REVIEW OF OPTIONS FOR IMPLEMENTATION OF A CUSTOMER SERVICE INCENTIVE SCHEME FOR ELECTRICITY CUSTOMERS

FINAL REPORT

July 2010

Level 9, 38 Cavenagh Street DARWIN NT 0800
Postal Address GPO Box 915 DARWIN NT 0801
Email: utilities.commission@nt.gov.au
Website: www.utilicom.nt.gov.au

Table of Contents

Confidentiality

The Commission will make submissions publicly available. A person not wanting their submission to be public must clearly specify that the document (or any part of the document) should be kept confidential. A version of the submission suitable for publication (i.e. with any confidential material removed) should also be provided.

Public access to submissions

Subject to the above, submissions will be made available for public inspection at the office of the Commission and on its website (www.utilicom.nt.gov.au).

To facilitate publication on the Commission's website, submissions should be made electronically by disk or email. However, if this is not possible, submissions can be made in writing.

Inquiries

Any questions regarding this report should be directed in the first instance to the Executive Officer, Utilities Commission at any of the following:

Utilities Commission
GPO Box 915
DARWIN NT 0801

Telephone: 08 8999 5480
Fax: 08 8999 6262

Email: utilities.commission@nt.gov.au

CHAPTER 1

Overview

Introduction

1.1 In November 2009, the Treasurer endorsed terms of reference for the Commission to undertake a review of options for the implementation of a customer service incentive scheme for electricity customers. The purpose of the review is to investigate and report on options for implementation of:

- a financial incentive scheme, by which the Power and Water Corporation (PWC) is rewarded or penalised through higher or lower electricity prices for service performance; and
- a guaranteed service level scheme, by which individual customers receive payments if PWC does not meet minimum acceptable standards of service to those individual customers.

1.2 The purpose of this review is to recommend a course of action that will ensure electricity generation, networks and retail service standards are appropriate in the Territory, and give PWC, as the sole electricity service provider, the incentive to improve service performance.

Proposed guaranteed service level scheme

1.3 The Commission's recommendation is that a guaranteed service level (GSL) scheme providing for payments to be made to customers who receive very poor levels of service should be implemented in the Northern Territory.

1.4 The proposed scheme includes network reliability measures and network customer service measures. Generation reliability measures and retail customer service measures have not been included at this time as the Commission is not certain that a GSL scheme is an effective mechanism for encouraging improvements in generation and retail service performance.

1.5 The Commission will consider regulatory options to provide effective incentives for improved generation reliability and retail customer service outcomes. In particular, the Commission will consider regulatory measures to enhance incentives for generators to achieve improved reliability outcomes as part of upcoming reviews of System Planning Monitoring and Reporting, and Electricity System Planning and Market Operation Roles and Structures.

1.6 The Commission's recommended performance measures, thresholds and payment amounts are set out in table 1.1.

Table 1.1: GSL scheme performance measures, thresholds and payment amounts

Performance measure	Threshold	GSL Payment
Frequency of outages.	CBD and Urban feeders: More than 12 outages in a financial year. Rural short and Rural long feeders: More than 16 outages in a financial year.	$80.00 $80.00
Duration of a single outage.	More than 12 hours and less than 20 hours. More than 20 hours.	$80.00 per event. $125.00 per event.
Cumulative duration of outages.	More than 20 hours in a financial year.	$125.00
Failure to establish a new connection within a specified time.	Reconnection to an existing property - within 24 hours. New connection to a property in a CBD or Urban area - within 5 business days. New connection to a property in a Rural area - within 10 business days.	$50.00 per day late, up to a maximum of $300.00
Failure to give sufficient notice of planned outages.	At least 2 business days notice.	$50.00
Failure to keep a (network related) appointment on time.	In CBD and Urban areas, within 30 minutes of agreed time. In Rural areas, within 1 hour of agreed time.	$20.00
Failure to respond to a (network related) written enquiry within a specified time.	Within 2 weeks of receipt.	$80.00

1.7 The scheme will only apply to customers using less than 160 megawatt hours (MWh) a year and located in the Darwin-Katherine, Alice Springs and Tennant Creek systems.

1.8 The following events and supply interruptions would not give rise to a GSL payment:

- load shedding due to a generation shortfall;
- supply interruptions due to planned outages, where at least two business days notice has been given of the planned outage;
- momentary interruptions of less than one minute;
- events that are outside the reasonable control of the service provider, such as traffic accidents and vandalism, and natural events that are identified as statistical outliers using the 2.5 beta method;

For natural events that are identified as statistical outliers using the 2.5 beta method, the service provider must apply in writing to the Commission, within 30 business days of the event occurring identifying:

a) the relevant event

b) the impact of the event on the service provider's reliability performance

c) the proposed extent of the exclusion

d) reasons explaining why the Commission should consider the event as an exclusion

- an interruption resulting from System Control exercising any function or power under any applicable legislation or code;
- an interruption resulting from a direction by a police officer or other authorised person exercising powers in relation to public safety; or
- an interruption requested by a customer, or caused by a customer's actions or electrical installation.

1.9 The scheme shall be funded from PWC's general revenue. The GSL scheme, including thresholds, payment levels and funding arrangements, will be reviewed as part of the five yearly network price determination process.

1.10 GSL payments are to be made automatically via rebate on the next bill, or in another form agreed between PWC and the recipient if they are no longer a customer of PWC and will not receive a future bill.

1.11 Customers will have the ability to claim a payment if they consider they have experienced service performance that warrants a GSL payment.

1.12 The Commission understands that PWC will have the information management systems necessary to support the operation of the proposed GSL scheme by July 2011. However, the Commission understands that these systems may not be completely accurate in identifying if customers are affected by a supply interruption.For the avoidance of doubt, where there is uncertainty about which customers were affected by an outage, PWC Networks should assume all customers on the affected feeder are eligible for a GSL payment.

1.13 The service provider will publish information so that customers can identify if they are supplied through a CBD, urban, rural short or rural long feeder and whether they are located within a CBD, urban or rural area.

1.14 The Commission considers a GSL scheme should be able to operate effectively from 1 July 2011.

Proposed financial incentive scheme

Networks

1.15 The Commission's recommendation is that a financial incentive scheme providing for adjustments to network tariffs linked to average service performance for all customers not be implemented at this time.

1.16 The Commission is not satisfied about the reliability of data to set a base level of performance or the financial volatility associated with such a scheme in the Territory.

1.17 Consistent with the 2009 network price determination, a paper trial of a financial incentive scheme will be run for the 2009-10 to 2013-14 regulatory period to provide further analysis of the costs and benefits of implementing such a scheme in future periods.

1.18 The paper trial will determine an s-factor based on system average interruption duration index (SAIDI) performance.

1.19 The paper trial will be based on one aggregated region only (Territory wide), rather than having separate targets for different regions.

1.20 The baseline target against which performance will be measured is a rolling average of actual performance over the five preceding years.

1.21 The incentive rate used will be the Australian Energy Regulator's (AER) 'value of customer reliability' for non-CBD segments of $47,850/ megawatt hour (MWh), adjusted by the consumer price index (CPI) from the September quarter 2008 to the start of the relevant regulatory period, set out in the AER's Service Target Performance Incentive Scheme.[1]

1.22 The methodology adopted for the paper trial will be the methodology set out in the AER scheme.

Generation and retail

1.23 No financial incentive scheme is proposed for generation or retail service providers at this time due to practical difficulties of implementation.

Implementation

1.24 The Commission has advice that implementation of a GSL scheme in the Territory requires amendment to the *Electricity Reform Act*. The Commission notes that the proposed GSL scheme could be voluntarily adopted by PWC (or other service providers) in a customer charter in anticipation of any legislative amendments.

1.25 The Commission notes that the *Electricity Networks (Third Party Access) Act* and Code currently provide for the implementation of a financial incentive scheme. No legislative change is required to establish a financial incentive scheme for distribution network services.

[1] Australian Energy Regulator, November 2009, Electricity Distribution Network Service Providers Service Target Performance Incentive Scheme.

CHAPTER 2

Introduction

Background

2.1 The electricity supply industry in the Northern Territory is regulated by the *Electricity Reform Act*, *Electricity Networks (Third Party Access) Act*, *Utilities Commission Act* and associated legislation. This statutory framework was introduced on 1 April 2000.

2.2 The statutory framework is primarily focused on regulating the activities of electricity industry participants and customers in the Darwin-Katherine, Alice Springs and Tennant Creek power systems – referred to as the market systems. Key elements of the statutory framework are:

- third party access to the Darwin-Katherine, Alice Springs and Tennant Creek electricity networks;
- staged introduction of retail contestability, with all customers contestable from 1 April 2010; and
- an independent economic regulator, the Utilities Commission, to regulate monopoly electricity services, licence market participants and enforce regulatory standards for market conduct and service performance.

2.3 The Power and Water Corporation (PWC) is the main participant in the market systems, generating the majority of electricity, operating the network and supplying retail services to all customers. PWC also provides water supply and sewerage services to customers throughout the Territory.

2.4 PWC is a vertically integrated electricity service provider, with generation, network and retail business units operating as separate businesses.[2] The commercial relationship and transactions between each unit is subject to oversight by the Commission.[3] PWC is owned by the Territory Government, and is also subject to oversight by a shareholding Minister through the *Government Owned Corporations Act*.

2.5 In the three market systems, PWC is currently the sole electricity retailer, supplying electricity to almost 75 000 customers in the Darwin-Katherine, Alice Springs and Tennant Creek power systems.[4] PWC is also the main electricity generator, with almost 91 per cent of generation capacity. There are four other firms generating electricity for the Darwin-Katherine and Alice Springs systems. However, these businesses generate

[2] This paper refers to the separate business units as PWC Retail, PWC Networks and PWC Generation.

[3] The Commission's functions and powers are defined in regulatory instruments including the licensing framework and the Northern Territory Electricity Ring-Fencing Code.

[4] Power and Water Corporation, September 2009, 2008-09 Annual Report, page 23.

electricity under contract for PWC rather than selling directly to an electricity retailer, and PWC provides the fuel used for electricity generation.[5]

2.6 PWC operates the Darwin-Katherine, Alice Springs and Tennant Creek networks, and is responsible for system control.[6] The networks are not interconnected, and are separated by long distances. The networks comprise 730 kilometres (km) of high voltage transmission lines and 7378 km of low voltage distribution lines.[7]

2.7 Electricity supply in regional and remote centres of the Territory is mainly managed by the Territory Government and a service provider through a contract for service model. These systems include: the 72 communities and about 600 outstations where essential services are provided through the Territory Government Indigenous Essential Services program; three mining townships (i.e. Nhulunbuy, Alyangula and Jabiru), where electricity is supplied by the associated mining firm; and eight remote townships (e.g. Elliott, Yulara and Ti-Tree).

Developing a customer service incentive scheme for the Northern Territory

2.8 The Commission has terms of reference from the Treasurer to review and report on options for implementation of a customer service incentive scheme under the Electricity Standards of Service (ESS) Code. The purpose of the review is to recommend options for the design of a scheme to give electricity service providers the incentive to improve service performance.

2.9 The terms of reference require consideration of the merits of implementing a customer service incentive scheme for electricity generation, networks and retail services. Although customer service incentive schemes operating elsewhere in Australia are generally limited to distribution network service providers, no aspect of performance of the electricity supply industry is excluded for the purposes of this review.

2.10 Performance which could be subject to a guaranteed service level (GSL) scheme includes frequent outages or long outages (e.g. payment if a customer experiences more than a defined number of outages in any year, or if supply is interrupted for more than a defined period). Performance which could be subject to a financial incentive scheme includes average frequency of outages, average duration of outages, and telephone answering time.

Summary of terms of reference

2.11 The terms of reference require the Commission to:

- report on the merits of implementing a customer service incentive scheme or similar service performance incentive scheme in the Territory;

[5] These generators are located at Pine Creek (between Darwin and Katherine), Shoal Bay (at the Darwin City Council dump) and Brewer Estate (in Alice Springs).

[6] The System Controller is located in the PWC networks business unit, and is responsible for monitoring and controlling the operation of the power system to ensure the system operates reliably, safely and securely in accordance with the System Control Technical Code.

[7] Power and Water Corporation, September 2009, 2008-09 Annual Report, page 23.

- identify options for the design of a customer service incentive scheme in the Territory;
- recommend a preferred option for the design of a customer service incentive scheme, and provide detailed plans for implementation of that recommendation.

2.12 In undertaking the review, the Commission is to take into account:

- any recent relevant policy developments and regulatory practice in other jurisdictions, particularly the development of the service target performance incentive scheme by the Australian Energy Regulator (AER);
- the capability of PWC systems to reliably record the impact and duration of interruptions to supply or poor service performance; and
- all relevant economic and policy developments, including current and forecast economic conditions.

Conduct of the review

Issues paper

2.13 The Commission released an Issues Paper on 24 March 2010 to initiate the Review and to obtain comment from interested parties on the considerations and issues for implementing a customer service incentive scheme for electricity customers in the Territory.

2.14 The Issues Paper examined the current arrangements and recent history of service performance in the Territory, and considered the practice and experience with customer service incentive schemes in other Australian jurisdictions.

2.15 The Commission received four submissions on the matters raised in the Issues Paper from Northern Territory Treasury (Treasury), the Northern Territory Major Energy Users (NTMEU), the Energy Retailers Association of Australia (ERAA) and PWC.

Draft Report

2.16 The Commission released a Draft Report on 28 May 2010 with proposed draft recommendations for the implementation of a customer service incentive scheme for electricity customers.

2.17 In summary, the Commission proposed:

- introducing a GSL scheme in the Territory, involving payments to customers who receive very poor levels of generation and network service, according to specified performance measures, thresholds and payment amounts;
- introducing a financial incentive scheme, involving adjustments to network tariffs based on average service performance. A paper trial of the scheme would be run for the 2009-10 to 2013-14 regulatory period to provide further analysis of the costs and benefits of implementing such a scheme in future periods; and
- no financial incentive scheme was proposed for generation due to practical difficulties of implementation

2.18 Treasury and PWC made submissions commenting on the proposals outlined in the draft report.

Treasury

2.19 In summary, Treasury supports the proposal to introduce a GSL scheme and a paper trial of a financial incentive scheme, in-principle.

2.20 Treasury notes that initial funding will be from PWC profits although the Commission may consider including allowance in networks regulated revenue from 1 July 2014 and agrees that this approach appears reasonable. However, Treasury also seeks a further opportunity to comment on funding via network charges when this is considered at next regulatory reset.

Power and Water Corporation

2.21 In summary, PWC supports the proposal to introduce a GSL scheme and notes the Commission has adopted the majority of design elements proposed by PWC.

2.22 PWC did not comment on the proposed design of paper trial of s-factor scheme, other than to advise that PWC looks forward to being provided further details prior to commencement of a paper trial.

CHAPTER 3

Objectives and principles

Service incentive schemes

3.1 Standards of service are an important feature in any industry. However, firms operating in sectors with natural monopoly characteristics, such as electricity distribution networks, are subject to little or no competition, and have less incentive to provide good service as customers generally cannot move to an alternative provider.

3.2 In the case of the electricity industry, governments or industry regulators typically monitor the performance of electricity network service providers to ensure they provide acceptable levels of service. The two most common approaches adopted in Australia to provide electricity service providers with financial incentives to achieve a certain performance are:

- GSL schemes which involve payments to customers when performance does not meet defined standards of service; and
- financial incentive (also referred to as s-factor) schemes which establish financial incentives and penalties for network performance and are imposed through the network revenue or price regulation framework.

3.3 Additionally, service providers may commit to self imposed standards of service, for example by agreeing to voluntarily make a payment to customers for breach of a standard defined in a customer charter.

Objectives of a GSL scheme

3.4 A GSL scheme involves payments by a service provider to individual customers who have received a very poor level of service, as defined by a government or independent regulator. GSL schemes most commonly apply to distribution networks service providers (DNSP).

3.5 The main objective of a GSL scheme is to encourage improvement in areas of poor performance. A GSL scheme also provides customers with reassurance that the poor performance they have received is recognised and acknowledged by the service provider, and will be addressed.

3.6 GSL schemes are designed to set a floor to the level of service that a customer is entitled to receive by setting a threshold level for a particular aspect of service performance. If the actual level of service falls short, the service provider is required to make a payment to the affected customers. The threshold levels and the related customer payments are set in advance, so that customers know the standard of service they should expect to receive, and the service provider knows the consequences if those service levels are not met. Primarily, GSL schemes are designed to provide an incentive to improve service to the worst served customers.

3.7 There is a definite distinction between GSL payments and 'compensation' payments for poor service performance. GSL payments are an amount paid to customers that receive service levels below a predetermined threshold, and are a recognition of poor service rather than compensation. Compensation for poor service performance involves customers making claim for loss or damage arising from loss of supply or from poor quality of supply.

The case for a GSL scheme

3.8 Where a firm or industry has the potential for exercising monopoly power, regulatory measures, such as the regulation of service performance through GSL or financial incentive schemes are needed to ensure that acceptable service performance is maintained.[8]

3.9 GSL schemes for DNSPs are well established throughout Australia and currently operate in every Australian jurisdiction except the Territory. These schemes generally include reliability performance measures relating to the frequency and duration of outages and network related customer service measures such as meeting specified timeframes for new connections, appointments and responding to enquiries.

3.10 There is competition in the generation and retail sectors of the electricity industry in other Australian jurisdictions, with multiple generators of electricity and multiple retailers operating in the market. Customers not satisfied with retail performance are able to move to another retailer, while generators not meeting reliability and quality of supply requirements are not dispatched. These competitive disciplines (supported by technical and customer protection measures) encourage retailers and generators to strive to maintain and improve service performance.

3.11 The situation in the Territory is somewhat different, with PWC currently the sole electricity retailer and main electricity generator. Although these sectors are open to competition, the reality is that there are no competitors to PWC in these markets at this time, and effective competition is unlikely in the medium term due to structural barriers, such as small customer retail prices that are below cost reflective levels and limited access to fuel supplies.

3.12 Unlike the national electricity market (NEM), Territory customers experience regular outages due to poor generation performance. Generation reliability outcomes in the Territory are probably partly due to the small scale of the systems, as the number and location of generation facilities means there is less reserve or redundant capacity than in a larger system. However, reliability outcomes could be influenced by the lack of competition in the generation sector, with PWC Generation operating in a monopoly environment, and facing fewer incentives to provide improved service performance than exist in a competitive environment.

3.13 With no market mechanism to promote improvement in performance in the Territory, there is a case for introducing regulatory measures to support improvements in reliability performance. From a customer perspective, frequent or long power outages

[8] Essential Services Commission of South Australia, November 2008, South Australian Distribution Service Standards 2010-2015 Final Decision, pages 7-8.

should be recognised, regardless of whether they are caused by poor network or generation service performance.

3.14 As with the electricity generation sector, the absence of competition in the retail sector means that PWC Retail faces fewer incentives to provide improved service performance than exist in the NEM or a similar competitive environment.

3.15 Retail activities relate to packaging of the services provided by generation and networks, and billing for these services. Performance measures relating to retail could encompass the answering of phones within a specified time and dealing with billing and other complaints. As such, retail performance is more subjective, and few aspects are suited to inclusion in a GSL scheme.

Commission's draft recommendation

3.16 The Commission's draft recommendation was to introduce a GSL scheme providing for payments to customers who received very poor levels of service.

3.17 The scheme was to include both network and generation reliability performance measures and network related customer service measures. Retail customer service measures were not to be included.

Views in submissions to Draft Report

3.18 PWC considers that generation performance should be excluded from a GSL scheme, noting that generation is not included in GSL schemes in other jurisdictions, and that setting appropriate generation targets and thresholds would be difficult.

3.19 Further, PWC indicated that generation performance is adequately monitored by the Commission, citing examples such as the ESS Code and the System Control Technical Code (incorporating the Secure System Guidelines). PWC also noted that generation performance is monitored by the Energy Supply Association of Australia (ESAA).

3.20 PWC suggested that changes to the regulation of generation performance is better considered in the Commission's forthcoming Review of Electricity System Planning and Market Operation Roles and Structures.

Response to views in submissions and further analysis

3.21 Introduction of a GSL scheme for network services has received general support from stakeholders. However, there is less support for a GSL scheme for generation and retail businesses, with both PWC and the ERAA expressing the view that such schemes are best restricted to natural monopolies, and not imposed in sectors where there is a potential for competition to develop.

3.22 The Commission was requested to consider options to improve electricity generation, network and retail service performance.

3.23 The Commission considers that introducing a GSL scheme would support improvements to network service performance, by establishing a financial incentive for PWC Networks to address areas of poor network reliability and customer service performance.

3.24 The Commission has assessed the merits of introducing a GSL scheme for generation as a mechanism for establishing effective incentives for generators in the Territory to achieve improved reliability service performance while there is no competition.

3.25 However, the Commission recognises that a GSL scheme is unlikely to be an effective mechanism for encouraging improved generation reliability performance. Signals to generators would probably be muted by the actions of System Control, with System Control's load shedding practices determining which specific customers are affected by any particular outage.

3.26 Accordingly, the Commission intends considering regulatory measures to enhance incentives for generators to achieve improved reliability outcomes as part of upcoming reviews of System Planning Monitoring and Reporting, and Electricity System Planning and Market Operation Roles and Structures.

Commission's final recommendation

3.27 The Commission recommends the introduction of a GSL scheme in the Territory, with payments to customers who receive very poor levels of service.

3.28 The GSL scheme should apply to electricity network services, and include network reliability performance measures and network related customer service measures.

3.29 Generation reliability measures and retail customer service measures should not be included in a GSL scheme at this time. Nonetheless, the Commission considers there is a strong case for examining regulatory options for encouraging improvements in generation and retail service performance, while there is no competition in these market sectors in the Territory.

Objectives of a financial incentive scheme

3.30 A financial incentive scheme involves adjustments to regulated electricity network prices in response to service performance, and is based around achieving an average performance for all customers. Financial incentive schemes apply to DNSPs.

3.31 The objective of a financial incentive scheme is to encourage improvement in average system performance by allowing a DNSP to earn higher regulated revenues, from higher network charges, if performance is better than the agreed benchmark. This arrangement is included in the network price control determination by the regulator.

3.32 Financial incentive schemes in Australia are generally symmetric, reducing network charges when performance falls below benchmark levels, and increasing network charges when performance exceeds benchmark service levels.

3.33 In addition, a financial incentive scheme can be designed to promote different levels of service performance. As noted by the AER, a financial incentive scheme can be designed to:[9]

- maintain a desired performance level simply by setting a target and providing a reward when performance exceeds the target and a penalty if the target is not met;
- provide an incentive to improve performance over time by changing the target annually so that the network service provider is required to improve performance each year just to meet the target; or

[9] Australian Energy Regulator, November 2007, Electricity distribution network service providers: service target performance incentive scheme: Issues Paper, page 11.

- reward sustained performance improvements by setting the target for a year at the actual result for the previous year. Network service providers are thereby rewarded when service is better than the previous year and penalised when service is worse than the previous year.

The case for a financial incentive scheme

3.34 Financial incentive schemes have operated in Victoria, South Australia and Western Australia, and New South Wales ran a paper trial for the 2004-2009 regulatory period. Tasmania had a financial incentive scheme in place, but this was discontinued for the 2008-2012 regulatory period due to a lack of consistent historical data. There are no financial incentive schemes implemented in Queensland or the Australian Capital Territory.

3.35 The Ministerial Council on Energy (MCE) transferred the economic regulation of electricity distribution networks to the AER on 1 January 2008. The National Electricity Rules require the AER to publish a service target performance incentive scheme, which occurred in November 2009. However, transitional arrangements require the AER to have regard to any average or minimum service standards and GSL schemes that apply to DNSPs under jurisdictional electricity legislation.

3.36 The AER has now undertaken network price reviews for New South Wales (for the 2009 to 2014 regulatory period), the Australian Capital Territory (for the 2009 to 2014 regulatory period), Queensland (for the 2010 to 2015 regulatory period) and South Australia (for the 2010 to 2015 regulatory period).

3.37 For New South Wales and the Australian Capital Territory, the AER decided to collect and monitor the DNSPs service performance data during the 2009 to 2014 regulatory period, with no revenue being placed at risk during this period. However, the AER expects this to provide a reliable data series to allow the application of the national scheme in New South Wales from 1 July 2014.

3.38 For Queensland and South Australia, the AER determined that the service target performance incentive scheme would apply to the local DNSPs.

3.39 The Commission notes that financial incentive schemes in Australia only apply to businesses subject to price regulation, such as DNSPs, and the approach does not lend itself to application businesses with prices which are set in a market, such as generators.

Commission's draft recommendation

3.40 The Commission's draft recommendation was for the Commission to undertake a paper trial of a financial incentive scheme for PWC Networks for the 2009-10 to 2013-14 regulatory period to provide more reliable data on which to base a decision as to whether to introduce a financial incentive scheme for the next regulatory period starting on 1 July 2014.

3.41 No financial incentive scheme was proposed for generation at this time due to practical difficulties of implementation.

Views in submissions to Draft Report

3.42 PWC and Treasury supported the Commission's proposal to undertake a paper trial of a financial incentive (s-factor) scheme.

Response to views in submissions and further analysis

3.43 The proposal to introduce a financial incentive scheme received general support, but with some qualifications about design and timing.

3.44 The NTMEU supported the introduction of a financial incentive scheme in the Territory, and expressed a preference for a Territory scheme based on schemes operating in Victoria and South Australia. The NTMEU considered that these schemes provide adequate and appropriate trade offs between targets, incentives and penalties and sufficient financial drivers that seek to achieve efficiency.

3.45 The NTMEU noted that the national scheme developed by the AER does not provide the degree of incentive that a DNSP requires to improve performance, does not focus on the network elements most in need of attention and the financial stakes of the scheme are easily overtaken by 'gaming' by the DNSP in other areas of the building block regulatory mechanism.

3.46 Treasury noted that based on the experience to date in other jurisdictions, the effectiveness of financial incentive schemes is inconclusive. Factors noted by other regulators, such as lack of consistent historical data, difficulties in accurate forecasting and delays in processing data which contributed to incorrect baseline assumptions and targets, are also issues that are likely to arise in implementing a financial incentive scheme in the Territory.

3.47 PWC also noted a number of concerns regarding data reliability, advising that although the performance data collected by PWC is sufficiently accurate and detailed for internal reporting, the data is not sufficient for the purpose of establishing a financial incentive scheme. PWC noted that the Commission had concluded in the 2009 network price determination that a paper trial was necessary prior to introducing financial incentives or penalties for network performance.

3.48 The issues that concern the Commission are:

- the potential accuracy and availability of data. Poor data could lead to some perverse outcomes;
- the observed variability of service performance indicators are a concern, but the short period of data available limits the ability to smooth possible price effects; and
- as the accuracy of the service performance data improves, reported reliability levels could worsen unrelated to poor performance.

3.49 The Commission is of the view that, at this time, uncertainty about the reliability of performance data means a financial incentive scheme for PWC Networks involving actual monetary incentives or penalties means such a scheme may not work as intended. Additionally, the Commission considers there is merit in waiting on evidence of the effectiveness of the AER financial incentive scheme.

Commission's final recommendation

3.50 The Commission confirms its draft recommendation that a paper trial of a financial incentive scheme for PWC Networks be undertaken for the 2009-10 to 2013-14 regulatory period to provide more reliable data on which to base a decision as to whether to introduce a financial incentive scheme for the next regulatory period starting on 1 July 2014.

CHAPTER 4

Proposed design of a guaranteed service level scheme

Key design features

4.1 The Commission has identified the following key features of the design of a GSL scheme:

- the types of performance indicators included in the GSL scheme;
- the payment amounts and thresholds that might apply;
- the customers that should be the target of a GSL scheme;
- what type of events (e.g. cyclones) should be excluded from the scheme; and
- funding and payments options.

Proposed performance indicators, thresholds and payment amounts

Reliability of supply indicators

4.2 Reliability measures are viewed as the most important characteristic of distribution services. Indicators used to monitor and improve the reliability of supply of DNSPs include:

- SAIDI (system average interruption duration index), which is calculated as the sum of the duration of each planned or unplanned distribution consumer interruption (in minutes), divided by the total number of connected distribution consumers averaged over the year, excluding momentary interruptions (less than one minute duration);
- SAIFI (system average interruption frequency index), which is calculated as the total number of planned or unplanned distribution consumer interruptions, divided by the total number of connected distribution consumers averaged over the year, excluding momentary interruptions (less than one minute duration); and
- CAIDI (customer average interruption duration index), which is calculated as the sum of the duration of each unplanned distribution consumer interruption (in minutes), divided by the total number of unplanned distribution consumer interruption in that year, excluding momentary interruptions (less than one minute duration).

4.3 DNSP services subject to penalty payments and the applicable payment levels vary widely. Reliability of supply indicators used in GSL schemes elsewhere in Australia include:

- duration of a single supply interruption;
- annual cumulative duration of supply interruptions; and
- frequency of supply interruptions.

Commission's draft decision.

4.4 The Commission proposed that the following reliability performance indicators, thresholds and payment amounts be included in a GSL scheme.

Table 4.1: Draft Report Proposed reliability of supply performance indicators, thresholds and payment amounts

Performance measure	Threshold	Payment Amount
Frequency of outages	Interconnected networks: More than 12 outages in a 12 month period.	$80.00
	Radial networks: More than 16 outages in a 12 month period.	$80.00
Duration of a single outage	More than 12 hours and less that 20 hours.	$80.00 per event
	More than 20 hours.	$125.00 per event to a maximum of $300.00 per annum
Cumulative duration of outages	More than 20 hours in a 12 month period.	$125.00

4.5 The Commission took the preliminary view that generation and network related outages should be included in a Territory GSL scheme, on the basis that, from a customer perspective, the issue is the loss of power regardless of the reason.

4.6 The Commission proposed to differentiate between interconnected and radial networks, and to require PWC Networks to publish information so that customers can identify if they are supplied through an interconnected or radial network (e.g. in the form of a network map).

4.7 The Commission proposed that payments under the GSL scheme should be based on a rolling 12 month period, rather than a financial year basis, to avoid the potential for customers to experience 12 months of very poor performance across a calendar year, and not receive a GSL payment.

4.8 For each of the performance indicators, measures and payment amounts proposed for inclusion in the GSL scheme, the Commission adopted the proposals made by PWC in response to the Issues paper, or that were consistent with the thresholds and payments set through GSL schemes in place elsewhere in Australia.

4.9 However, the Commission foreshadowed that these thresholds and payments will be revisited regularly as part of the five yearly network price determination process. In particular, the Commission considered that the performance thresholds may be revised once better information is available about service performance, and to recognise any changes to standards of service arrangements.

Views in submissions to the Draft Report

4.10 PWC made the only submission commenting on the proposed reliability measures, thresholds and payments. PWC proposes some variations to the threshold descriptions for the reliability measures for network reliability:

- that 'unplanned' be included in performance indicator descriptors for frequency and duration of outages on the basis that including planned outages would penalise service providers for taking prudent action to repair and maintain assets; and
- that terminology of 'CBD and urban network' rather than 'interconnected networks' and 'rural short and rural long networks' rather than 'radial networks' should be used on the basis that this would be more informative and useful for customers and also consistent with other jurisdictions.

4.11 PWC queried the need for publishing a network map, suggesting that the need for such a map would be diminished if CBD, urban, short rural, long rural terminology is adopted and that customers would not need to identify the type of feeder they are on if payments are to be automatic as the onus is on PWC to identify eligible customers.

4.12 PWC queried the inclusion of cumulative duration of outages as a performance measure, citing data limitations in current systems and administrative capabilities. In particular, PWC drew the Commission's attention to the transient nature of the Territory population, noting that it would be unable to track a customer across multiple addresses in a year.

4.13 Further, PWC advised the Commission that the administrative costs of tracking frequency and cumulative duration of outages on a rolling year, rather than financial year, is difficult and prohibitive. However, PWC did not quantify the potential administrative costs.

Response to views in submissions and further analysis

4.14 The Commission is of the view that the indicators, thresholds and payment amounts should be set so that the GSL scheme is effective, and easy to administer. In this context, the Commission considers:

- the proposed $300 maximum payment amount for the duration of a single outage is not necessary. Based on historic performance in the Territory, the $300 cap would rarely have been reached. The Commission also notes that New South Wales is the only jurisdiction that provides for a cap on payments;
- that a number of events are excluded from the GSL scheme, one of which is planned outages where at least two days notice has been given. The Commission does not consider that there is any reason to specifically include this type of exclusion in the description of the performance measure, while leaving out other types of exclusions;
- that a Territory GSL scheme should use terminology commonly used in other jurisdictions, and intends replacing interconnected and radial descriptions of feeders with CBD, urban, short rural and long rural;[10]

[10] CBD is a feeder supplying predominantly commercial, high-rise buildings, supplied by a predominantly underground distribution network containing significant interconnection and redundancy when compared to urban areas; Urban is a feeder which is not a CBD feeder, with a maximum demand per total feeder route length greater than 0.3MVA/km; Short Rural is a feeder which is not a CBD or urban feeder and has a total route length less

- a network map should be published to allow customers to identify what feeder type they are connected to - a map of feeders, with each feeder identified as either CBD, urban, short rural or long rural, not identification of which feeder is supplying a particular customer at a particular point in time. Dynamic switching may change which feeder a particular customer is on, it should not change a feeder classification;
- the data limitations cited by PWC preventing inclusion of a GSL payment for the cumulative duration of outages appear to be for existing systems, but the Commission understands new asset information systems will provide enhanced capability. There is no requirement to track customers across multiple addresses; and
- PWC's proposal that payments under the GSL scheme should be based on a financial year basis, rather than a rolling 12 month period, on the basis of administrative simplicity.

Commission's final decision

4.15 The Commission recommends that the following network reliability performance indicators, thresholds and payment amounts be included in a GSL scheme.

Table 4.2: Proposed reliability of supply performance indicators, thresholds and payment amounts

Performance measure	Threshold	Payment Amount
Frequency of outages.	CBD and Urban feeders: More than 12 outages in a financial year Rural short and Rural long feeders: More than 16 outages in a financial year	$80.00 $80.00
Duration of a single outage.	More than 12 hours and less than 20 hours. More than 20 hours.	$80.00 per event. $125.00 per event.
Cumulative duration of outages.	More than 20 hours in a financial year.	$125.00

Customer service measures

4.16 Customer service measures refer to the (network or retailer) service provider's performance in regard to consumer requirements, including late connections, failure to attend appointments on time and responding to queries.

Commission's draft decision

4.17 The Commission's draft recommendation was that the indicators, thresholds and payment amounts proposed by PWC for customer service measures be included in a

---

than 200km; and Long Rural is a feeder which is not a CBD or urban feeder and has a total route length greater than 200km.

Territory GSL scheme with one addition – a performance measure of whether PWC Networks arrived on time for scheduled appointments.

Table 4.3: Draft Report Proposed customer service performance indicators, thresholds and payment amounts

Performance measure	Threshold	Payment Amount
Failure to establish a new connection within a specified time.	Within 24 hours to an existing property. Within 5 business days to a property in a new urban subdivision.	$50.00 per day late, up to a maximum of $300.00
Failure to give sufficient notice of planned outages.	At least 4 business days notice.	$50.00
Failure to keep a (network related) appointment on time.	Within 30 minutes of agreed time.	$20.00
Failure to respond to a (network related) written enquiry within a specified time.	Within 2 weeks of receipt.	$80.00

Views in submissions to the Draft Report

4.18 PWC proposes that the threshold description relating to the establishment of a new connection be amended so that "within 24 hours" refers to existing supply within major urban centres and "within five business days" refers to a property in a new major urban subdivision where extension or augmentation is not required, as this is an important clarification for customers.

4.19 PWC also proposes that with respect to keeping appointments, different thresholds for CBD/urban and rural should apply, or that an appointment window approach be adopted. PWC argued that this was a practical implementation issue given that there can never be complete time synchronisation between PWC and customer.

Response to views in submissions and further analysis

4.20 In establishing new connections, the Commission agrees with PWC that clarifying that the threshold does not apply where extension or augmentation is required appears reasonable. However, PWC has not advanced any argument as to why the thresholds should be restricted to major urban centres, or provided any definition of what constitutes a major urban centre.

4.21 Connections to an existing property are more properly described as reconnections, as this refers to a situation where a new customer moves into a premises where the service already exists. For such connections, the Commission considers that a 24 hour threshold is appropriate for all customers on the regulated network.

4.22 For new connections, that is for connections to properties where no previous service has been in place, and new infrastructure may be needed to make the connection, the Commission considers that a distinction between urban and rural is appropriate.

4.23 The purpose of a performance measure for keeping an appointment on time is to ensure that customers are required to wait around for a service person who may or may not turn up. The proposed GSL measure requires that if PWC makes an

appointment to see a customer at a particular time, then they should be there within 30 minutes of that time. While travel time eg to rural areas, should be taken into account by PWC when making appointment, the Commission acknowledges that this can be affected by factors outside PWC's control.

4.24 Synchronisation with customer is not relevant, as this should also be considered when making appointment. If customer is not home at the arranged time, then no payment by PWC is required.

4.25 The Commission also notes that PWC's customer charter provides for customers to be given at least two days notice of planned outages and considers that the GSL measure should reflect existing practice.

Commission's final decision

4.26 The Commission recommends that the following network customer service performance indicators, thresholds and payment amounts be included in a GSL scheme.

Table 4.6: Proposed customer service performance indicators, thresholds and payment amounts

Performance measure	Threshold	Payment Amount
Failure to establish a new connection within a specified time.	Reconnection to an existing property - within 24 hours Connection to a property in a new CBD or urban subdivision - within 5 business days Connection to a property in a new rural subdivision - within 10 business days	$50.00 per day late, up to a maximum of $300.00
Failure to give sufficient notice of planned outages.	At least 2 business days notice.	$50.00
Failure to keep a (network related) appointment on time.	In CBD and Urban areas, within 30 minutes of agreed time. In Rural areas, within 1 hour of agreed time.	$20.00
Failure to respond to a (network related) written enquiry within a specified time.	Within 2 weeks of receipt.	$80.00

4.27 Notice of a planned outage may be given by mail, press advertisement or other means which are reasonable in the circumstances.

Customers eligible for a GSL payment

4.28 The Commission considered if a GSL scheme should apply only to small customers and how small customers should be defined, whether it should be restricted to regulated networks and whether there should be distinctions between customer groups or regions.

4.29 Only PWC made specific comment, suggesting a 160 MWh threshold for customers in the market systems, with no other distinction between customer groups or regions. PWC proposed the 160 MWh threshold on the basis that these 'smaller customers' are not in a position to negotiate variable service levels through individual contracts.

4.30 The Commission notes that currently only customers who use more than 750 MWh of electricity a year negotiate individual contracts with PWC. Customers using less than 750 MWh a year, who became contestable from 1 April 2010 and are still protected by grace period arrangements, remain on PWC's standard contract and tariffs set by the Territory Government.

4.31 Nonetheless, annual consumption of up to 160 MWh a year is the generally accepted threshold adopted in Australia for identifying small customers.

4.32 PWC also submitted that the GSL scheme should be restricted to customers in the market systems (on regulated networks) in line with customer service incentive schemes operating in other jurisdictions.

Commission's draft decision

4.33 The Commission's draft recommendation was that small customers be defined as those customers using less than 160 MWh of electricity a year, and that a GSL scheme should be open to these customers only.

4.34 The Commission considered that the focus of a GSL scheme should be to avoid poor service performance for domestic and small customers, as larger businesses are able to manage risks through contractual or other arrangements e.g. insurance.

4.35 The Commission noted that extending a GSL scheme beyond the market systems and regulated networks would raise practical issues as the market systems are the only areas where PWC currently collects useable data. The majority of customers are located in the market systems.

4.36 In addition, the Commission currently has limited jurisdiction over service provision in the electricity systems and networks in regional and remote areas.

4.37 Although consideration may be given to extending a GSL scheme in future, at this time the Commission recommended that a Territory GSL scheme should only apply to customers in the market systems.

4.38 The Commission also recommended that thresholds and payments should be the same across the three market systems – Darwin-Katherine, Alice Springs and Tennant Creek.

Views in submissions to Draft Report

4.39 There were no views in submissions on this matter.

Commission's final recommendation

4.40 The Commission confirms its draft recommendation that a GSL scheme only be open to those customers using less than 160 MWh per annum who are located in the market systems, and that thresholds and payments will be the same across three market systems – Darwin-Katherine, Alice Springs and Tennant Creek.

4.41 Further, the Commission considers that the eligible party should be the account holder at the time the liability for the GSL payment is triggered, even if the account is closed. In regard to the GSL for multiple interruptions, the connection point should be

monitored and the obligation triggered by the number of interruptions to the connection point.

Events when GSL payments are not made

4.42 Events that are outside the reasonable control of the DNSP are generally excluded from a GSL scheme. Events that a network service provider cannot reasonably be expected to prevent or avoid, at least without excessive capital investment, include fire, floods and storms, traffic accidents and acts of vandalism.

4.43 In response to the Issues Paper, PWC provided a list of events and supply interruptions that it considered should be excluded from a GSL scheme:

- supply interruptions due to planned outages as these are generally scheduled to undertake necessary repairs and maintenance;
- momentary interruptions of one minute or less, given the operating environment in the Territory where these can be caused by airborne vegetation during storms and bats;
- those events which are deemed to be outside the control of the service provider including natural events such as cyclones, severe storms, fire and flood, traffic accidents and vandalism. The exclusion of the effect of severe interruptions should continue to be allowed using the exclusion method approved under the Standards of Service Code;
- multiple contingency events, for example where a number of generating units might fail or trip at the same time, or a transmission fault might occur at the same time as a generator trips. As noted by the AER, it would be inefficient to operate the power system to cope with such non-credible events, nor would the additional investment in generation or networks necessarily avoid such interruptions;
- an interruption resulting from a direction from the Power System Controller exercising any function or power under any applicable legislation or code;
- an interruption resulting from a direction by a police officer or other authorised person exercising powers in relation to public safety; or
- an interruption requested by a customer, or caused by a customer's actions or electrical installation.

4.44 PWC suggested that the exclusion of the effect of severe interruptions should continue to be allowed using the exclusion method approved under the ESS Code. However the Commission noted that the ESS Code uses the 2.5 beta method to identify the effect of statistical outliers for reporting purposes. This method does not remove the effect of these events, but rather allows reporting on an unadjusted and adjusted basis so that these events can be analysed separately to make internal comparisons possible. Adjusted data can be used for both internal and external goal setting, while unadjusted data provides information about the service provider's performance during major events.

Commission's draft decision

4.45 The Commission's draft recommendation was that supply interruptions be excluded for the purpose of GSL payments on the following basis:

- supply interruptions due to planned outages, where at least four business days notice has been given of the planned outage.
- momentary interruptions of less than one minute.

- events that are outside the reasonable control of the service provider, such as traffic accidents and vandalism, and natural events that affect more than five per cent of customers in a service area.

  The service provider must apply in writing to the Commission, within 30 business days of the event occurring identifying:

  a) the relevant event;

  b) the impact of the event on the service provider's reliability performance;

  c) the proposed extent of the exclusion; and

  d) reasons explaining why the Commission should consider the event as an exclusion.

- an interruption resulting from System Control exercising any function or power under any applicable legislation or code.
- an interruption resulting from a direction by a police officer or other authorised person exercising powers in relation to public safety.
- an interruption requested by a customer, or caused by a customer's actions or electrical installation.

4.46 The Commission accepted most of the situations or events proposed by PWC to be excluded events for the purpose of a GSL scheme. However, the Commission did not consider that the following events should be excluded events:

- multiple contingency events; and
- natural events such as cyclones, severe storms, fire and flood, except where these events affect more than five per cent of the customers in a particular region.

4.47 After taking into account service performance to date and system design factors, the Commission was not convinced that multiple contingency events should be considered non-credible events in the Territory, and therefore excluded events.

4.48 The Commission considered that system design and operating practices in the Territory could mean that multiple contingency events are a credible event. As such, excluding these events from a GSL scheme removes an incentive for PWC to invest appropriately to ensure customers are not affected by simultaneous and multiple failures of system assets.

4.49 The Commission also noted that natural events are foreseeable, and that mitigating the frequency and duration of outages due to natural events is within the scope of a service provider's capital and maintenance program. However, the Commission also noted that some natural events can be of a scale that mitigation is not commercially feasible.

4.50 The Commission was guided by the approach adopted in Queensland for determining if outages should be excluded for the purposes of a GSL scheme and payments. Performance reporting arrangements in Queensland allow Ergon Energy (a DNSP serving areas of Queensland outside the Brisbane region) to exclude interruptions where at least five per cent of customers in the area are affected by storm, flooding or

other natural disaster,[11] or from 2005-06, to exclude the effect of severe interruptions to supply using the 2.5 beta method.[12]

4.51 The Commission noted that defining an event as an excluded event if more than five per cent of customers in a service area is generally equivalent to using the 2.5 beta method.

Views in submissions to the Draft Report

4.52 PWC proposes that the qualification that planned outages are only excluded where at least four business days notice has been given be removed, noting that planned outages should be excluded as they are a necessary operational requirement and not reflective of poor performance.

4.53 PWC also argues against the requirement that a service provider must apply to the Commission to confirm that an event is outside the control of the service provider. PWC expressed the view that this is not consistent with the AER approach and is overly bureaucratic. The Commission is already informed of noteworthy events through half-yearly reports by System Control and adding an additional layer of reporting is unnecessary.

4.54 Further, PWC continues to advocate for the use of the 2.5 beta method to exclude the effect of severe interruptions arguing that the Commission's proposed benchmark of more than five per cent of customers being affected appears arbitrary. PWC also argued that low population density in some areas of the Territory means that a major natural event may not reach the five per cent threshold.

4.55 PWC requests that the Commission reconsider its draft decision to not categorise multiple contingency events as excluded events, arguing that greater redundancy in a small system would not be commercially feasible nor consistent with industry practice. PWC cited as an example the recent multiple contingency event on 30 January 2010 where both transmission lines tripped, advising that significant investment would be required to mitigate a similar event in future.

Response to views in submissions and further analysis

4.56 The reason for excluding planned outages is because customers have a reasonable opportunity to make arrangements to minimise inconvenience. However, if a customer does not have sufficient notice, then the fact that the service provider defines an interruption as planned is irrelevant.

4.57 The Commission initially proposed to adopt a notice period of four days, consistent with PWC's proposal, and the AER scheme. However, the Commission notes that other jurisdictions provide for shorter notice periods for planned outages, and that PWC's Customer Charter provides for at least two days notice to be given of planned outage. To align with PWC's current practices, the required notice period for an outage to be defined as a planned outage is revised to two days.

---

[11] Queensland Competition Authority, October 2001, Electricity Distribution: Service Quality Reporting Guidelines v1.1, section 2.2.

[12] Queensland Competition Authority, August 2005, Electricity Distribution: Service Quality Reporting Guidelines v2, section 2.2.

4.58 Although the 2.5 beta method is not designed to exclude events, but rather to identify statistical outliers so that these events can be examined separately, the Commission recognises that it is used elsewhere in this context. Further, the key requirement is that an event be outside the reasonable control of the service provider.

4.59 The Commission acknowledges that requiring PWC to apply to the Commission for every traffic accident and act of vandalism would be onerous. The Commission has clarified the requirement to apply to the Commission for a decision as to whether a particular event was foreseeable, and whether mitigation was within the scope of a service provider's capital and maintenance program, should apply only to natural events identified as outliers under the 2.5 beta method.

4.60 The Commission does not accept PWC's arguments that multiple contingency events should be excluded. If an outage is the fault of the service provider, the fact that more than one component of the system failed does not detract from this. Allowing multiple contingency events to be excluded, even when it is within the reasonable control of the service provider, could be seen to encourage poor design as the failure of a second system component would relieve the service provider of responsibility.

Commission's final decision

4.61 The Commission recommends that supply interruptions be excluded for the purpose of GSL payments on the following basis:

- load shedding due to a generation shortfall;
- supply interruptions due to planned outages, where at least two business days notice has been given of the planned outage;
- momentary interruptions of less than one minute;
- events that are outside the reasonable control of the service provider, such as traffic accidents and vandalism, and natural events that are identified as statistical outliers using the 2.5 beta method.

  For natural events that are identified as statistical outliers using the 2.5 beta method, the service provider must apply in writing to the Commission, within 30 business days of the event occurring identifying:

  a) the relevant event;

  b) the impact of the event on the service provider's reliability performance;

  c) the proposed extent of the exclusion; and

  d) reasons explaining why the Commission should consider the event as an exclusion;

- an interruption resulting from System Control exercising any function or power under any applicable legislation or code;
- an interruption resulting from a direction by a police officer or other authorised person exercising powers in relation to public safety; or
- an interruption requested by a customer, or caused by a customer's actions or electrical installation.

Source of funding of GSL payments

4.62 GSLs are an amount paid to customers who experience service levels below predetermined thresholds. Therefore, the payment is seen as a recognition of poor

service rather than as compensation. GSL payments are not in any way related to the actual dollar value of an individual customer's loss.

4.63 PWC indicated in its submission to the Issues Paper that any GSL payments should be funded through an allowance in regulated network revenues, but that a GSL scheme implemented prior to the start of the next network price determination would need to be funded from PWC's profits.

Commission's draft decision

4.64 Generally GSL payments represent a minor financial cost on a business relative to overall operating and capital costs. However, the payments may have a significant symbolic value to customers and the service provider.

4.65 GSL schemes in place elsewhere in Australia are generally funded as an operating cost of the DNSP. This is done through an ex ante assessment of likely costs by the regulator when setting the revenue or price cap. The cost of these schemes is therefore borne by customers through higher network charges.

4.66 The current network price determination is in place until 1 July 2014, and the introduction of a GSL scheme is unlikely to trigger reopening or off ramp provisions requiring reassessment of regulated revenue requirements. As such, any GSL payments made until 1 July 2014 would come out of PWC Networks profits.

4.67 The Commission could consider if an allowance for GSL payments should be made when assessing the regulated revenue requirement of PWC Networks for the 2014-15 to 2018-19 regulatory period.

4.68 Any GSL payments that might be made by a generator would come from the businesses' revenues. However, as these revenues are not regulated, there is no mechanism in place at this stage to prevent these costs being passed on to customers.

Views in submissions to Draft Report

4.69 PWC argues that the GSL scheme should be funded through the regulatory reset process. Although the GSL scheme will be funded from PWC's profits until the next regulatory reset, PWC expressed the view that the Commission should make decision now that an allowance will be made from 1 July 2014, as this is integral to design of the scheme.

Response to views in submissions and further analysis

4.70 The Commission does not consider that a decision about funding arrangements for a GSL scheme after 1 July 2014 is required at this time. The Commission considers this decision should occur as part of the network determination process, when stakeholders will have an opportunity to comment on the appropriateness of providing an allowance for GSL costs in PWC's regulated network revenue.

Commission's final decision

4.71 The Commission confirms its draft recommendation that any GSL payments made until 1 July 2014 would come out of PWC Networks profits and that the Commission should consider if an allowance for GSL payments should be made when assessing the regulated revenue requirement of PWC Networks for the 2014-15 to 2018-19 regulatory period.

How GSL payments are made

4.72 Various regulatory bodies have introduced individual customer compensation payment systems, and different approaches to the payment of penalties.

4.73 PWC submitted in its response to the Issues Paper that GSL payments should be initiated by way of a claim made by the customer and that GSL payments should be made as a credit to the customer's account, with payment made in another form (e.g. a cheque) only if the account has ceased. PWC advised that these provisions would be included in PWC's Customer Contract.

4.74 PWC also suggested that:

- only one payment should be made per electricity account for each event regardless of the number of account holders or premises listed on the account affected by the event;
- annual payment caps should apply per electricity account holder over a financial year period; and
- a cap linked to PWC Networks regulated revenue be applied to the GSL scheme.

4.75 PWC has advised the Commission that implementation of a GSL scheme after June 2011 would give sufficient time for the necessary system enhancements to cater for a GSL scheme.

Commission's draft decision

4.76 The Commission's draft recommendation was that payment be made automatically by PWC via rebate on the next bill, or in another form agreed between PWC and the recipient if they are no longer a customer of PWC and will not receive a future bill.

4.77 In Australia, automatic payment arrangements apply in Victoria, Queensland, South Australia and Tasmania. In New South Wales, customers must apply for payments relating to network reliability, but payments relating to customer service measures are made automatically.

4.78 The reasons for adopting an automatic payment system include:

- requiring a customer to claim a GSL payment increases the inconvenience to customers of poor service performance. The increased effort and potential lack of knowledge that a GSL payment is deserved may act as a disincentive for customers to make a claim.
- automatic payment should reduce the administrative burden of the GSL scheme, as there is no need to determine the percentage of eligible customers who will make a claim; and
- automatic payment allows for more varied and targeted performance indicators to be included in the GSL scheme. More complex arrangements increase the chance that customers will not know their rights and consequently not claim.

4.79 The Commission understands that data on outages experienced on individual feeders and by individual customers is not completely reliable due to network operation practices. However, the Commission also understands that the network operating practices adopted by PWC Networks are similar to practices of DNSPs across Australia, and that this has not prevented automatic payments.

4.80 Customers will have the ability to claim a payment if they consider they have experienced service performance that warrants a GSL payment. The Commission

considers that any payment errors made in favour of customers should be at the cost of PWC, and that any payment errors made in the favour of PWC to the detriment of customer must be corrected as soon as identified.

Views in submissions to Draft Report

4.81 PWC notes that the Commission had not addressed the matter of electricity holders who have unpaid accounts with PWC, arguing that it would be commercially appropriate for any GSL payments to initially go towards rectifying unpaid accounts.

4.82 Further, the Commission did not address PWC's submission that an annual cap of two per cent of regulated revenue (about $2 million) would be prudent, particularly in light of automatic payment and that payments be made to all customers on a feeder.

Response to views in submissions and further analysis

4.83 The Commission's draft recommendation was that payments be made automatically via rebate on next bill. As a bill issued by PWC will include any outstanding amounts, a GSL payment will go towards rectifying outstanding accounts.

4.84 The Commission considers that payments should not be limited because service is exceptionally bad. If anything, this is more reason for a GSL scheme being implemented.

4.85 PWC estimates that an annual cap of two per cent would equate to approximately $2 million. The Commission notes that the total amount paid after the Casuarina outages for failures in network reliability measures was around $450 000. Further, based on 2008-09 standards of service reporting, PWC would have had to pay out a maximum of $60 000 for late connections (40 existing properties, 159 in new subdivisions, based on maximum payment of $300).

4.86 The Commission also notes experience in other jurisdictions, where the amount of GSL payments made by Queensland DNSP Ergon Energy was $78,000 in 2008-09 and $84,000 in 2008-09 and payments made by South Australia's ETSA Utilities of $400,000 in 2007-08 and $1.3m in 2008-09.

Commission's final recommendation

4.87 The Commission confirms its draft recommendation that payment be made automatically by PWC via rebate on the next bill, or in another form agreed between PWC and the recipient if they are no longer a customer of PWC and will not receive a future bill.

CHAPTER 5

Design of a financial incentive scheme

Improving average service performance

5.1 Financial incentive schemes are intended to provide incentives to improve the performance of the system or network.

5.2 The Commission indicated in the 2009 network price determination that a paper trial financial incentive scheme would be run for the 2009-10 to 2013-14 regulatory period to inform the implementation of such a scheme in the future. The Commission will be undertaking an audit of PWC's service performance data to provide more certainty about the quality of historical data and data collection systems and processes.

5.3 The Commission's view is that the most appropriate model to adopt for a paper trial of a financial incentive scheme is the methodology used by the AER's service target performance incentive scheme. Table 5.1 compares the performance indicators used in the AER financial incentive scheme, and the performance indicators reported by PWC.

Table 5.1: AER service performance indicators and PWC reporting capability

AER performance measure	PWC historic reporting
Unplanned SAIDI	Total planned and unplanned SAIDI for regulatory reporting. Unplanned data for internal and shareholder reporting.
Unplanned SAIFI	Total planned and unplanned SAIFI by region for regulatory reporting. Unplanned data for internal and shareholder reporting.
MAIFI	Does not report. Has previously indicated that PWC does not have system capability to collect this data.
Telephone answering	Number and % of calls responded to within 20 seconds of when the customer selects to speak to a human operator. Cannot distinguish network related telephone phone calls.
Streetlight repair	Does not report for regulatory purposes.
New connections	% of new connections made within specified time for regulatory reporting on a Territory-wide basis.
Response to written enquiries	Does not report for regulatory purposes.

5.4 The AER determinations for Queensland and South Australian DNSPs established a financial incentive scheme with SAIDI and SAIFI reliability performance measures and the telephone answering customer service performance measure.

Commission's draft decision

5.5 The Commission's draft recommendation was that a paper trial financial incentive scheme be run for the 2009-10 to 2013-14 regulatory period to provide information on the costs and benefits of implementing such a scheme in the regulatory period commencing 1 July 2014.

5.6 The Commission proposed the following approach for the paper trial of a financial incentive scheme:

- the paper trial scheme will be symmetric, involving penalties and rewards;
- the paper trial will determine the financial incentive based on a single performance indicator – SAIDI;
- the paper trial will be based on one aggregated region only (Territory-wide), rather than having separate targets for different regions;
- the performance target will be the actual SAIDI averaged over the previous five years performance. This is intended to encourage continuing improvement over time;
- the incentive rate will be based on the AER's 'value of customer reliability' for non-CBD segments of $47 850/MWh adjusted by CPI from the September quarter 2008 to the start of the relevant regulatory period;

5.7 To avoid any doubt, the Commission would adopt the methodology and approach of the AER service target performance incentive scheme for the paper trial.

5.8 Although the NTMEU expressed a preference in its submission to the Issues paper for a Territory scheme to be based on schemes operating in Victoria and South Australia, the Commission notes that the transfer of economic regulation to the AER from 1 January 2008 means the AER scheme will also be adopted in these jurisdictions.

Views in submissions to Draft Report

5.9 Both Treasury and PWC support a financial incentive (s-factor) scheme in principle, and agreed with the Commission's recommendation for a paper trial of an s-factor scheme. Neither Treasury nor PWC provided any comment on the structural elements proposed by the Commission.

Commission's final recommendation

5.10 The Commission confirms its draft recommendation that a paper trial financial incentive scheme would be run for the 2009-10 to 2013-14 regulatory period to provide information on the costs and benefits of implementing such a scheme in the regulatory period commencing 1 July 2014.

CHAPTER 6

Implementation

Legislative head of power

6.1 The Commission has the power, under the *Electricity Network (Third Party Access) Act* and Code, to incorporate a financial incentive (s-factor) scheme into the price control mechanism applying to PWC's regulated electricity network operations.

6.2 Specifically, the Commission may:[13]

In setting a revenue or price cap, the regulator must take into account the revenue requirements of the network provider during the relevant financial year or years having regard to –

…

(b) the service standards applicable to the network provider under this Code and any other standards imposed on the network provider by any regulatory regime administered by the regulator and by agreement with the relevant network users;

6.3 However, there is currently no statutory authority in the *Electricity Reform Act* or other legislation that authorises implementation of a GSL scheme.

6.4 The Commission has advice that an amendment to the *Electricity Reform Act* is necessary to establish an explicit authority and mechanism for introducing a GSL scheme in the Territory. For example:

- in New South Wales, the GSL scheme is imposed through design reliability and performance licence conditions determined by the Minister for Energy and Utilities;
- in Victoria, the GSL scheme is imposed by the Electricity Distribution Code (2007);
- in Queensland, the GSL scheme is imposed by the Queensland Electricity Industry Code (2008), made under the *Electricity Act 1994*;
- in Western Australia, the GSL scheme is imposed by the Electricity Industry (Network Quality and Reliability of Supply) Code (2005) established by the Minister for Energy under the *Electricity Industry Act 2004*;
- in South Australia, the GSL scheme is imposed by the standard connection and supply contract between customers and the DNSP under the *South Australian Electricity Act 1996*.

6.5 In the Territory, a GSL scheme could be implemented if the Commission was authorised by the *Electricity Reform Act* or by a regulation made under the *Utilities*

[13] Electricity Networks (Third Party Access) Code, cl.68.

Commission Act [s.24] to make a Code. For example, an amendment to the *Electricity Reform Act* [s.111] could be made to specify that the Administrator may make a regulation authorising the Commission to make a Code relating to a GSL scheme (or equivalent).

6.6 The Commission notes that the proposed GSL scheme could be voluntarily adopted by PWC (or other service providers) in a customer charter in anticipation of any legislative amendments.

Timing

6.7 The timeframe for introduction and operation of a GSL scheme is subject to there being a legislative head of power for the scheme, and the capability of PWC systems to support the operation of the scheme.

6.8 PWC has an Asset Management Capability project which includes implementation of an integrated asset management information system, with process redesign, change management and data improvement. PWC has indicated that the information systems will collect and report the information necessary for a GSL scheme, and should be operating by July 2011.

6.9 On this basis, the Commission considers a GSL scheme should be able to operate effectively from 1 July 2011.

Reliability of data

6.10 A key problem for the successful implementation of a GSL scheme in the Territory is the potential for PWC to collect and report inaccurate reliability and customer service performance data. Unreliable data will undermine the integrity of the GSL scheme.

6.11 PWC recognises this problem and notes that although the Draft Report links the implementation date for a GSL scheme to the scope of legislative changes required to support its introduction, the key to successful implementation of a GSL scheme is to have systems in place to record the various performance indicators.

6.12 In its response to the Issues paper, PWC advised that while outages are currently recorded in PWC's Facilities Information System, the AMC project currently underway will provide similar capability but will differentiate between planned and unplanned events and record outage events at the customer level. This project is expected to be completed by June 2011.

6.13 The Commission is putting a greater priority on the capability of PWC compliance systems, including by independent audits of technical and performance data capture systems and processes. The Commission's compliance program will support improvements in data quality in the short term, and ensure accurate data is collected and maintained in the longer term.