## Introduction

In October 2011, Scottish Hydro Electric Transmission Limited (SHETL) consulted on a variation to Ofgem's proposed Reliability Incentive Mechanism relating to Energy Not Supplied (ENS). In light of the feedback received from stakeholders, for which we have published a summary of responses along side this paper, and subsequent dialogue with Ofgem, we are pleased to present a final proposal for this mechanism in RIIO-T1.

SHETL's Proposals for an incentive mechanism to target Energy Not Supplied

In developing our thinking on the treatment of ENS, we were keen to recognise the uniqueness of the SHETL transmission network, with a significant proportion of the network consisting of radial 132kV circuits serving a relatively small proportion of our connected customers. While we are keen to ensure the continued supply of electricity to these customers, the cost of upgrading these circuits to prevent the small number of occurrences that would trigger a penalty under Ofgem's proposed mechanism is currently disproportionate.

The overall reliability of the GB transmission network is consistently in excess of 99.98% and, over the last 3 years, SHETL's reliability has consistently exceeded

99.997%. Over the past 5 years we have experienced ninety-three incidents on the network that have resulted in an interruption to supply.

Of these incidents, more than half were of less than three minutes duration, as our system automatically restores supplies in response to, for example, lightning strikes. We have had only 6 incidents caused by asset failure in the last 5 years.

# Our proposal

We therefore propose a hybrid mechanism that incentivises SHETL to minimise the total amount of ENS on an annual basis, as well as guaranteeing that no customer should be off supply for more than 6 hours as a result of an incident on our transmission network. In the event that a customer is off supply for more than 6 hours as a result of an incident on our transmission network, we propose to make a compensation payment to that customer in a manner that is similar to the existing arrangements for distribution networks.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> The Distribution Guaranteed Standards set out compensation arrangements for customers who are off supply for more than 18 hours as a result of a distribution fault.

We consider that a hybrid incentive would ensure the general volume of ENS is kept to a minimum, but also that customers impacted by faults are restored in a reasonable timescale. In the overall target, a handful of customers off supply for a week would make very little difference to the penalty SHETL would have to face, particularly if SHETL was under the target. However, the 6 hour limit ensures that focus remains on getting the customer back on supply quickly, whether or not they impact on SHETL's overall ENS performance.

We believe this is the right balance between high level ENS volumes and detailed level customer supply reliability and that it continues to compensate directly affected customers.

# **Minimising total Energy Not Supplied**

We propose adopting Ofgem's proposal that we are rewarded or penalised for our actual ENS compared to an agreed baseline of 120MWh per annum. The reward or penalty will be calculated in terms of the Value of Lost Load (VOLL @ £16k/MWh shared at 50% factor, i.e. £8k/MWh), adjusted for price inflation) with a 3% of allowed revenue collar. We accept the exceptions proposed by Ofgem in their March Strategy Document, subject to licence drafting.

# **Proposed payments to customers**

Payments will be made to affected customers within the SHETL area, on a basis similar to that of the Distribution Guaranteed Standards. These payments will be proactively triggered by SHETL following analysis of the fault data available. Once a 6 hour fault has been identified, our sister company Scottish Hydro Electric Power Distribution (SHEPD) will provide details of the customer addresses affected and the final length of time off supply. Providing that the fault is not subject to any of the exclusions (see below), SHETL will make a single payment to the Distribution Network Operator (DNO) along with details of the properties affected and the DNO will then despatch payments to the customers at those properties.

The value of the payments will be as follows: Customer off supply for 6 hours or more

Domestic: £54 Commercial: £108

Additional payment where the customer is off supply for twelve hours or more :

Domestic: £27 Commercial:£54

We will make these payments in the majority of circumstances. The only instances when we will not make these payments are:

- Where an exceptional weather event has occurred (defined on the same basis as is applied to electricity distribution); and
- Where an extended Emergency Return to Service arrangement has been agreed with the system operator, National Grid.

# Interaction between the two elements of the mechanism

The following worked examples demonstrate how the two elements will interact.

## Worked example 1:

Baseline target: 120MWh
Actual ENS: 154MWh

ENS Penalty:  $34MWh \times £8000^2 = £272.000$ 

Customers off supply: 240 x £54 = £12,960 Net revenue adjustment: Penalty of £259,040

(ENS - Customer Payments)

## Worked example 2:

Baseline target: 120MWh
Actual ENS: 86MWh

ENS Reward:  $34MWh \times £8000 = £272,000$ 

Customers off supply: 48 x £54 = £2,592

Net revenue adjustment: Reward of £274,592

(ENS + Customer Payments)

### **Our Conclusions**

We believe that our proposed incentive will more appropriately compensate those customers who suffer the inconvenience of being off supply due to an incident on our transmission network, while being of sufficient strength to ensure SHETL minimises any potential disruption to our customers. Instead of paying a penalty into a central fund, we believe it is more appropriate to pay compensation to those customers directly affected by an event.

# **Next Steps**

We included these final proposals in our Business Plan Update submitted to Ofgem on 16<sup>th</sup> December 2011. We recognise that these will need to be incorporated into the licence drafting for SHETL and, potentially, also for SHEPD as the relevant DNO. We are committed to working with Ofgem to complete these in 2012.

<sup>&</sup>lt;sup>2</sup> Volume of Loss Load = £8,000 adjusted for inflation.