in the market, ensuring we manage our network costs effectively.

Our wider and flexible contracting model has also resulted in the improvement of our own internal capabilities for commercial, contract and risk management. Such capabilities have enhanced our future design work, improved our internal decision making and resulted in better overall investments. In turn, this approach has undoubtedly developed and

encouraged our staff to grow, utilising their wider range of knowledge and skills to the benefit of stakeholders and customers alike.

1.1.3 Promoting additional purchasing flexibility

We have a responsibility to develop and maintain an economic, efficient and coordinated transmission network. To achieve this, it's important that we have the utmost flexibility in contracting. In addition to the disaggregated model, SPT has access to a suite of additional purchasing tools and procedures.

We have framework agreements in place which, while limited in number due to the success of our disaggregated procurement model, offer additional benefits – particularly when purchasing in bulk or from products with replicable design features. These frameworks are reviewed by the Energy Networks Procurement team on a weekly basis, through the use of framework status reports, taking into account existing and future work to accurately reflect business need. These frameworks tend to last 3-5 years and are fixed in price for the duration of the framework period. At the end of the framework, each framework is reviewed and competitively tendered again in the market.

Our existing framework agreements are:

- Equipment we have significantly increased the purchase and free issue of main items of plant and overhead line conductors. This allows us to leverage full benefit of Iberdrola's Global Purchasing Model and standardized specifications.
- Maintenance these frameworks offer the business greater flexibility in relation to external maintenance activities, particularly for reactive work with tight delivery time frames.

In addition, we also have other purchasing tools to complement these framework agreements. These include:

- **Emergency Purchasing** a procedure used infrequently for work of an immediate nature, which could not have been foreseen, and limits the impacts of time associated with full tendering activities to a minimum.
- SP Procurement Shared Services utilised for lower value contracts up to £350k. This team was introduced to provide a quicker, more agile solution, proportionate to the value/ complexity of the contract.

As part of the wider Iberdrola Group, we also look to benefit from Iberdrola's strong presence in global markets. For significant, high-value purchases such as transformers, the Energy Networks Procurement team works alongside Iberdrola's Global Procurement team to access the global market and purchase items at a more competitive rate. Working collaboratively with this team opens up the global supply base to drive efficiencies for the benefit of SPT and SPEN consumers.

Accessing Global Markets delivers benefits to consumers

HV Instrument Transformer Main Plant Framework case study

Network Issue:

The purchase of HV Instrument Transformer equipment was required during RIIO-T1 for network reinforcement, new connections and fault repairs programmes.

Tender Scope:

The contract was divided into the following lots (i) Capacitive Voltage Transformers (ii) Inductive Voltage Transformers (iii) Current Transformers (iv) Combined Current Transformer/Voltage Transformer.

Outcome:

It was felt a global list of manufacturers was needed to generate sufficient competition for this contract. The Energy Network's Procurement team therefore engaged with our supplier development provider as well as other purchasing groups within the Iberdrola Group to compile a list of global manufacturers capable of manufacturing and delivering this HV Instrument Transformer equipment.

38 manufacturers were identified and contacted to confirm their intentions to participate in a PQQ. 8 manufacturers expressed an interest and were invited to submit an offer with 7 suppliers submitting bids.

Using this framework approach, we delivered XXX% savings*.

*when compared with last purchase comparator and estimated volumes.

1.1.4 Continually expanding our supplier base

Our work to drive competition and savings ensures we closely monitor developments in the supply chain, and continue to build on our existing supplier base. We achieve this by measuring the trends of suppliers tendering for particular contracts, identifying gaps in our supplier lists, and engaging directly with the supply chain to address such gaps for future tendering exercises.

Supporting Potential New Suppliers to meet SPT standards delivers benefits for consumers

Increasing Competition within Power Transformer tenders case study

Network Issue:

A key part of SPEN and Iberdrola's Global Purchasing strategy is encouraging greater competition between suppliers within the Power Transformers market. Increasing the number of qualified factories capable of supplying cost-efficient and high quality products has been a key focus of SPEN during RIIO-T1. In 2013, to facilitate a windfarm connection by 2015, SPT required delivery of a 240 (400/132/33kV) MVA transformer.

Tender Scope:

For power transformers, competition is limited, particularly at this higher voltage class and rating. Any new supplier being brought in for this project would have a particularly significant challenge given the scale, complexity and strategic nature of the purchase.

Prior to the tender, the Energy Networks Procurement team worked to invite new potential suppliers to submit offers, based on previous tenders. The SPEN Standards team, who ensure our suppliers meet SPEN's high quality and technical standards, supported SPT in this by technically assessing a number of factories of cost competitive suppliers. They also carried out Factory and Quality Audits for 2 suppliers in advance of any potential award.

Outcome:

The tender was issued to 18 suppliers, with 14 initial bids received. 4 bids were confirmed to be technically compliant and were invited to submit a Best and Final Offer. Of the 4 offers received, the **1st and 2nd position suppliers were new suppliers** to this category for SPT.

You can find full details of our disaggregated contracting model, efficient delivery practices and pioneering supply chain engagement in the Delivering our Plan chapter of our Business Plan.



Figure 2 - SPT Tender and contract award process

1.2 Delivering Ofgem's principles of Best Practice

1.2.1 How our practices promote Ofgem's principles

Accredited with our ISO 9001 Procurement Policy and Procedures status since 2013, we are confident that our existing procurement practices reflect Ofgem's principles of Best Practice, as set out in the table below:

Ofgem's proposed principles of Best Practice	SPT delivering Best Practice
Utilisation of competitive processes for all procurement and projects, except where the potential benefits of doing so are outweighed by the costs	The Iberdrola Group's Purchasing Policy sets out a Global framework which promotes the importance of using competitive processes for minimising the overall cost of the purchase of equipment & materials as well as contracts for works & services. It also guarantees the strategic alignment of awards, conformity of processes with the Group's internal policies and strict compliance with relevant legislation.
	In addition to our legal procurement obligations, the SP Group's own procurement procedures also promotes these important priorities, and, in particular, means that SPT looks to utilise competitive procurement processes wherever possible.
	In recent years, we've taken a series of steps in developing our processes to further extend our use of competition, resulting in almost 96% of all of our regulated transmission construction activities being delivered by the market.
The competitive process must be robust, transparent and provide equal treatment of potential bidders and protect information appropriately.	Tenders are managed under a common SP Group- wide corporate model. Procurement planning is undertaken on the basis of annual Procurement Plans (in this instance the SPT Procurement Plan) within required budgets approved by SP Corporate Control and Administration.
	Whilst SPT's Procurement Plan is determined by the requirements of SPT, the procurement process is independently managed by the Energy Networks Procurement Team to ensure transparency, as well as fair and equal treatment of information between SPT and all potential suppliers.
	Therefore all communications during a tender process are facilitated by the Energy Networks Procurement team in order to ensure all tenderers are furnished with the same level of information and opportunity to submit questions. SPT Project Managers are deliberately excluded from the competitive process.
	The SPT procurement process also ensures that no confidential information is shared between potential bidders.
	The SP Procurement Procedures sets out the steps each tender process must follow. The process is managed through an electronic based procurement system, the " <u>Supplier Relationship Management</u> " system, which has access limited to the relevant

	Energy Networks Procurement team members, ensuring information is sensitively handled.
	The proposed award approvals are considered and ratified by a hierarchal Procurement chain of personnel ensuring that awards are in line with SP Procurement procedures.
The complexity of the competitive process should be proportionate to the value and time-sensitivity of the project or system need in	The introduction of the SP Procurement Shared Services team in 2016/17 has increased our ability to be agile.
question.	For purchases up to £350k, which are neither complex nor strategic in nature, the SP Procurement Shared Services team manages tenders with a strong focus on speed of delivery. The team follows the SP Procurement Procedures of fair and equal treatment of suppliers and by streamlining timescales. Using a simplified 2-step approval process, the team is able to reduce the time taken to award and provide a faster route to market.
	High value, complex tenders are performed by our Centralised Purchasing team where we ensure the tendering timescale is appropriate to the requirement. Typically, we will agree a standard tender timescale which will evolve based on supplier feedback as well as SPT's review of the level of submissions.
	The process also offers flex where we have complex low value tenders <£350k as we can decide to move these to Centralised Purchasing instead of SP Procurement Shared services (as explained above).
	SPT also provides a Forward Look of forthcoming tenders (of up to 12 months, at the time of publication) through a regular newsletter format. We actively encourage all of our suppliers, and potential suppliers, to sign up to the newsletter mailing list. We know from feedback from our suppliers that they find this information helpful in being able to prepare in advance of the launch of forthcoming complex tenders.
Any information must be provided equally to all parties, and any conflicts of interest have to be appropriately managed.	The " <u>Supplier Relationship Management</u> " system is accessible to all suppliers, subject to a simple registration process. Information on tenders can be found on this system as well as on the <u>Suppliers</u> page of SP's website.
	The role of the Energy Networks Procurement team is to support the relevant SPT Project Managers throughout the procurement process. It is the responsibility of the Energy Networks Procurement Team to ensure a consistency of approach in the information that is made available to all relevant parties, ensuring that answers to any technical questions raised are circulated to all parties.
	Pricing information during the tender process is withheld from SPT colleagues until a bidder has been determined as compliant or the supplier selected by the Energy Networks Procurement Team, ensuring SPT Project Managers cannot influence the awarding of contracts to any suppliers.
	Conflicts of interest are actively managed during the tendering process with suppliers asked to raise any

	potential conflicts of interest in their bid. Where conflicts are identified, procurement and/or compliance colleagues will investigate the conflicts raised, before determining whether that party is permitted to tender for the particular contract.
	Internal procedures are also in place to deal with potential conflicts of interest within the Energy Networks Procurement Team itself, to ensure they are excluded from any involvement in the tender.
Licensees should be agnostic to technology and bidder type.	All tender specifications are checked by the Energy Networks Procurement team in order to ensure outputs are described, based on performance only – agnostic to technology and bidder type.
	In instances where SPT wishes to proceed to tender for a purchase with a sole supplier, SPT project managers must provide to the Energy Networks Procurement team, a Single Source Proposal which explains the reason for not undertaking a competitive process. This approach must be signed off by a SPEN Director to validate the explanation.
	The "Embracing technology agnosticism" case study below highlights one particular example whereby SPT's technology agnostic approach, delivered significant savings for consumers.
Competitions should be structured to generate outcomes in the interests of current and future consumers.	The Iberdrola Group adopts a "technically compliant, lowest cost" award model. Given this, SPT Project Managers determine what constitutes the minimum technical compliance required, bearing in mind the needs of current and future consumers. Once technical compliance is established, with each tender submission, negotiations focus purely on compliance with commercial terms and conditions, before the best and final offer to determine lowest cost.

Embracing technology agnosticism

Market-led Series Compensation Solutions case study

Network Issue:

The Series Compensation project was required to maintain transient stability across the Scotland-England interconnector following double-circuit faults at high AC transfers. This project was a key element of the 4400MW Interconnector Upgrade. A coordinated network design between SPT and NGET resulted in 4 capacitors in the SPT area and 2 capacitors in NGET's area being required.

Tender Scope:

SPT and NGET both led independent procurement processes, with NGET tendering and placing a contract with ABB for its network solution. Whilst SPT was offered NGET's solution we were keen to adopt a technology agnostic approach, tendering for black boxes with certain characteristics to address system requirements. It was then left to interested market players to propose relevant technology solutions.

Outcome:

Three different solutions were offered by the market. SPT selected the solution that offered the best compromise between cost and performance. With significant expertise from SPT's design engineers, working alongside the Energy Networks Procurement team, SPT was able to deliver a 'world first' installation of this kind, significantly cheaper than the solution which NGET offered us.

Our market-led approach resulted in extensive **project savings of XXX%**, which consumers benefitted from, as the expenditure that we forecast for this project for RIIO-T1 was significantly lower due to the identification of this new market driven solution, which SPT was unaware of at the time of T1 Business Plan submission.

1.3 Encouraging an ethical and sustainable supply chain

We are strongly of the view that our native competition practices go beyond that expected from Ofgem in their principles of Best Practice. We place a number of additional requirements on the suppliers that we contract with, ensuring that the ethics, priorities and policies of importance to the SP Group are also reflected within the operations and activities of our contractors.

We place particular importance in the following areas when contracting with suppliers:

Anti-Bribery – We have robust anti-bribery provisions in every contract that we agree with a supplier. The ScottishPower Group is committed to the highest standards of ethical conduct and integrity in its business activities and the UK Bribery Act 2010. Full compliance is expected of all employees, contractors, suppliers and third parties. Annual risk assessments are carried out to identify and address the key risks within SPT with further risk assessments also being carried out before entering into a contract with a third party provider for all contracts greater than £50k. These risk assessments are underpinned by a due diligence framework of review and approvals, before finalising any contract with SPT.

Human Rights – We have developed a Human Rights virtual tour which includes details of the UN's Guiding Human Rights Principles and the 1948 Human Rights Declaration. We have shared this with our suppliers encouraging them to share it with their own employees and shareholders, emphasising the importance of acknowledging Human Rights during all business practices.

Sustainable Development – In 2018 we launched a Sustainable Development survey to better understand how our suppliers are incorporating the UN's Sustainable Development Goals (SDGs) in their behaviours and activities. We also used this survey as an opportunity to inform our suppliers on the UN's SDGs, highlighting Affordable and Clean Energy and Climate Action as priority SDGs for us.

Environmental Awareness – We have recently launched our 9th Campaign of Environmental Awareness with our suppliers. We use this as an opportunity to request data from our suppliers in relation to measuring emissions, water use management measures and their climate change risk mitigation practices. We also provide our suppliers with access to relevant information to help them improve upon their environmental impacts.

Modern Slavery – We are committed to combatting any form of Modern Slavery, particularly any such activity connected to our supply chain. We have recently updated our Modern Slavery Statement and are offering additional support for our employees through our Modern Slavery Prevention Plan, within higher risk areas, and by focusing on Supplier Management. SP is also in the process of becoming a member of the Slave Free Alliance, an organisation which will further support our actions in this area. In addition to this, we also have a Code of Ethics which we follow and promote.

1.4 Maintaining excellence in our procurement processes

In addition to the robust procurement procedures, detailed above, we also use thorough monitoring and reporting requirements to maintain the effectiveness of our procurement processes. Our extensive monitoring and reporting processes include the following:

Weekly reporting:

- All Live Tenders Report: issued to the Head of Energy Networks Procurement and includes details of each tender status, estimated value, number of rounds, time elapsed, last modified and estimated completion date.
- Framework Control Report: issued to the Head of Energy Networks Procurement. This report provides the same detail, as explained above, for procurement frameworks. It also details the expiry date and framework value as well as POs and invoices raised to date. This allows the Energy Networks Procurement team to assess the use and effectiveness of the framework and whether further action is required.

Monthly reports:

- Objectives reporting: The Head of Energy Networks Procurement will receive a consolidated report, detailing the progress of all Iberdrola procurements against objectives. This includes reporting on savings, number of bidders, financial risk, awards to date, suppliers awarded and tender timelines.
- Objectives management pack: the above report is summarised into a management pack for the Head of Energy Networks Procurement outlining his team's progress against the relevant objectives. This pack also includes monthly updated information on initial and final bids, work allocation per buyer, number of new tenders and variations for that month, as well as headcount and departmental budget.
- SP Management Committee update: an update to senior management (including the CEO of SPEN) which includes awards to date, a summary of work in progress and any key planned tenders yet to commence.
- Corporate Social Responsibility (CSR): SP's Corporate Procurement team review CSR questionnaires with suppliers and try to improve their scoring with guidance and support. [This process is currently under review to move to an improved reporting model].
- Internal Controls: SP's Corporate Procurement team will test SPT's compliance against our purchasing model, looking at issues including delegated buying spend and purchase orders (POs).

Quarterly reports:

- Financial Risk: The Head of Energy Networks Procurement will receive a quarterly report reviewing the credit status of live suppliers.
- XXX.
- XXX.

Annual reporting:

- SPT Procurement Plan prepared.
- Year-end report of SPT's spend and objectives reporting.

1.5 <u>What are we intending to do for RIIO-T2?</u>

With a disaggregated procurement model which has allowed us to significantly increase our suppliers, particularly SMEs, and procure work from the market at competitive prices, we intend to continue to utilise our existing procurement model throughout RIIO-T2. This model has, and will continue to, support SPT in developing and maintaining an economic, efficient and coordinated transmission network, cost effectively.

As outlined above, we are confident that our existing model effectively delivers upon, and goes beyond, Ofgem's principles of Best Practice.

Our Procurement function is continually reviewing how to be more efficient and drive continuous development. During 2018/19 it has reviewed its existing e-tendering system and identified this as an area for improvement. We are currently developing a new e-Procurement solution that will provide a more effective tendering platform, digitalisation opportunities and drive a more efficient means of management and reporting. We expect that the new system will be operational in Q1 2020.

1.6 Commitments during RIIO-T2

We will continue to drive efficiencies through the use of our flexible delivery strategy based around a disaggregated contracts model which has significantly increased tender competition in RIIO-T1.

We will consider ways in which our new e-procurement tool can be used to improve our existing tendering processes.

We propose to share high-level data on our competitive tendering activities on an annual basis with Ofgem (see details below).

1.7 Reporting and Transparency during RIIO-T2

We will continue to drive efficiencies through the use of our flexible delivery strategy based around our disaggregated contracts model, which has significantly increased tender competition in RIIO-T1. We have full confidence in the effectiveness of our procurement model and we plan to increase transparency with Ofgem in highlighting the scale of competition this model is driving.

Therefore, during the RIIO-T2 period, we propose to share the following procurement data, with Ofgem, on an annual basis:

- Number of tenders placed for SPT under competitive processes;
- Average number of bidders per competitive tender placed;
- Total value of contracts awarded under competitive tender processes.

We would propose that the Regulatory Reporting Pack (RRP) process is used to provide this data annually. However, to ensure consistency in data provision across the TOs, we would expect Ofgem to engage with the TOs in the development of appropriate Regulatory Instructions and Guidance (RIGs) for the transparent sharing of such data with Ofgem.

2.0 EARLY COMPETITION

2.1 <u>What are we currently doing?</u>

2.1.1 Whole system planning

SPEN owns and manages both the distribution and transmission network in central and southern Scotland. Whole system planning is therefore deeply engrained in our business, and we recognise the importance of a whole system approach to enable seamless planning across the transmission and distribution networks. We see strong similarities between Ofgem's objectives for early competition models, particularly in relation to the identification of alternative solutions to network reinforcement and whole system planning, which SPT has been actively pursuing throughout RIIO-T1.

We work with a range of parties across the electricity sector including other network operators, customers and parties that will play an increasing role in the future for electricity – such as Transport Scotland. This collaborative approach is also seen in our work with SP Distribution and the ESO. We recently coordinated to build one of the largest active network management zones in the UK, as evidenced in the case study below.

South West Scotland – Active Network Management case study

Network Issue:

The geographical area of the borders of East Ayrshire, South Ayrshire, and Dumfries & Galloway is sparsely populated but rich in natural wind and hydro resources. It has therefore attracted interest from developers wishing to connect significant renewable generation to the transmission system. As the existing network does not have sufficient capacity to cope with the level of demand, a new transmission network is required.

Solution:

In South West Scotland we have developed a coordinated approach spanning distribution, transmission and the ESO to create 1,250MW of new capacity, diminishing the anticipated requirement for new transmission network build. We assessed different options for providing this and are now implementing an extensive active network management system (Generation Export Management System (GEMS)), utilising real time control systems on both the network and with generators.

This system will operate across almost one third of our network area, comprising 15 substations and coordinating generation connected to both distribution and transmission levels. This is a collaborative project between SP Distribution, SPT and the ESO. It has required extensive planning and coordination with generation customers in the region to ensure it meets their needs.

This project has resulted in **reducing the visual and environmental impact** of constructing new assets, and **maximising the utilisation of the assets we already have** in operation, and we consider that this model can be rolled out as an alternative to network build, in suitable circumstances, across the GB system.

2.1.2 Networks Options Assessment (NOA) process

The NOA process also plays an important role in determining the most cost effective network solutions for consumers. Using the national Future Energy Scenarios (FES), generation and demand backgrounds are used to calculate what level of power is required to be transferred across network boundaries for each scenario for the next few decades. Each TO, individually, and collaboratively with other TOs where appropriate, will propose projects that could address the issues that are emerging from the ESO's analysis. The ESO then performs an economic study of all the proposals to identify the 'least worst regrets' approach and provides an indication whether the project should be progressed or put on hold. We will continue to work closely with the ESO and the other TOs in the NOA process as we consider that the NOA has an increasingly important role to play in optioneering, whole system planning and identifying the most cost effective delivery solutions for major boundary projects. In SPT's view, NOA is already driving early competition practices by ensuring various network solutions are explored, allowing TOs to opt for the most cost effective network solution. We expect the ESO to consider, and learn from, the success of the NOA process as it looks to develop its Early Competition Plan for RIIO-2.

We welcome the fact that the ESO has chosen to utilise a NOA type approach for economic and cost assessment in its Pathfinder projects. However, we are strongly of the view that further work is required by both Ofgem and the ESO to determine the most appropriate cost benefit analysis (CBA) assessment and delivery model for Pathfinder projects and other early competition models, which recognises the license responsibilities of the TO to design and maintain an SQSS compliant transmission network.

2.2 What are we intending to do for RIIO-T2?

We note Ofgem's new criteria for identifying projects potentially eligible for early competition, of £50m+ and contestable. We have several projects which we intend to deliver during the RIIO-T2 period which meet the £50m threshold. We would be keen to consider further with Ofgem and the ESO as to what contestability, in the context of early competition, looks like. However, in the meantime, as requested in the Business Plan Guidance, we have listed each of those projects in appendix A highlighting the other delivery solutions, SPT explored, having identified the network need. Where appropriate, SPT already works with the market to consider alternative solutions/technologies, for example the series compensation project described on page 11 of this Competition Plan.

We believe we are already embracing the spirit of Ofgem's early competition proposals and we will continue to work with the ESO as they further develop their early competition processes and draft Early Competition Plan.

Of those projects, listed in appendix A, there is only one project, included in our baseline, which meets the early competition criteria of £50m+ and contestable – the installation of hybrid synchronous compensation at Eccles.

2.2.1 ESO Stability Pathfinder

Given the demand for the connection of further renewable generation and to provide system strength previously provided by transmission connected synchronous generation in Scotland, there is a strong need for synchronous compensation across our network. In response to our changing network, the ESO is currently developing a Stability Pathfinder project which is intended to create and manage a market for inertia and system stability services to be assessed against TO solutions, within a NOA style economic analysis.

This Pathfinder project is part of the ESO's plans to facilitate early competition in transmission, by looking to the market for alternative network solutions.



Figure 3: Hybrid synchronous compensation at Eccles - early competition consideration We have identified a further 3 sites at Hunterston, Strathaven and Kincardine where we consider the installation of synchronous compensation is required. These 3 projects all meet the early competition criteria, and are already subject to early competition as they are being considered within the scope of the ESO Stability Pathfinder project. Indications from the ESO are that they are confident that commercial solutions can be delivered by the market as alternatives to our synchronous compensation proposals for Hunterston, Strathaven and Kincardine. We have therefore removed these projects from our T2 baseline allowance. Should the commercial solutions favoured by the ESO fail to deliver as intended, we would look to deliver the synchronous compensation required under a Net Zero Transition reopener, as explained at p141 of the Business Plan and Annex 20: Uncertainty Mechanisms. Further details on these projects can be found at appendix A.

As early competition processes are undertaken, it is essential that the relevant TOs are involved in any consideration of system need and potential market solution(s) in relation to the operation of our network, given our licence obligations to design and maintain an SQSS compliant transmission network. However, TOs must also be able to participate in Pathfinder, and other early competition models. Allowing TOs to put forward their own network solutions allows projects to be fairly and accurately assessed against the market solutions identified by the ESO, to determine the most cost effective solutions for consumers. Whilst potentially difficult, we believe that a solution can be reached that will satisfy market participants. The relevant TO should play an active role in helping the ESO scope out and evaluate potential Pathfinder projects at an early stage, to address the identified system need, and so allowing the ESO to undertake market testing and a fair CBA assessment.

Further details of the Hybrid Synchronous Compensation project at Eccles can be found in the table below:

Table 1: H	ybrid S	ynchronous	Compensation -	Eccles	(£95m)

System Need/Project Description	SPT Commentary
System Need:	This project is primarily to increase boundary capability and has been assessed by the NOA process as being required. With the approach being taken, this project has additional benefits to support system
The primary driver for this project is to increase boundary capability on B6 in the short term, with the secondary driver of helping to maintain system strength following the closure of Torness nuclear power	stability and black start recovery. In SPT's view, the only viable alternative to the system benefits that will be realised by the installation of hybrid synchronous compensation at Eccles, is the installation of a new synchronous generation plant, within SPT's area. As we have no evidence of any market appetite for a generator solution within the required timescales, we consider the installation of hybrid synchronous compensation, the only realistic option.
station. (Also see EJP_SPT_SPT200120_ECVC)	The ESO is developing a Stability Pathfinder project which is intended to create and manage a market for inertia and system stability services to be assessed against TO network solutions, within a NOA style economic analysis. This project falls within the scope of the Stability Pathfinder RFI.

Project Description:	In addition to the services required through the Stability Pathfinder, this project has
	additional benefits which may not be quantified through the Pathfinder process. These
Installation of hybrid	include B6 boundary capability uplift, steady state voltage support and system support
synchronous compensation at	within a Black Start event.
Eccles 400kV substation, and	
a real time ratings system on	Earliest in Service Date:
the existing circuits between Gretna & Harker and Moffat & Harker, as well as the cable section between Thornton	Proposed delivery date is 2026. Competition Criteria review:
Bridge and Tomess substation.	I his project meets the early competition criteria of £50m+ and contestable.
	We consider this project is already subject to Ofgem's early competition processes. SPT has already undertaken a robust Request for Information exercise engaging directly with 5 manufacturers to assess the potential costs of this project. As detailed above, this project has also been included as part of SPT's submission to the ESO's Stability Pathfinder RFI and the NOA process.

2.3 Early Competition Models - Measuring Consumer Benefits

We are strongly of the view that further work is currently required by both Ofgem and the ESO to introduce robust CBA when determining early competition solutions, including the ESO's Pathfinder projects. Whilst we welcome the fact that the ESO is choosing to adopt a NOA type CBA as part of their Pathfinder assessments, it is important that, in general, the costs and system benefits of network-led solutions are considered in a fair and transparent way, against market proposed solutions. Such analysis must therefore account for the additional risks associated with market-led solutions, for example the use of innovative techniques or technologies, against proven network solutions. Whilst also acknowledging the wider system benefits such as black start, boundary capacity uplifts and voltage support, which not all market-led solutions may provide.

Detailed consideration of constraint costs, identified by the ESO in NOA, must play a role in considering market-led options when compared to network reinforcement which will become an inevitable option in the short to medium term.

This must be borne in mind by Ofgem as it considers the consumer costs and benefits for a particular network solution, particularly for more innovative solutions which could hold a greater risk of delay due to a lack of market testing.

2.4 Commitments during RIIO-T2

During RIIO-T2 we will:

- expand on our whole system planning work engaging with TOs, DNOs/DSOs, the ESO, market players and key stakeholders throughout RIIO-T2. Driven by identifying network needs at the earliest stage, and determining the most cost effective solutions, which benefit consumers.
- continue to work with the ESO to ensure that its methodologies for NOA and Pathfinder projects are appropriate, accurate and fair in the overall context of network investment and planning.
- engage with the ESO to determine an appropriate role for the TOs in current and future Pathfinder projects, reflective of our licence obligations to design and maintain an SQSS compliant transmission network.
- support the ESO in the development of its RIIO-2 Early Competition Plan.

3.0 LATE COMPETITION

3.1 What are we currently doing?

Despite our concerns with Ofgem's proposed late competition models, SPT actively participated in Ofgem-led Competition Proxy Model (CPM) licence drafting workshops from October 2018. We will continue to work closely and constructively with Ofgem, and where appropriate the ESO, as the Special Purpose Vehicle (SPV) and Competitively Appointed Transmission Owner (CATO) models are also developed.

We consider that the NOA process has an important role to play in determining the most cost effective delivery models and timescales for high value, strategic projects. We therefore place particular importance on working with the ESO during the annual review of the NOA methodology and compiling of the annual NOA report.

We will continue to build on our existing relationship with the ESO as we support them in the design of an 'early' CATO model, for the potential delivery of projects which meet the late competition criteria.

3.2 What are we intending to do for RIIO-T2?

We agree with Ofgem's decision to retain the well understood late competition criteria of new, separable and high value (£100m +). In line with Ofgem's Business Plan guidance, we have provided details in appendix B of all projects over £100m that we expect to deliver during RIIO-T2.



Of those projects, the only project which meets the late competition criteria of new, separable and highvalue is the 2 GW Eastern HVDC Subsea Link* from Torness to Hawthorn Pit (current anticipated landing point). Our assessment is consistent with the conclusions of the ESO in the Networks Options Assessment 2018/19¹, which states this project meets the late competition criteria.

Figure 4: Eastern HVDC Link – Late competition consideration

*The Eastern Subsea HVDC Link is a cross boundary project affecting all TOs. As a Strategic Wider Works (SWW) project, it falls outside the scope of this Business Plan. The details provided in this Business Plan are for illustration only.

¹ ESO, 2019, Networks Options Assessment 2018/19, [online] National Grid ESO [viewed 15 November 2019]. Available from: <u>https://www.nationalgrideso.com/document/137321/download</u>

Table 2: 2 GW Eastern HVDC subsea link -	Torness to Hawthorn	Pit (current anticipated la	anding point) (~£1.7-
<u>£2.5bn)</u>			

System Need/Project Description	SPT Commentary
System Need: The purpose of this link is to reinforce the transmission network boundary B6, to focilitate CB network	This project has been jointly developed by the three TOs and economically assessed against, and in combination with, many alternatives by the ESO as part of the annual NOA process, as well as within an East Coast specific SWW CBA. Since NOA2 a large B6 infrastructure reinforcement has been given proceed signals from the ESO. NOA3 and NOA4 have consistently indicated that two Eastern HVDC 2 GW links are required from Scotland.
access for renewable generation connecting in Scotland.	Earliest in Service Date (EISD): An initial needs case for both Eastern links is currently being prepared by all three TOs to be submitted to Ofgem in 2020, with an expected final needs case in 2021.
Project Description:	The NOA process has indicated constraint costs to the GB consumer of ~£XXXm per annum , for each year this project is delayed beyond its current EISD of 2027.
Construction of a new 2 GW HVDC subsea link from the Torness area (within SPT's network) to Hawthorn Pit (within NGET's area).	Competition Criteria review: Whilst this project meets the late competition criteria of new, separable and high value (£100m+), as a SWW project, it falls outside the scope of this Business Plan. As mentioned above, we do consider this project to be a potential candidate for Ofgem's competition models.

3.3 Ofgem's Late Competition models

We support, and already use, competition in onshore transmission where it delivers better outcomes for consumers, provided that it is established in an effective, and legally robust, way.

We consider it fundamental that Ofgem acts within the statutory framework in delivering its 'extending competition in electricity transmission' framework. We remain of the view that Ofgem should be waiting until the UK Parliament has the relevant legislation in place before pressing ahead with any proposals in this area, i.e. amending the Electricity Act to allow for the CATO model.

Of the late competition delivery models proposed by Ofgem, SPT continues to hold the view that the 'early' CATO model is the only model proposed by Ofgem which could potentially deliver actual competition.

Ofgem already has an effective tool for the funding of high value and strategic projects, the Strategic Wider Works (SWW) process which has delivered significant benefits to consumers. Ofgem has yet to explain what concerns it has with the SWW process, which is driving the need for the introduction of late competition delivery models. We see the benefits to consumers which the SWW mechanism brings so we therefore welcome the latest signals from Ofgem that it intends to introduce an updated version of SWW to the Large Onshore Transmission Investment (LOTI) framework in RIIO-T2. In the Managing Uncertainty chapter of our Business Plan, we propose ways in which the SWW (or new LOTI) mechanism could be improved upon, based on the TOs' experiences of using this model in RIIO-T1.

We also have concerns that the introduction of these 'novel' late competition delivery models could lead to delays in project delivery. This is of particular concern to us given that NOA estimates costs of ~£XXX m per annum to GB consumers for each year delivery of the Eastern HVDC link is delayed beyond 2027.

Given that none of Ofgem's proposed late competition models have been established, we remain sceptical that Ofgem can have these regimes in place in time for RIIO-T2. We share our views on each of Ofgem's proposed models below:

3.3.1 Competitively Appointed Transmission Operator (CATO)

The 'late' CATO model whereby the TO would be responsible for design, planning and consenting of the project adds little or no value to consumers and will contribute to delays in the delivery of major infrastructure, as a result of planning, tendering and other process issues, resulting in material costs to consumers. It is vital that any CATO model recognises the limitations on timing and transfer of consents which Scottish land and planning rules create and which we described in detail in our response to Ofgem's Sector Specific Methodology consultation.

We therefore believe that the 'early CATO' model whereby, as well as the early design of the project, the winning bidder is responsible for planning and obtaining consents, is the approach most likely to **deliver material consumer benefits from innovative solutions and efficiencies in the design, construction and delivery of transmission assets**. However, the merits of using this approach should be considered on a case by case basis taking into account factors such as whether going to tender will delay the connection of generation and other critical infrastructure, as well as a robust CBA exercise.

3.3.2 Competition Proxy Model (CPM)

SPT was actively involved in Ofgem's CPM licence drafting workshops from October 2018. Throughout these workshops, SPT consistently raised our specific concerns with Ofgem, in relation to the CPM in that we see significant legal and practical barriers to the implementation of the CPM. For example, SPT considers that the underlying logic for the CPM is flawed since it introduces no direct competition or competitive tendering. SPT also considers that Ofgem's analysis does not reflect the way the project would be treated under a project finance competitive model and that there are serious flaws in the cost of capital methodology adopted by Ofgem. See SPEN's response to Ofgem's minded to consultation on the delivery model for Hinkley-Seabank for further details².

We welcome Ofgem's decision to propose funding delivery of HSB through the Strategic Wider Works (SWW) mechanism, rather than through the CPM. In the case of HSB, Ofgem "*do not consider that there is clear evidence in this case that applying the CPM (and therefore departing from the existing SWW arrangements under RIIO) is in the interest of consumers*³". We agree with Ofgem that SWW is the right delivery framework for this important, strategic infrastructure. We also note Ofgem's view that the CPM is an integral element of the RIIO-2 price control framework and that Ofgem may decide to apply the CPM "*in cases where the consumer savings appear finely balanced*"⁴.

We are disappointed that Ofgem continues to consider the CPM as an appropriate delivery model for large, strategic infrastructure projects in RIIO-T2, despite Ofgem having reached the view that delivery of the Hinkley Seabank project under the CPM will not deliver any consumer benefits. Given the CPM was the preferred delivery model selected for the delivery of the Hinkley Seabank project, if consumer benefits cannot be delivered from this mechanism for this particular project, we do not believe there is any reasonable prospect that the CPM can derive additional consumer benefits from other high value, strategic projects.

Despite it being moved into the RIIO-T2 framework, our significant concerns with the CPM remain. The absence of a standalone CPM policy remains, more so now that the Hinkley Seabank project, which was the main conduit for the development of the CPM mechanism is now being delivered by a different mechanism. There also continues to be a lack of understanding as to the scope of the CPM mechanism. It is important that we, investors, generators and other stakeholders, are able to reach an informed view of the CPM policy in its entirety, and assess with certainly how this could operate in practice in RIIO-T2 and the impact it is likely to have in future price controls.

² SPT response to Ofgem's consultation on the minded to consultation on the delivery model for Hinkley Seabank <u>https://www.ofgem.gov.uk/system/files/docs/2018/04/scottish_power.pdf</u>

³ Ofgem Hinkley-Seabank: Consultation on our updated delivery model minded to decision consultation <u>https://www.ofgem.gov.uk/publications-and-updates/hinkley-seabank-consultation-our-updated-delivery-model-minded-position?utm_medium=email&utm_source=dotMailer&utm_campaign=Daily-Alert_15-10-2019&utm_content=Hinkley++ +Seabank%3a+Consultation+on+our+update</u>

⁴ Ofgem Hinkley-Seabank: Consultation on our updated delivery model minded to decision consultation https://www.ofgem.gov.uk/publications-and-updates/hinkley-seabank-consultation-our-updated-delivery-model-mindedposition?utm_medium=email&utm_source=dotMailer&utm_campaign=Daily-Alert_15-10-2019&utm_content=Hinkley+-+Seabank%3a+Consultation+on+our+update

3.2.3 Special Purpose Vehicle (SPV)

We continue to hold the view that Ofgem's proposed Special Purpose Vehicle (SPV) model will not deliver effective competition that benefits consumers today or in the future. In our view, the SPV model is not lawful, practical or cost effective.

We believe it would be unlawful for Ofgem to require a TO to manage its affairs in this way. Under the SPV model, a TO could be compelled to **delegate its licence obligations**, against its will, to an SPV. If the SPV were to then cause a breach of the TO's licence, the TO could not realistically be sanctioned for that breach. As the SPV would not hold a transmission licence, Ofgem would not be able to secure compliance with the TO licence, therefore **abdicating its regulatory responsibilities**, under the Electricity Act 1989. We do consider it important that the proposed SPV must hold a transmission licence, including the licence requirements to comply with relevant STC duties. In SPT's opinion, the lack of SPV responsibilities in these important areas will **increase operational risk** across the transmission network as it is expected to manage performance of the SPV, over which it does not have day to day control, and yet take responsibility for its actions.

SPT's experience of using sub-contractors, developed over many years of establishing and managing large scale projects, shows that things don't always go as planned. Experience suggests that it is almost certain that there will be requests for the TO to **adjust the SPV's revenues accordingly**. There will be **additional costs** of managing all such requests, even where unsuccessful, as well as the increased overall cost where such requests are successful. As with many PFIs, circumstances may also change such that the initial deal does not remain in customers' best interests. This is reflective of the UK Government's 2018 Budget announcement to abolish future PFI and PF2 contracts, given the compelling evidence that these contracts neither deliver value for taxpayers nor genuinely transfer risk to the private sector.

3.4 Late Competition Models - Measuring Consumer Benefits

SPT continues to hold the view that Ofgem's late competition models will in no way deliver the scale of consumer benefits, they propose. Instead, these new delivery models are likely to cause delay and additional costs to consumers, when compared to the current SWW process.

We consider that the updated late competition Impact Assessment document, accompanying publication of the Sector Specific Methodology decision in May 2019, is disappointingly lacking in detail and analysis as to how each late competition model will deliver actual additional benefits to consumers.

Robust and transparent CBA work must be carried out on any prospective late competition projects, prior to Ofgem deciding upon the delivery model for a project. Given the complexity of both the CATO and SPV models, and the tendering and contractual timescales required, delays are probable. Therefore any costs of delay must be factored into Ofgem's CBA work. By way of example, the NOA 2018/19 assessment calculates that for any delay to the delivery of the Eastern HVDC project's earliest in service date of 2027, it will result in additional constraints costs to consumers of ~ £XXXm per annum, for each year of delay.

3.5 Commitments during RIIO-T2

During RIIO-T2 we will:

- continue to work closely with the ESO and other TOs in the NOA process to identify forthcoming projects which meet the late competition criteria, supporting robust analysis and CBA work undertaken, to deliver the most cost effective network solutions for consumers.
- progress with the development and delivery of the 2 GW Eastern HVDC subsea link, in close collaboration with the other TOs and the ESO;
- continue to work with Ofgem on the further development of the late competition models.

SP Energy Networks, RIIO-T2 Business Plan Annex 18: Competition Plan

APPENDIX A: EARLY COMPETITION ASSESSMENT OF RIIO-T2 PROJECTS

A.1 EARLY COMPETITION ASSESSMENT OF RIIO-T2 PROJECTS

In line with the latest Business Plan Guidance, we have flagged those projects below which meet Ofgem's new early competition criteria of £50m+ and contestable (potential for alternative solutions).

FLAGGED Projects – meet the £50m+ threshold and are contestable					
Project Name	System Need/Project Description	Cost	TO commentary on alternative solutions explored		
Eastern HVDC subsea link – Torness to Hawthorn Pit (current anticipated landing point)	System Need: The purpose of this link is to reinforce the transmission network boundary B6, to facilitate GB network access for renewable generation connecting in Scotland. Project Description: Construction of a new HVDC 2 GW subsea link from the Torness area (within SPT's network) to Hawthorn Pit (within NGET's area).	Total: ~£1.7- £2.5bn	 This project has been jointly developed by the three TOs and economically assessed against, and in combination with, many alternatives by the ESO as part of the annual NOA process, as well as within an East Coast specific SWW CBA. Since NOA2 a large B6 infrastructure reinforcement has been given proceed signals from the ESO. NOA3 and NOA4 have consistently indicated that two Eastern HVDC 2 GW links are required from Scotland. The alternatives considered for this project, but have proven uneconomical in comparison include: Do nothing, allowing the balancing mechanism to continue to constrain generation north and south of B6 to manage this boundary. This is uneconomical as analysis has shown that constraint costs could be ~£XXXm per annum, for each year the project is not delivered. An onshore AC overhead line construction between the Torness area in Scotland and various landing points in North England. This option has lower capex, however due to the increased planning and consents complexities, delivery of this project would deliver at least 4 years later than the HVDC seabed solution. Therefore this approach proves uneconomical and when compared to the additional constraint payments to consumers during this timeframe. A multi-terminal link from Peterhead, Torness and Hawthorn Pit has also been previously considered. However this would only allow 1 GW to be exported from both Scottish locations, which has been determined via technical and economic analysis to be not large enough to meet current system needs. The NOA process is currently indicating that 4 GW of transfer capability is a minimum requirement, with indications that an additional 2GW could also be required. Earliest in Service Date: An initial needs case for both Eastern links is currently being prepared by all three TOs to be submitted to Ofgem in 2020, with an expected final needs case in 2021. The NOA process has indicated an EISD of 2027 for a link from the Torness area to Ha		

Hybrid synchronous	System Need: The primary driver for this project	Total: £95m	This project is primarily to increase boundary capability and has been assessed by the NOA process as being required.
compensation at Eccles (SPT200120)	is to increase boundary capability on B6 in the short term, with the secondary driver of helping to maintain system strength following the closure of Torness nuclear power station. (Also see EJP_SPT_SPT200120_ECVC)		With the approach being taken, this project has additional benefits to support system stability and black start recovery. In SPT's view, the only viable alternative to the system benefits that will be realised by the installation of hybrid synchronous compensation at Eccles, is the installation of a new conventional generation plant, within SPT's area. As we have no evidence of any market appetite for a generator solution within the required timescales, we consider the installation of hybrid synchronous compensation, the only realistic option. This option of the introduction of hybrid synchronous compensation has also been assessed as part of the latest NOA 2018/19.
	Project Description: Installation of hybrid synchronous compensation at Eccles 400kV substation, and a real time ratings system on the existing circuits between Gretna & Harker and Moffat & Harker, as well as the cable section between Thornton Bridge and Torness substation.		However, the ESO is currently undertaking a Stability Pathfinder project which is intended to create and manage a market for inertia and system stability services to be assessed against TO network solutions, within a NOA style economic analysis. This project falls within the scope of the Stability Pathfinder RFI and we have included this project as part of our TO submission.
			In addition to the services required through the Stability Pathfinder, this project has additional benefits which may not be quantified through the Pathfinder process. These include B6 boundary capability uplift, steady state voltage support and support during a Black Start event.
			Earliest in Service Date:
			Proposed delivery date is 2026.
			Competition Criteria review:
			This project meets the early competition criteria of £50m+ and contestable.
			We consider this project is already subject to Ofgem's early competition processes. SPT has already undertaken a robust Request for Information exercise engaging directly with 5 manufacturers to assess the potential costs of this project. As detailed above, this project has also been included as part of SPT's submission to the ESO's Stability Pathfinder RFI and the NOA process.

As outlined on page 16 above, 3 synchronous compensation projects are being considered within the scope of the ESO's Stability Pathfinder project. Should the ESO fail to identify a cost-effective market-led solution for this network need, SPT would then deliver and fund synchronous compensation under the proposed Net Zero Transition reopener with further details at p141 of the Business Plan and Annex 20: Uncertainty Mechanisms.

Synchronous Compensation projects (non-baseline) included in SPT's Stability Pathfinder submission				
Project Name	System Need/ Project Description	Cost	TO Commentary	
Synchronous Compensation	System Need:	Total: £51.9m	In SPT's view, the only viable alternative to the system benefits that will be realised by	
at Hunterston	The installation of this device will facilitate the connection of further renewable generation in Scotland and provide system support in the event of a black start.		synchronous generation plant, within SPT's area. As we have no evidence of any market appetite for such a generator solution within the required timescales, we consider the installation of synchronous compensation, the only realistic option.	
			Earliest in Service Date:	
	Project Description:		2024	
	Installation of synchronous compensation at Hunterston to provide system strength previously		Competition Criteria review:	
			This project meets the early competition criteria of £50m+ and contestable.	
offered by transm synchronous gen	offered by transmission connected synchronous generation.		We consider this project is already subject to Ofgem's early competition processes as this project is being considered under the scope of the ESO's Stability Pathfinder project which is assessing a wide range of build and non-build solutions provided by network operators and third parties.	
Synchronous Compensation at Strathaven	System Need:	Total: £54.6m	In SPT's view, the only viable alternative to the system benefits that will be realised by	
	The installation of this device will facilitate the connection of further renewable generation in Scotland and provide system support in the		the installation of synchronous compensation at Strathaven is the installation of a new synchronous generation plant, within SPT's area. As we have no evidence of any market appetite for such a generator solution within the required timescales, we consider the installation of synchronous compensation, the only realistic option.	
	event of a black start.		Earliest in Service Date:	
	Project Description:		2026	
	Installation of a synchronous compensation at Strathaven to provide system strength previously		Competition Criteria review:	
			This project meets the early competition criteria of £50m+ and contestable.	
	offered by transmission connected synchronous generation.		We consider this project is already subject to Ofgem's early competition processes as this project is being considered under the scope of the ESO's Stability Pathfinder project which is assessing a wide range of build and non-build solutions provided by network operators and third parties.	

Synchronous Compensation at Kincardine	System Need: The installation of this device will facilitate the connection of further renewable generation in Scotland and provide system support in the event of a black start.	Total: £51.7m	In SPT's view, the only viable alternative to the system benefits that will be realised by the installation of synchronous compensation at Kincardine is the installation of a new synchronous generation plant, within SPT's area. As we have no evidence of any market appetite for such a generator solution within the required timescales, we consider the installation of a hybrid synchronous compensation, the only realistic option.
	Project Description:		Earliest in Service Date:
	Installation of synchronous compensation at Kincardine to provide system strength previously offered by transmission connected synchronous generation.		2025
			Competition Criteria review:
			This project meets the early competition criteria of £50m+ and contestable.
			We consider this project is already subject to Ofgem's early competition processes as this project is being considered under the scope of the ESO's Stability Pathfinder project which is assessing a wide range of build and non-build solutions provided by network operators and third parties.

In line with the latest Business Plan Guidance, we have flagged those projects below which **do not** meet both of Ofgem's new early competition criteria of £50m+ and contestable (potential for alternative solutions).

Project Name	System Need/ Project Description	Cost	TO Commentary as to why project isn't contestable
Denny – Wishaw 400kV Reinforcement (SPT200106)	System Need: This project is designed to reinforce the network boundary B5, to facilitate the transmission of renewable generation connected in Scotland. (Also see EJP_SPT_SPT200106_DWNO) Project Description: Reconfiguration and reuse of the existing network between Denny North substation and Wishaw. This includes the construction of ~17km of new overhead line between Bonnybridge and north of Newarthill to create a new 400kV corridor down the centre of the SPT network.	Total: £146m	These works have been considered within the ESO's NOA process and have been given proceed indications in both NOA3 and NOA4. The project has also been economically assessed within the East Coast SWW CBA, which has also identified the need to deliver this project. This project has been designed specifically to increase the boundary capability of B5 in line with the wider network strategy. There is a non-load element of this project, in reconductoring of the existing double circuits between Easterhouse, Newarthill and Wishaw 275kV substations, which make up £XXXm of the total £146m project costs. The reconductoring of these circuits would be required regardless of load related drivers, within the late RIIO-T2/early RIIO-T3 period. Earliest in Service Date: The current EISD within NOA is 2028, which has been indicated as optimal for delivery. Competition Criteria review: Whilst this project meets the early competition threshold of £50m, it fails to meet the contestable criterion. The TOs and the ESO have undertaken an extensive exercise through the NOA process to identify the most cost effective network solution for consumers. We also consider that this project is too late in the project design process to be considered for delivery under early competition.
Longannet 275kV Switchgear Replacement (SPNLT 2099)	System Need: All plant, equipment and the substation building have extensive life-limiting issues. The physical and electrical limitations, the extensive outage works and the costs make in-situ asset replacement less economic than the alternative options. Additionally, a new project submitted to the NOA process in 2019 requires the substation to be uprated to 400kV. A detailed description can be found in Engineering Justification Paper EJP_SPT_SPNLT 2099.	Total: £69.29m	An extensive optioneering process has considered the alternatives to building the substation off-line. SPT studied a number of network reconfiguration options (as well as CBA analysis) which were shown to be detrimental to the capability of major system boundary B5. The reconfigurations studied entail significant construction works at other existing substations and the diversion of existing circuits to avoid the need for a new substation. The costs of the reconfiguration and to restore the boundary capability are significantly in excess of the off-line build solution proposed. The interaction with a major system boundary reinforcement submitted to this year's NOA process introduces uncertainty in the solution. The costs noted in this table relate to the 275kV option being required. The incremental cost for the 400kV option is £30.2m. The current operational issues being experienced at the existing substation require intervention in the timescales proposed in the RIIO-T2 business plan. Earliest in Service Date: 2027

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	Project Description: Replacement of the existing substation using an off-line build approach. Diversion of existing overhead line routes. Dismantling and demolishing the existing substation and building.		Competition Criteria review: Whilst this project meets the early competition threshold of £50m, it fails to meet the contestable criterion. As explained above, SPT studied a number of network reconfiguration options which were shown to be detrimental to the capability of the B5 boundary, nor the most cost effective option for consumers. We also consider that this project is too late in the project design process to be considered for delivery under early competition.
Branxton (SPT200168)	System Need: Branxton is a major new 400kV substation development near Torness. It is the connection point for the Eastern HVDC Link and it is therefore vital that this project is completed to ensure the timely connection of the link. Further, this substation will be the connection point for offshore windfarm developments in the North Sea. It also forms an important bypass of the thermally limited Torness cables, providing additional network capacity. A detailed description can be found in Engineering Justification Paper EJP_SPT_SPT200168). Project Description: Branxton will initially be established as a 14-bay GIS with room to expand to 23 bays in future. This first stage provides terminations for the Eastern HVDC Link and the circuits to Torness, Eccles, Crystal Rig and Strathaven. The project includes overhead line and cable works to deviate existing circuits.	Total: £93.3m	This project requires deviation and reconfiguration of eight existing 400kV transmission circuits, while maintaining an adequate level of network connectivity. This will lead to a complex construction programme. It is the connection point for the Eastern HVDC Link and it is therefore vital that this project is completed to ensure the timely connection of the link. Earliest in Service Date: 2027 Competition Criteria Review: In our view, there are no viable alternatives and therefore this project fails to meet the contestable criterion, although the £50m early competition threshold is met. We consider that this project is too late in the project design process to be considered for delivery under early competition.

SP Energy Networks, RIIO-T2 Business Plan Annex 18: Competition Plan

APPENDIX B: LATE COMPETITION ASSESSMENT OF RIIO-T2 PROJECTS

SP Energy Networks, RIIO-T2 Business Plan Annex 18: Competition Plan

B.1 LATE COMPETITION ASSESSMENT OF RIIO-T2 PROJECTS

In line with the latest Business Plan Guidance, we detail those projects below which meet Ofgem's late competition criteria of new, separable and high value.

Project Name	System Need/Project Description	Cost	TO Commentary
Eastern HVDC subsea link – Torness to Hawthorn Pit (current anticipated landing point)	System Need: The purpose of this link is to reinforce the transmission network boundary B6, to facilitate GB network access for renewable generation connecting in Scotland. Project Description: Construction of a new HVDC 2 GW subsea link from the Torness area (within SPT's network) to Hawthorn Pit (within NGET's area).	Total: ~£1.7- £2.5bn	 This project has been jointly developed by the three TOs and economically assessed against, and in combination with, many alternatives by the ESO as part of the annual NOA process, as well as within an East Coast specific SWW CBA. Since NOA2 a large B6 infrastructure reinforcement has been given proceed signals from the ESO. NOA3 and NOA4 have consistently indicated that two Eastern HVDC 2 GW links are required from Scotland. The alternatives considered for this project, but have proven uneconomical in comparison include: Do nothing, allowing the balancing mechanism to continue to constrain generation north and south of B6 to manage this boundary. This is uneconomical as analysis has shown that constraint costs could be ~£XXX m per annum, for each year the project is not delivered. An onshore AC overhead line construction between the Torness area in Scotland and various landing points in North England. This option has lower capex, however due to the increased planning and consents complexities, this project would deliver at least 4 years later than the HVDC seabed solution. Therefore this approach proves uneconomical when compared to the additional constraint payments to consumers during this timeframe. A multi-terminal link from Peterhead. Torness and Hawthorn Pit has also been previously considered. However this would only allow 1 GW to be exported from both Scotlish locations, which has been determined via technical and economic analysis to be not large enough to meet current system needs. The NOA process is currently indicating that 4 GW of transfer capability is a minimum requirement, with indications that an additional 2GW could also be required. Earliest in Service Date: An initial needs case for both Eastern links is currently being prepared by all three TOs to be submitted to Ofgem in 2020, with an expected final needs case in 2021. The NOA process has indicated an EISD of 2027 for a link from the Torness area to Hawthorn Pit. Com

In line with the latest Business Plan Guidance, we detail those projects below which meet the £100m late competition threshold but **do not** meet the new and/or separable criteria.

Projects which meet the £100m+ threshold but do not meet the new and/or separable criteria				
Project Name	System Need/ Project Description	Cost	TO Commentary	
Denny – Wishaw 400kV Reinforcement (SPT200106)	System Need: This project is designed to reinforce the network boundary B5, to facilitate the transmission of renewable generation connected in Scotland. (Also see EJP_SPT_SPT200106_DWNO) Project Description: Reconfiguration and reuse of the existing network between Denny North substation and Wishaw. This includes the construction of ~17km of new overhead line between Bonnybridge and north of Newarthill to create a new 400kV corridor down the centre of the SPT network.	Total: £146m Cost for new, separable section: £43m	These works have been considered within the ESO's NOA process and have been given proceed indications in both NOA3 and NOA4. The project has also been economically assessed within the East Coast SWW CBA, which has also identified the need to deliver this project. This project has been designed specifically to increase the boundary capability of B5 in line with the wider network strategy. There is a non-load element of this project, in reconductoring of the existing double circuits between Easterhouse, Newarthill and Wishaw 275kV substations, which make up £XXXm of the total £146m project costs. The reconductoring of these circuits would be required regardless of load drivers within the late RIIO- T2/early RIIO-T3 period. Earliest in Service Date: The current EISD within NOA is 2028, which has been indicated as optimal for delivery. Competition Criteria review: This project fails to meet the late competition criteria. The construction of a 17km section of overhead line is the only 'new' part of the project. The 'new' element of the project is not separable due to the re-use of existing SPT network assets, elements of the work associated with non-load modernisation, and expenditure on undergrounding existing lines for visual mitigation which are owned by SPT. it is integral to the existing transmission system. Nor does it meet the £100m+ threshold, given its value of £43m.	