

# **RIIO T1 Business Plan**

# Section 3 Our Outputs Strategy

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# **OUR OUTPUTS STRATEGY**

This document outlines the SP Transmission (SPT) strategy for outputs and incentives for RIIO-T1. It highlights the outputs delivered through implementation of the proposed business plan in the output areas of:

- Safety
- Reliability
- Environmental
- Customer Satisfaction; and
- Connections

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### 1. Summary

We recognise that outputs are at the core of the RIIO regulatory framework and we believe that an important principle should be that outputs are within the control of the transmission companies. It is also important there are no conflicting incentives and that we have full access to information on which any incentive is based.

Output Area	Outputs Delivered by RIIO-T1 Business Plan				
Safety	SPEN will continue to strive to ensure compliance with all appropriate safety legislation				
Reliability – ENS	SPEN will provide average ENS performance of 224.4MWh over RIIO-T1. Our investment proposals will maintain performance in line with stakeholder expectations.				
	SPEN will replace assets at end of life prioritised by criticality. Over RIIO-T1 SPEN will remove:				
	81 RP1 and 20 RP2 Circuit Breakers				
Reliability – Asset Risk	23 RP1 and 3 RP2 Transformers and Reactors				
	101km of RP1 and 773km of RP2 Overhead line conductor				
	12km of RP2 and 16.1km of RP4 fluid filled Underground cable (cable laid km)				
Peliphility – Wider Works	SPEN will deliver reinforcement projects by the end of RIIO-T1 which will increase the boundary capabilities of the network, within the context of the 'Gone Green Generation' scenario, to:				
Kellability – Wider Works	SSE/ SPT Boundary (B4) from 1,700MW to 3,500MW				
	SPT Central Boundary (B5) from 3,650MW to 4,250MW				
	SPT/ NGET Boundary (B6) from 3,500MW to 6,600MW				
Environmental – SF6	Target SF6 leakage of 833kg in yr1 rising to 1275kg in yr8 as a result of increases in the quantity of SF6 equipment on the network. Targets reflect maintaining current performance which is better than design standards.				
Environmental – Visual Amenity	SPEN will consider undergrounding of overhead lines in Areas of Outstanding Natural Beauty on a case by case basis when a line is considered for full asset replacement or when a new line is required. This will include consideration of consumer willingness to pay.				
Environmental – Business Carbon Footprint	SPEN will provide annual reporting of business carbon footprint and will identify measures to improve overall footprint where appropriate.				



Output Area	Outputs Delivered by RIIO-T1 Business Plan				
Environmental	SPEN will consider the whole life costs (incl. losses) of transmission equipment and will utilise appropriate equipment on the network.				
Transmission Losses	SPEN will also continue to consider the impact of losses when developing the network and will work with NGET to develop optimal designs to support a cost efficient network.				
Environmental – Broad	SPEN will continue to contribute to the UK's low energy targets through the connection of renewable generation and the completion of Scotland to England transmission reinforcements.				
Environmental	Through RIIO-T1 we will provide connection for 2.5GW of wind generation and increase the boundary capability to England & Wales from 3,500MW to 6,600MW.				
Customer Satisfaction – Survey	SPEN will develop and follow a stakeholder engagement strategy. We will also develop and implement a stakeholder survey. We will review feedback from the survey, update our engagement strategy where appropriate and endeavour to continually improve our engagement.				
Customer Satisfaction – Survey	SPEN will continue to strive to provide excellent customer service and if appropriate submit examples for consideration for the discretionary reward.				
Connection – Provision of Quote	SPEN will continue to work with NGET and developers t provide quality and timely connection quotes. We will aim to have no failures to provide quotes within the current licence deadlines.				
	SPEN will continue to develop and finalise the Network Availability Policy through consultation with relevant stakeholders.				
Interaction with System Operator	SPEN will implement this policy and will endeavour to be fully compliant with it throughout RIIO-T1. Additionally SPEN will consider the impact of its actions on short term constraint costs and work with NGET to minimise these within the context of delivery of the RIIO-T1 plan.				



## 2. Safety

The transmission companies are required by legislation, monitored and enforced by the Health and Safety Executive (HSE), to design and operate their networks to ensure the safety of the public and employees. This legislation covers:

- The Electricity Safety Quality and Continuity Regulations 2002,
- The Health and Safety at Work etc. Act 1974, and
- Electricity at Work Regulations 1989

Ofgem's strategy decision for RIIO T1 is for the primary output for safety to comply with their legal safety requirements hence aligning fully with the transmission company obligations with the HSE. Ofgem will monitor the long-term delivery of this output through secondary deliverables relating to asset risk.

There will be no financial incentives to the primary safety outputs as other agencies and mechanisms (the HSE and legal obligations) incentivise the companies to deliver in this area.

Energy Networks utilises a set of six Big Goals to provide a common purpose by combining our operational objectives with associated performance metrics. Health & Safety Matters is the 1<sup>st</sup> of the six Big Goals. The purpose of this goal is to ensure that health, safety and reliability are at the core of everything we do. The vision of the goal is:

The health and safety of our employees, contractors and customers is of paramount importance to our continued success. We will maintain our assets to safeguard our reliability and performance, championing best practice and sharing the lessons we learn.

A key safety objective is to ensure that all risks to public and staff safety are as low as reasonable practicable. This is achieved through application of our risk management philosophy which ensures that safety risks are identified and managed effectively.

Our RIIO-T1 plans ensure that safety is of critical importance as demonstrated by the following key aims.

- Throughout RIIO-T1 SPEN will continue to strive to ensure compliance with all appropriate safety legislation.
- Safety is also a key consideration in determining asset health and replacement priorities. Resultantly non load investment addresses assets in the poorest condition with the highest probability of failure and therefore the greatest safety risk.
- Our opex programme of inspection & maintenance provides ongoing care of our assets and ensures that the assets are inspected and maintained in accordance with legislation and industry best practice.



## 3. Reliability

The target for the price control period will be set based on historical performance and SPT are required to predict the improvement in this target over the period of the price control, which will result from our planned investments.

#### **Reliability – Energy Not Supplied**

The primary reliability output will be energy not supplied (ENS), which measures total MWh lost due to unplanned outages on the network impacting on customers.

We have worked with Ofgem and the other electricity transmission companies and have developed a framework for an ENS incentive (the ENS Framework). This Framework includes the rules around included and excluded events, the start and end times of events, and the impact on adjacent systems. The framework has been developed through consultative working among the three TOs and Ofgem and will be finalised during the coming year.

In Ofgem's March strategy, Ofgem set out a range for a common incentive rate of between  $\pounds4,300-\pounds22,000/MWh$  and proposed a value of  $\pounds16000/MWh$ , adjusted by the efficiency incentive rate with a collar of 3% of allowed revenue.<sup>1</sup> Although this is a new measure for SPEN we have been able to review historic outage information, over a 10 year period, to determine our performance which is shown on the chart below.



The large difference between Overall ENS and Reportable ENS in 2009/10 is due to the exclusion of events associated with severe weather. Based on this historic performance, we propose a target for SP Transmission of 224.4MWh unsupplied energy per annum, with a linear incentive based on a slope of £16k/MWh. That is, we would be in penalty if we exceed 224.4MWh unsupplied energy in any given year, subject to the agreed ENS Framework.

<sup>&</sup>lt;sup>1</sup> We assume that this collar covers more than one unsupplied energy event. We note that Ofgem also intend to enforce a minimum standard of performance such that if the collar is triggered, we would have to demonstrate that we had taken all reasonable actions to minimise unsupplied energy, and Ofgem would have the option to investigate the event and apply a financial penalty if appropriate.



The collar should be applied to provide a fully symmetrical mechanism offering rewards and penalties in equal measure. A natural cap exists in the form of achieving 0MWh ENS. A collar equal to double the target should be applied at 448.8MWh. Based on the incentive rate of £16k/MWh this is equivalent to a penalty cap of £3.6m, which is approximately 1.5% of SPT current revenue. We believe a cap of 1.5% of revenue is appropriate as it reduces the exposure of SPT to large events where the total ENS is beyond the control of SPT. In these cases the overall impact is driven by the amount of energy lost when the event occurs which, is a feature of the network configuration and the network loading, both of which are controlled by the system operator and not SPT.

As can be seen from the graph above this cap would have been applied twice in the last 10 years, both times occurring in the last three years. In each case the vast majority of the ENS is attributable to a single event. In 2008/09 the cap would have mitigated the impact by 30MWh and in 2010/11 by 437MWh.

Typically annual performance is dominated by a single large event and resultantly there is no discernible trend in performance. This means that investment cannot be targeted to improve this level of performance as it is dominated by single random events. To attempt to improve performance without a discernible trend would require network reinforcements, beyond current design standards, in the hope that a potential large event occurs, which would then be mitigated. This is unfeasible, inefficient, not in consumers interests and beyond stakeholders expectations.

However continuation of our intervention prior to failure approach should ensure that our ENS performance is maintained. Therefore our RIIO-T1 investment will deliver ENS performance as per the table below.

ENS	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
MWH	224.4	224.4	224.4	224.4	224.4	224.4	224.4	224.4

#### **Reliability – Asset Risk**

The primary output of ENS is supported by a suite of secondary deliverables around the delivery of asset health, criticality and asset risk. Our business plan submission includes full details of these secondary deliverables in our section on Network Outputs Methodology, within Section 5 covering Non-Load Expenditure.

Replacement priority is used as a representation of asset risk. Combining asset health (likelihood of failure) with criticality (consequences of failure) provides a replacement priority driven by risk. A replacement priority relates to a preferred timeline for replacement of the asset where RP1 represents a need for urgent replacement and RP4 represents consideration for replacement beyond the next 10 years. Over RIIO-T1 SPEN will replace the volumes of assets by replacement priority as detailed in the table below.

	Asset Category	RP1	RP2	RP3	RP4	Total
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Asset Category	RP1	RP2	RP3	RP4	Total
275kV Transformers	6	1	0	0	7
132kV Transformers	11	0	0	0	11
Reactors	6	2	0	0	8
400kV Circuit Breakers	7	0	0	0	7
275kV Circuit Breakers	14	20	0	0	34
132kV Circuit Breakers	60	0	0	0	60
400& 275kV OHL Conductor	101	414	0	0	515
132kV OHL Conductor	0	359	0	0	359
132kV Fluid Filled Cable	0	12	0	16.1	28.1

#### Wider Works - Arrangements to encourage timely delivery

As Ofgem acknowledges in their Strategy consultation, transmission companies are already incentivised to complete wider works as early as possible. Not only is there a business driver in increasing the business RAV as quickly as possible, but there is also a reputational driver given that the wider system reinforcements are key to supporting Government energy policy.

However, Ofgem intends to introduce a penalty-based financial incentive for those uncertainty mechanisms based on a target delivery date for wider works. Given the scale of investment, and the risk associated with these projects in terms of technology, environment, consents and NETSO interactions, we have concerns over the introduction of penalties. We agree with Ofgem that if such penalties are to be introduced then it will be important for there to be clear and transparent guidelines around their application. For example, outage changes caused by the NETSO in order to minimise constraint costs, delays due to obtaining consents (where there is clear evidence demonstrated that the licensee has been pro-active in seeking consents), and other exceptional circumstances should be taken into account.



## 4. Environmental

#### **Direct network Emissions - SF6 Leakage**

The installation of assets which make use of SF6 have various benefits. For example SF6 based switchgear help minimize substation footprint, and the gas insulated transformers being installed at Dewar Place are essential from a safety standpoint. Over RIIO-T1 we will install new SF6 equipment as part of our load and non-load capital expenditure programmes and in so doing significantly increase our inventory of SF6 mass used in transmission equipment. Currently we have 41250kg of SF6 gas equipment installed on our network. By the start of RIIO-T1 this will have increased by 30% and as a result of our investment plans will increase by a further 80%.

We manage our SF6 inventory in accordance with industry good practice, and have not identified projects above this level. Out of our current 41250kg of gas, around 50% is located at Torness. In order to reduce our inventory and actual loss of gas, one solution would be to replace this site with a modern equivalent with a lower designed leakage rate. Assuming we have a leakage baseline based on our current annual SF6 leakage, then the cost benefit of the saving through reduced SF6 leakage does not justify asset replacement. Based on the current non-traded value of carbon, a cost benefit based on a 1kg saving in SF6 gas would not justify a  $\pounds$ 30m asset replacement. This would not be value for money for customers, as this site is generally in good condition.

The graph below shows the leakage of SF6 from SPT equipment over the last four years. Through focussed operational efforts we have driven reductions in the kg of SF6 leakage from the 2007/08 levels. However, in 2010/11 the leakage increased back to 2008/09 levels. We believe this represents the expected background level of leakage and cannot be improved without significant investment.



Currently almost all transmission assets have been purchased and installed to IEC specifications which vary up to 3% leakage as design rating. Our current leakage rate at over 1.8% of total installed SF6 gas is on, if not below design standards. In effect, our operating regime is already performing much better than the equipment specification and we have determined that it is not possible to improve the performance further. The

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only effective method of reasonably operating at a significantly lower target would be a substantial capital programme of asset replacement. Therefore our plans for a flat background leakage profile are appropriate as we believe there is limited scope for further reductions.

We have forecast our leakage performance over RIIO-T1 based on our existing performance and our planned network investments. For all new assets we have applied the design rating leakage rates which are 1% for indoor equipment and 1.5% for outdoor equipment. The table below details our predicted performance over RIIO-T1.

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Total inventory (kg)	56366	58396	62926	64576	74381	74381	80881	88031
SF6 leakage (kg)	833	853	919	943	1079	1079	1176	1275
Leakage as % of asset base	1.48	1.46	1.46	1.46	1.45	1.45	1.45	1.45

We note Ofgem's intention to introduce an output to prompt transmission companies to take into account the environmental costs of SF6 equipment that have different leakage rates. Our strategy therefore for SF6 emissions aligns with Ofgem's view although we believe that convergence towards a best practice leakage of 1% will be extremely challenging.

Ofgem would like to introduce a symmetric incentive based on carbon equivalent emissions. We have assessed the impact of an incentive based on the prevailing non-traded annual carbon price recommended by DECC<sup>2</sup>, we recommend that a neutral position should be based on the kg targets in the table above. We believe that this level sets the right risk balance as it maintains background performance despite an ageing asset base which has an increasing leakage rate.

#### Visual Amenity - Wider environmental footprint

We agree with Ofgem that the TO's compliance with visual amenity or activities such as emissions to water or landfill is primarily dealt with through planning processes and compliance to various environmental regulations.

We note that Ofgem believe that the transmission companies may have to consider the socio-environmental impacts of their network reinforcements at an earlier stage. We broadly support Ofgem's proposal to introduce an allowance for each transmission company to reduce the visual impact of existing infrastructure in National Parks and Areas of Outstanding Natural Beauty, to be considered on a case by case basis. In our

 $<sup>^2</sup>$  At a non-traded value of £55/tCO2e 1kg of SF6 has a value of around £1200 (using a multiplier of 1kg SF6 to 22,000kg CO2).



licence area, this would potentially apply to the proposed new overhead line in Dumfries and Galloway. This reinforcement would be funded under an uncertainty mechanism and in due course, as the detailed engineering design is scoped and developed, we will provide more information on this upgrade, including information on consumer willingness to pay, to help inform the value of the allowance that would be appropriate over RIIO-T1.

#### **Business Carbon Footprint**

We support Ofgem's proposal to require the network companies to submit an annual report of their BCF in line with the emissions reporting methodology introduced for DPCR5 in 2010.

#### **Transmission Losses**

We agree with Ofgem that the biggest determining factor for losses is the system loading which is the responsibility of the NETSO. In theory the TO can take actions to reduce losses but the reality is that transmission losses are a function of the disposition of generation and demand on the transmission system. Indeed, the introduction of large scale renewables in remote parts of Scotland will increase losses as conventional generation, nearer load centres, is shut down and replaced with remote renewable generation.

The transmission owner can minimise transmission losses through:

- Removing unnecessary transmission lines. This can happen as the transmission system develops. For example, we are considering removing the Kilmarnock to Neilston 132kV circuit as a result of the ENSG planned network reinforcements.
- (ii) By investing in higher voltage circuits. Most new transmission circuits are for generation connections and the decision on which voltage to connect will be taken with the developer taking into account overall cost and the best option for obtaining consents. Where we can we will also consider factors such as the longer term development of our transmission network, and minimising transmission losses, which can encourage a higher voltage solution.
- (iii) By investing in lower loss transformers. Our approach to transformer procurement considers the transformer capital and operating costs, including losses, over the complete life cycle of the transformer

Any decision will depend on the present value of the additional cost of a low loss option against the benefit of reduced losses over the lifetime of the asset. We note that Ofgem expect the transmission companies to take into account lifetime costs, including transmission losses when deciding between different transmission equipment and intend to include an output on transmission companies against "the modelled lifetime net benefits to consumers arising from low loss investments on their network over RIIO-T1".



We agree that it is not appropriate to set a primary output on the actual volume of losses on our transmission system, and we broadly support the use of a reputational incentive based on modelled savings in order to encourage companies, as part of their network planning practices to fully assess the lifetime costs including losses. We also note that there is the potential for companies to earn some financial reward for reducing network losses that is in addition to their baseline activity through the broad environmental output following consultation.

#### **Broad Environmental**

In the stakeholder working groups it was suggested that to align TO incentives directly with the UK's low carbon energy goals there should be a broad output on TOs' contribution to meeting the UK's renewable energy target. To date, SPT's contribution towards UK renewable energy targets has been very significant. We have already connected over 2GW of renewable wind to our network and we have been the main instigator around the development of essential Scotland to England transmission reinforcements. We have also been responsible for developing significant technical innovation in order to maximise north to south boundary capacity; through highly complex and innovative intertripping, and more recently the promotion of wide area monitoring to maximise the operation of the network capacities towards thermal, voltage and stability limits.

We note that Ofgem intends to consult on the potential to introduce a financial reward for the electricity transmission companies with:

- an automatic incentive potentially linked to a measure of the carbon intensity of energy flows as well as the annual increase in low carbon energy flows, and/or
- a discretionary reward if we can demonstrate they we have made a contribution that is in addition to those already rewarded under either the automatic incentive or the wider outputs framework.

We are pleased that Ofgem recognises the significant scope for electricity transmission companies to contribute to the UK's renewable energy targets, albeit from our point of view, it is disappointing that this recognition had not come earlier.

We are supportive of the development of appropriate incentives. Indeed, in discussions with Renewable UK in 2010 we suggested that they consider our proposal to incentivise the GB electricity transmission companies to connect renewable wind generation as early as possible to their respective transmission systems. We proposed that the incentive would be based on performance against an agreed programme of connections for a given year. There would then be a reward or penalty based on the cost of carbon i.e. the carbon benefit or penalty for a MWh saved or incurred.



## 5. Customer Satisfaction

We fully support the introduction of a customer survey incentive. We are committed to improving our customer satisfaction throughout the RIIO-T1 period and beyond. We recognise the wide range of stakeholders we engage with in relation to our transmission activities. We intend to develop a strategy for engagement that helps us understand their needs and wants, and we will take action in response to this engagement to change our processes and plans to produce real results in delivering our outputs better and more efficiently.

Historically, we have always looked to engage effectively with those direct and indirect customers that we provide a service to or are affected by our activities. We have developed and maintained an active relationship with a wide range of stakeholders including:

- Transmission network customers
- Generation developers
- Government and regulatory bodies
- Industry bodies and trade associations
- Legal and environmental bodies
- Academic institutes (e.g. University of Strathclyde)
- Research & policy making bodies (e.g. EPRI, Eurelectric)
- National Grid and SHETL for collaboration and sharing learning
- Equipment suppliers and technology providers
- Construction companies
- Planning authorities and interested parties (e.g. Historic Scotland, National Fisheries)

Our RIIO-T1 investment proposals have been developed based on the views and concerns of these stakeholders where appropriate. In particular our plans for generation connections entirely reflect the output of our engagement with generation developers with agreed dates for connection of their proposed generation capacity.

In developing our RIIO-T1 plans we have undertaken a wide range of specific stakeholder engagement activities including a number of stakeholder workshops which, has provided constructive discussion and facilitated the development of our plans.

The extent of our stakeholder engagement and strength of relationship with our customers gives us confidence that we perform well in this area and we therefore welcome Ofgem's focus on customer satisfaction and stakeholder engagement as integral to their RIIO-T1 strategy.

Ofgem expect the network companies to develop and further refine customer satisfaction surveys to be used to set the level of performance for the primary output, with the onus on the companies to develop the surveys through consulting with a diverse group of customers and stakeholders. We note that it will be important for the Scottish companies to provide sufficient information about their role, and their surveys may therefore need to be focused on and/or weighted towards stakeholders connecting to the network or those affected by infrastructure developments. We note that as we do not



have a survey at present, the application of a financial incentive related to their performance in this area may be delayed.

We fully support the introduction of this incentive and will work with Ofgem and our other stakeholders to ensure that the preparatory work is in place for the start of RIIO T1, and we note that a licence condition will be introduced to make sure that any "testing" is completed by a set date.

#### **Discretionary Award**

We also fully support Ofgem's proposals for the introduction of a discretionary award to reward companies that can demonstrate that their engagement activities have led to exceptionally positive outcomes for customers over the price control period.



## 6. Connections

We consider that SPT has a very good track record in delivering timely grid connections. By way of background, our experience is that any changes from the originally contracted dates are due to factors out with our control; usually due to planning consent delays and changes to developer requirements. In particular, obtaining all necessary consents is dependent on outside agencies, such as local authorities, providing consent approval to competent planning applications in realistic timescales. Also, the advent of considerable onshore wind in Scotland has led to Scottish landowners becoming much more aware of the value of land necessary to connect wind hence agreement of landowner consents can take some time, particularly if we are to ensure that connections and associated infrastructure are delivered cost-efficiently.

In terms of RIIO T1 outputs, we note that Ofgem believes that it is imperative that transmission companies give due priority to ensuring timely connection to their network, and Ofgem have reached the decision that the primary output for connections should be related to compliance with current obligations, and therefore on the licence requirement to make connection offers.

Since the start of BETTA we have worked work closely with both National Grid and developers during the connection application process to agree connection dates that take a realistic view of the consent, construction and commissioning processes. At this stage of the process, we will advise the developer of connection options that will improve their chances of obtaining timely consent such as, for example, consideration of wood pole single circuit overhead lines or undergrounding. In our experience before and since the start of BETTA, we are not aware of ever missing licence deadlines for connection offers. This business priority will not change over RIIO T1 and so we are not concerned at Ofgem imposing a penalty incentive regime around the current licence obligations.

Our feedback through our RIIO stakeholder engagement is that we, working with National Grid, should deliver sustainable low carbon energy through fair, clearer and more accessible processes. Our stakeholder strategy in this area includes a commitment to review the current connection process with National Grid to look to provide more clarity on the connection process particularly for new, smaller developers.



## 7. Interaction with the System Operator

Our core message for our business plan is that the delivery of UK energy policy, and hence the decarbonisation benefits and reduction in constraint costs, will be addressed through the timely delivery of wider system reinforcements.

The Scottish companies have an obligation to provide transmission services to NGET and this includes the obligation to make available their network assets to facilitate the safe, economic, and reliable transmission of electricity within its licensed area. The activities of the TOs can be affected significantly by factors that are outside of the TO's control, primarily due to actions/decisions taken by the NETSO. Similarly the activities of the NETSO can be affected by TO actions.

We agree with Ofgem that constraint costs can be affected by "real time" TO activities, and we have, over a number of years, offered our help to minimise constraints. However, in order to do this, we have asked for some constraint related information covering the timing, severity and location of constraints. Unfortunately due to this information being confidential we have not been able to provide direct support in this area.

Given this limitation, we believe that Ofgem's approach for each transmission company to prepare a Network Availability Policy is a pragmatic and sensible solution. We have prepared our draft Policy and it is included as an appendix in our narrative section on Deliverability. We prepared our draft policy and took the lead in consulting on it with the other TOs and the NETSO. The policy has been revised as a result of this consultation process. We have included a draft, rather than final, policy as we are keen to continue the consultation process with relevant stakeholders to ensure the policy is robust.

Our approach in preparing this draft Policy is to recognise that given the scale of circuit outages required over the period of RIIO T1 it is important to plan ahead and agree critical outage "windows" up to 8 years in advance of the circuit outage work, with formal agreement of outages agreed 2 years in advance with the option of further refinement at the year-ahead stage. We believe that this approach will help minimise the impact on the TO or the NETSO by ensuring that TO and NETSO requirements are addressed at a much earlier stage of the process.

Our Policy is intended to help us plan and organise outages to minimise customer costs, whilst ensuring that we meet our legal, licence and regulatory requirements. In defining and prioritising outages, our Policy applies the following key principles in order of precedence:

- The replacement, refurbishment and maintenance of transmission network assets, to ensure the ongoing safe and secure operation of the transmission network,
- (ii) The development and reinforcement of the transmission network to minimise longer term system costs, and
- (iii) The minimisation of short term constraints.

We believe that our policy clearly meets Ofgem's objectives by clarifying what the SO, and other stakeholders, can expect from the TO. We note that Ofgem will assume that



the Policy to be taken as a primary output, within the network reliability and availability category and that financial penalties can be imposed in the event of a TO not complying with its policy, but also that there will also be opportunities to benefit financially from performance beyond that which is required under its policy. The important point is that our policy takes stakeholder interests first, by recognising the importance of both security of supply and constraint cost minimisation.