

**SUBMISSION TO THE AUSTRALIAN ENERGY REGULATOR**

**ELECTRICITY DISTRIBUTION NETWORK SERVICE PROVIDERS**


**SERVICE TARGET PERFORMANCE INCENTIVE SCHEME**

**19th March 2009**



SPA Consulting Engineers (QLD) Pty Ltd

P.O. Box 664, North Cairns  
QLD, 4870  
PH (07) 4032 3322  
Email [info@spaconsulting.com.au](mailto:info@spaconsulting.com.au)  
[www.spaconsulting.com.au](http://www.spaconsulting.com.au)

<b>REVISION HISTORY</b>				
Rev	Date	Author	Reviewed / Authorized	Description
1	19-03-09	S. Perkins		Submitted to AER

## 1 INTRODUCTION

SPA Consulting Engineers (QLD) Pty Ltd's (SPA) primary field of practice is the design, documentation and contract administration of electrical distribution and roadway lighting for contestable subdivision developments in regional Queensland.

We are aware that the AER wishes to make amendments to the to the Service Target Performance Incentive scheme (STPIS) for the reasons outlined in section 1 of the Explanatory Statement. By seeking submissions however the AER offers the opportunity of correcting other elements in version 1.0 of the distribution STPIS and it is in this context that SPA make this submission.

Given the very limited financial resources available to SPA, it has been necessary to limit this submission to the Customer Service Component (CSC) and Guaranteed Service Level (GSL) component of the STPIS, despite the significant public interest element that applies the Reliability of Supply component.

### 1.1 INHERENT POWER IMBALANCE

In making this submission SPA acknowledges the substantial power imbalance that exists between Distribution Network Service Providers (DNSPs) and their customers, and also with those required to interact with DNSPs. The commercial "upper hand" held by the DNSPs is extends further than the simple commercial position of being a monopoly and also includes greater power due to the DNSP's:

- control of information,
- ability to present a position of power, particularly through the historical position of DNSPs previously being "power authorities" with limited regulation and extraordinary power,
- controlling the timing of network activities such as provision of design parameter, determining timing for commissioning and connection of new network assets (funded externally to the DNSP),
- determining (with little or no external review) head works contributions for network extensions,
- taking the roles of legislator, police and judiciary with respect to accreditation and management of external entities who, funded by customers requiring network extensions, carry out the design and construct network assets, even though these assets are not funded by the DNSP, and
- having the resources (due to size alone) to dedicate to the provision of substantial submissions, which in themselves can lead to favourable regulation of the DNSPs.

This power imbalance produces a public perception that DNSPs will inevitably behave as monopolies, with little, no or ineffectual external regulation. This public perception in turn creates a situation where the public are unwilling to make submissions to regulators, because of the inevitability that their submissions will be fruitless.

We request that the AER gives additional weighting to this SPA submission due to the reality that the AER is unlikely to receive submissions from organizations other than DNSPs, because of the power imbalance detailed above.

Finally in making this submission SPA is aware of the paradox that, the AER itself has greater similarity to the DNSPs that it regulates than to those who it regulates for. Because of the similarities, the AER is likely to take a passive approach to regulation rather than an active, commercial and enquiring approach that is driven by active competition and this passive

approach can then reflect through to DNSPs operating with lesser performance than would otherwise occur.

## 1.2 AUDITING OF DATA REPORTED BY DNSP ENTERPRISES

An over-riding consideration which does not appear to be given significant attention is active auditing of data reported by DNSPs.

Presently DNSPs report on the various elements of their operations including, reliability of supply, quality of supply, customer service, and guaranteed service levels using their own systems and do not provide access on a real time basis to the AER to permit verification of reported data.

The AER does not take a highly active role in auditing the systems used by the DNSPs or the accuracy of information provided by the DNSPs and to a significant extent relies on the DNSPs to self manage reporting.

DNSP staff are fully aware of the negative impact on their enterprises associated with reporting poor outcomes to the AER (and other regulators) and many staff in DNSPs have salary packages that include key performance indicators related to benchmarks tied to STPIS parameters.

Given the consequences of reporting poor parameters to the AER, there is a natural tendency for staff in DNSPs to under report unfavourable parameters and exaggerate favourable parameters. With such a position staff will naturally find innovative methods to circumvent the need to report unfavourable parameters.

We strongly recommend that the AER implement an **active auditing** regime to ensure that DNSPs are reporting correctly to the AER and that the systems used by the DNSPs can be monitored in real time by the AER.

We also recommend that the revenue at risk component of the service target performance incentive scheme includes parameters for “accuracy of systems and reporting” as STPIS parameters themselves. Additionally should the AER, (in its more **active auditing** of DNSPs) detect that the DNSP under reported events that would negatively affect them, then the cost penalties to the DNSP should be of such a magnitude as to present a “high risk” strategy for the DNSP to under report.

We are aware of the penalties that are included in the NEL under subdivision 5, 28R, however their magnitude is negligible with respect to the competing inducements available from DNSPs for staff to achieve positive STPIS parameters, which then requires that the AER take an active role in auditing of DNSPs.

## 2 CUSTOMER SERVICE COMPONENT AND GUARANTEED SERVICE LEVEL COMPONENT

The Customer service component of the STPIS includes four service parameters, telephone answering, streetlight repair, new connections and response to written enquiries, which are also reflected in the GSL component.

This submission relates to the later three of these four service parameter.

### 2.1 STREET LIGHTING

Using the streetlight repair parameter as the principal trigger for the roadway lighting maintenance is an inherently flawed methodology because:

- the natural effect of this parameter is to lead DNSPs to utilize only street lights that have a low failure rate, irrespective of their luminous efficacy, energy consumption or lumen output depreciation,
- the parameter leads DNSPs to only “repair” failed street lights, rather than adopt a maintenance program related to pedestrian and vehicle user safety by ensuring that the roadway lighting is maintained in accordance with the maintenance requirements documented at the time of design,
- the methodology relies on the actions of the public or road authority to trigger a maintenance event rather than a maintenance system which actively maintains the roadway lighting, and
- the methodology does not consider the fact that lamps continue to provide a less and less output over time, and in fact can continue to provide some output years after the output has fallen to levels such as to make the lamp practically useless.

### **2.1.1 STREET LIGHTING REPAIR**

We recommend that the street lighting repair parameter and associated GSL parameter thresholds be maintained, but that a new GSL be added for Street lighting maintenance, as detailed below.

### **2.1.2 STREETLIGHT MAINTENANCE**

The maintenance of roadway lighting is a critical element in ensuring pedestrian and motorist and to this end Australian Standards have been developed for the public interest.

The Australian Standards which deal with roadway lighting are the AS/NZS 1158 series. These standards include substantial elements regarding the maintenance requirements for roadway lighting. The same standards require that designers of roadway lighting include details of the maintenance anticipated so that the output of lanterns can be de-rated to account for lamp and lantern output depreciation and for periodic spot checks of lighting between bulk lamp replacement periods.

We strongly recommend that in the interest of public safety that parameters for the maintenance of roadway lighting be included in the customer service component.

As a starting point, we recommend that each DNSP publish their policy for the maintenance of roadway lighting and have it subjected to public scrutiny and endorsement by the AER before adoption. After adoption of DNSP’s policy for the maintenance of roadway lighting, the DNSPs then must report on their performance and this performance be included as a STPIS parameter.

For the information of the AER, the following represents the most commonly adopted maintenance assumptions used by those carrying out roadway lighting design:

- Periodic bulk lamp replacement to ensure that each lamp is replaced with a maximum 36 month interval. The bulk re-lamping interval be reduced as required to ensure that lamp outputs do not fall below 80% of their 100 hour output values,
- Lantern cleaning and maintenance to be carried out at the same time as lamp replacement, and
- Periodic inspections of the roadway lighting at night by the DNSP to record failed lanterns, so that the DNSP does not rely on the public as their trigger for restorative maintenance.

## 2.2 RESPONSE TO WRITTEN ENQUIRIES

This parameter as it stands is of no value to the public and does nothing in terms of effective regulation of DNSPs. All that is required to achieve a high performance result is for the DNSP to provide an acknowledgement response to the author of the enquiry within a very short time of having received it.

As an example of this, when making application to the regional Queensland DNSP (Ergon Energy) a written application is submitted and in general, an acknowledgement letter / email is provided within 14 days. Ergon Energy (as an example) will frequently take in excess of 90 days to provide a meaningful response and we have examples of delays exceeding 150 days! The delays experienced by applicants due to response times of DNSPs have a significant adverse affect on the applicants, causing financial hardship and damaging the economy through supply side constraints. As a part of our operations we record response times for certain correspondence with Ergon Energy and we would be pleased to make this information available to the AER should it be requested.

We recommend that the definition be amended to include a requirement for the DNSP to finalize the response such that it fully addresses the issues raised in the enquiry within nominated times. We recommend that 21 days be allocated for DNSPs to provide such a comprehensive response and that this be included into table 3 (GSL Payment amount) with a payment amount of \$10.00 per day for each day exceeding the 21 day notional time.

Additionally we recommend that written correspondence be defined to include Facsimile and email communications.

So that GSLs can be managed a system would be implemented the DNSPs to record on a database, all incoming correspondence and responses and by providing a portal to the AER to this system, the **Active Auditing** element referred to in our comments above could be carried out automatically.

## 2.3 NEW CONNECTIONS

The new connections parameter includes a threshold of “Connection on or before the day agreed”.

We have detailed below issues which require attention with respect to new connections.

### 2.3.1 NEW ESTATES

In regional Queensland (Ergon Energy being the DNSP), customers requiring network extension make application for work via the Customer Initiated, Capital Works (CICW) process. Under the CICW process land developers (residential / commercial / industrial) are required to fully fund the cost of the network asset, despite the revenue from the asset being received by Ergon Energy. Under the CICW process, developers are able to have most urban underground residential subdivision works designed and constructed commercially via the a process generically known as Developer Design and Construct, which Ergon Energy refer to as UDC.

Presently Ergon Energy have advised UDC customers making application to them for supply that they will attempt to make supply available to the UDC customers twelve weeks after Ergon Energy audit and accept the works designed and constructed and funded by the developer customer. This time frame is imposed upon developer customers because of Ergon Energy's monopoly status and could not be considered to be “agreed” as it is established on a “take it or leave it” basis.

We request that the AER nominate a maximum time of 21 days from time of audit acceptance until time of connection for projects carried out on the basis of Developer Design and Construction of network connection assets.

### **2.3.2 NEW CONNECTION GSL PAYMENT AMOUNT**

We request that the AER amend the GSL Payment amount for new connections detailed in (section 6.3.3, Table 3) to reflect the relationship between the customers load and the payment amount.

We have assumed that the current amount is based on a typical residential customer. Ergon Energy deem a typical residential customer to have an ADMD of 5 kVA. Whilst an individual residence is likely to have a maximum demand of 8 – 10 kVA and an average maximum demand of 1 – 2 kVA, a notional value of 5 kVA could be set as reasonable. On that basis, the payment amount could be rationalized to \$10.00 per day per kVA of ADMD with a maximum penalty of 6 days.

Under these circumstances a residential customer's GSL would be unchanged whereas a large customer (commercial / industrial, etc) that has an ADMD of say 1000 kVA could receive a payment of \$10,000.00 per day of delay, up to a maximum of \$60,000.00.

Such payments, would more accurately reflect the commercial costs to the community from failure of a DNSP to make supply available and would also provide incentives for DNSPs to make appropriate provisions for supply.

In the specific instance of Developer Design and Construct, the payments could be considered to apply if the DNSP does not provide supply to each potential customer's supply point in the development within 21 days after auditing and accepting the network asset. Payments would then be made to the developer on the basis of the agreed ADMD of the development.