Revised Regulatory Proposal

Supporting Information: Reliability

Aurora response to the AER's Draft Distribution Determination

January 2012

Aurora Energy Pty Ltd
ABN 85 082 464 622
Level 2 / 21 Kirksway Place
Hobart TAS 7000
www.auroraenergy.com.au
Enquiries regarding this Document should be addressed to:
Network Regulatory Manager
Aurora Energy Pty Ltd
GPO Box 191
Hobart TAS 7001
e-mail: RRP2012@auroraenergy.com.au

Table of contents

1. Introduction

Aurora provided the AER with its *Regulatory Proposal* on 31 May 2011 in accordance with the provisions of Chapter 6 of the *Rules*. Aurora also set out its answers to the Regulatory Information Notice (RIN) issued by the AER on 21 April 2011 in its response (*RIN Response*) of 31 May 2011.

The AER have reviewed Aurora's *Regulatory Proposal* and *RIN Response* and provided Aurora with the AER's *Draft Distribution Determination*, associated consultant's reports and AER models on 29 November 2011 in accordance with the provisions of Chapter 6 of the *Rules*.

Aurora provides its *Revised Regulatory Proposal* to the AER in response to the AER's *Draft Distribution Determination* in accordance with the provisions of Chapter 6 of the *Rules*. This document provides specific supporting information as an appended attachment to Aurora's *Revised Regulatory Proposal*

2. Aurora Response

2.1. Reliability Program

Aurora proposed a reliability program for meeting its obligations under the TEC reliability standards[1]. While Nuttall Consulting believe the programs appear reasonable and appropriate[2] the expenditure has not been allowed as they have been assessed as improving reliability and/or improving operational efficiency.

Aurora considers the Local Reliability program[3] described in the Reliability Management Plan is necessary to maintain performance in line with TEC reliability standards and hence required to fulfil Aurora's capital expenditure Objectives.

Aurora agrees that some of the proposed Protection and Control programs may have an additional reliability improvement component in addition to the operational efficiency savings proposed, however other programs[4] are based on Asset Protection and provide no reliability improvement. Aurora believes the expenditure on these programs is required to fulfil its capital expenditure Objectives.

2.2. Local Reliability Program

The AER considers the apparent increase in replacement expenditure should be sufficient to address reliability issues and refer to the CONSAC cable replacement program as an example[5].

Aurora believes the asset replacement expenditure is insufficient to maintain reliability in line with the TEC reliability standards as described below.

2.3. Asset replacement impact on Reliability

The AER asserts the asset replacement program will have a reliability performance impact. While Aurora agrees in principle, the effect will not materially assist Aurora meeting its capital expenditure objectives. For example the reliability impact of HV and LV cable failures is 1% of system reliability[6]. Therefore the CONSAC cable replacement program will have a less than 1% effect, and not assist Aurora meet its objectives under the TEC.

---

[1] Aurora Energy Regulatory Proposal
[2] Nuttall Consulting Aurora Capital Expenditure Review – Final 6.5.2 pg 127
[3] Work Categories PRREL, PRTXI, PRREH, PRSPT
[4] Work Categories PRIGF, PRLVR
[5] AER Aurora Draft Determination 5.4.3 pg 137
[6] Justification: REUCS – Replace CONSAC Cables

2.4. Community Standards

Aurora is required to maintain the standards in 101 separate communities. To adequately achieve this objective, targeted reliability projects are required. Asset replacement funds are not able to achieve this requirement as the locations targeted by these programs are to address other drivers such as public safety, and do not align with the TEC communities[7]. Therefore Aurora requires specific funds to maintain performance in communities.

2.5. The proposed funding is for Reliability Maintenance, not Improvement

The local reliability program maintains reliability performance through its reactive design. The reactive approach has a maintenance effect by responding to performance deteriorations and returning it to the previous level. This may appear as reliability improvement but its material affect is the maintenance of individual community performance and hence average system performance. Aurora maintains this program is not a reliability improvement program.

The Local Reliability Program does affect performance at a community level. Generally, the issues addressed affect poor performance to around 1000kVA of connected load, and the majority of communities that contain the issues have a total connected load of between 5000 and 15000kVA[8]. Therefore a relatively small solution can affect the performance of an individual community.

2.6. The solutions implemented are efficient

Aurora acknowledges the need for efficient investment in reliability and does not consider the TEC objectives as an absolute requirement, and therefore considers "do nothing" under the best endeavours requirement for compliance. Aurora considers benefits from both GSL payments and the value of customer reliability when assessing projects for approval. OTTER acknowledges the value of the GSL payments do not reflect the customer value of reliability alone[9].

Aurora utilises the VCR prescribed in the STPIS to assess the project. This is implemented within Aurora's Investment Prioritisation Tool, and applies to reliability projects. Aurora believes it has sufficient governance in procedures to ensure all projects undertaken are prudent and efficient.

---

[7] Local Reliability Supporting Reference- LV and Community boundary comparison (NW-#30245576)

[8] Local Reliability Supporting Reference- kVA Distribution analysis (NW-#30245576)

[9] OTTER-Aurora Joint working group Final Report- Distribution Network Reliability Performance Standards- Vol section 2.4.2 GSL Design Principles pg 11

2.7. The STPIS does not provide an incentive to address Rural Communities

The STPIS weights performance by the energy consumption in the respective categories. This has the effect of increasing the value of reliability in the Urban category. Aurora accepts there is sufficient incentive to manage reliability in these communities. However, the relatively low energy consumption in the Lower Density Rural and Higher Density Rural communities reduces the incentive.

2.8. Local Reliability Summary

Aurora has shown the proposed expenditure under the local reliability program is:

- required to fulfil its capital expenditure objectives;
- required in addition to the asset replacement funds;
- economically efficient;
- not incentivised under STPIS; and
- does not constitute improvement to average performance

2.9. Protection and Control Programs

Many of Aurora's Protection and Control programs have historically formed part of the Reliability tool, and managed through System Performance team. As a result, the work programs have similar work category names and codes. With the new Network Strategy to maintain reliability, these programs have been modified accordingly, but have retained the previous category codes.

The remote control programs have not been designed to improve reliability as a primary outcome; however Aurora acknowledges that some programs may improve reliability as a secondary outcome. Other programs are based solely on Aurora's requirements under the NER to electrically protect its assets. Aurora believes the expenditure forecast in these programs[10] is required to meet its capital expenditure objectives.

2.10. Consequential equipment damage

Aurora has obligations under the NER S5.1a.8 to clear faults within the power system sufficiently rapidly such that consequential equipment damage is minimised. The work programs PRLVR and PRIGF both address this objective by ensuring the assets are suitable protected from damage through high fault levels as a consequence of incorrect fusing.

In the absence of this funding Aurora is unable to meet this requirement, and some assets, particularly small gauge GI conductor will be exposed to fault levels beyond its design rating.

Additional protection for heavily loaded spurs also addresses operational and safety issues as described in the Procedural guideline- additional protection for heavily loaded spurs.

[10] Work Categories PRIGF, PRLVR

3. Confidentiality

Aurora does not consider any information contained within this document to be confidential.