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Dear James,

**AusNet Services Submission – Review of the Victorian Electricity Distributors’ Guaranteed Service Level Payment Scheme, Draft Decision**

AusNet Services welcomes the opportunity to make this submission in response to the ESC’s Draft Decision on its review of the Victorian GSL payment scheme. This submission outlines AusNet Services’ views on the proposed amendments to the scheme, and sets out a number of suggested changes to ensure the arrangements set out in the final determination are appropriate and informed by the most accurate information.

AusNet Services strongly supports the scheme’s objectives and the need for it to be refined from time to time if it is to continue to provide incentives to improve reliability for the worst served customers where doing so is efficient.

However, the attached submission addresses several issues considered in the Draft Decision to ensure the scheme is appropriate and informed by the most accurate information.

If you have further questions regarding this submission, please contact Robert Ball on 9695 6281.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Anh Mai", is written over a horizontal line.

Anh Mai  
**Manager Economic Regulation**

# AusNet Services' Submission on the ESC's Draft Decision on the Victorian GSL payment scheme

## 1. Introduction

This submission responds to the ESC's proposed amendments to the Guaranteed Service Levels (GSL) payment scheme ('the scheme'). AusNet Services supports the scheme's objectives and the need for it to be refined from time to time if it is to continue to provide incentives to improve reliability for the worst served customers where doing so is efficient.

However, AusNet Services has sought in this submission to address several issues raised by the ESC in its Draft Decision to ensure the arrangements set out in the scheme are appropriate and informed by the most accurate information. The remainder of this submission therefore addresses:

- the proposed measures, thresholds and payment levels;
- the proposed Major Event Day exclusion criterion;
- the proposed requirement to report quality of supply data; and
- the timing of the commencement of the new scheme.

## 2. The proposed measures, thresholds and payment levels

AusNet Services supports the ESC's proposed set of payment measures, the thresholds applying to these payments and the payment amounts. These parameters have been updated to maintain the "one per cent" principle, where GSL payments are made to the worst served one per cent of customers, and also to reflect changes in the Value of Customer Reliability over time.

However, the draft decision's assumption that reliability improvements will result from the deployment of Rapid Earth Fault Current Limiters (REFCL) is questionable. The ESC has stated that:

*"Following the 2009 Black Saturday bushfires, the Victorian Government, through the PBSP has funded the replacement of powerlines in the most dangerous areas of the state. It is proposing to amend the Electricity Safety (Bushfire Mitigation) Regulations 2013 to require certain powerlines to be put underground or insulated at the end of their lives, and to enhance the network protection of polyphase powerlines with the installation of Rapid Earth Fault Current Limiters.*

*These measures are expected to improve the reliability experienced by those customers supplied by powerlines that have been replaced or supplied by polyphase powerlines connected to a zone substation with a Rapid Earth Current Limiter installed. Based on information provided by the Department of Economic Development, Jobs, Transport and Resources (the Department), we estimate that powerline replacement will reduce the duration of interruptions on those powerlines replaced by 50 per cent and enhanced network protection for polyphase powerlines will reduce the duration of interruptions on those powerlines by 30 per cent for phase to earth faults."*<sup>1</sup>

While the ESC has not proposed to adjust payment thresholds to reflect its estimate of reliability improvements attributable to the PBSP and REFCLs, it is important to make it clear that there is little evidence that the operation of REFCLs will improve network reliability in the context of AusNet Services' distribution network, where the operation of REFCLs is to reduce fire risk, rather than as a reliability tool.

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<sup>1</sup> ESC, *Review of the Victorian Electricity Distributors' Guaranteed Service Level Payment Scheme – Draft Decision*, November 2015, pp.34-35

The ESC has estimated that powerline replacement will reduce the duration of interruptions by 50 per cent. AusNet Services would welcome further discussion with the ESC regarding the information its estimates are based on.

The ESC has also estimated that the operation of REFCLs will reduce the duration of interruptions by 30 per cent. This is unlikely given the operating mode which will apply in AusNet Services' network. The reliability impacts of a Ground Fault Neutraliser (GFN), which is the type of REFCL that is intended to be deployed in parts of AusNet Services' network area, are highly dependent on the operating mode. AusNet Services considers it likely that GFN will in fact reduce reliability during the forthcoming period. This is because:

- **The operation of GFNs on “normal” days is expected to have no impact on reliability.** AusNet Services has invested significantly over the past 10 years to implement Distribution Feeder Automation (DFA) across the network. Many of the reliability benefits that are assumed to arise from the installation of a GFN are already incorporated into the AusNet Services network due to DFA. Further, there is considerable uncertainty around the mode of operation of the GFN and how a GFN may operate in conjunction with DFA. It is estimated that the installation of GFN will improve reliability in some operating conditions and lessen reliability in others, resulting in no overall impact on reliability; and
- **The operation of GFNs on Code Red or Total Fire Ban (TFB) days is expected to significantly reduce reliability.** On Code Red and TFB days, GFN will act to shut down parts of network automatically to prevent fires if they detect a fault. This is likely to result in prolonged outages for all customers connected to the affected feeder.

### 3. The proposed Major Event Day exclusion criterion

AusNet Services accepts the ESC's proposed changes to the scheme's exclusion criteria. However, it considers that the Major Event Day (MED) should be calculated consistently between the Victorian and national schemes, by the Victorian scheme adopting the national scheme's definition of a MED based on the duration of interruptions.

This would achieve alignment between the two schemes, which the ESC has noted as its rationale for proposing to introduce a payment to customers experiencing an interruption exceeding 12 hours (CBD and urban feeders) and 18 hours (rural feeders).<sup>2</sup>

Furthermore, alignment in this respect would minimise the administrative costs associated with calculating multiple thresholds, which electricity customers would ultimately benefit from through lower costs.

### 4. The proposed requirement to report quality of supply data

The ESC has proposed a new requirement for Victorian DNSPs to “collect and report on the number of events experienced by each customer where the undervoltage or overvoltage limits were exceeded for more than a minute.”<sup>3</sup>

There are a number of practical matters and issues that should be considered by the ESC in respect of the proposed new requirements, including its:

- Consistency with the ESC's objectives;
- Impact on DNSP systems and costs; and
- Interactions with the AEMC's Metering Contestability final rule change.

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<sup>2</sup> Ibid., pp.37

<sup>3</sup> Ibid., p.30

In light of these considerations, which are discussed below, AusNet Services does not support a path that may lead to the introduction of a GSL for quality of supply.

### ***Consistency with the ESC's objectives***

In reviewing the scheme, the ESC has stated that it must have regard to its objective, which is to promote the long term interests of Victorian consumers, having regard to the price, quality and reliability of essential services.<sup>4</sup>

AusNet Services considers that the introduction of a GSL payment for undervoltage and overvoltage events may not be consistent with the ESC's objective.

While the ESC is proposing only to require DNSPs to collect and report data on these events, the development of this capability would result in cost increases for DNSPs, which would ultimately be recovered from all customers on the distribution network during the forthcoming period. In light of these costs, which are discussed below, the merits of the proposed new requirement depend on the extent to which it, and the potential GSL payment foreshadowed by the ESC, promotes the ESC's objective.

Due to the nature of modern electrical appliances, fluctuations in voltages are increasingly having less impact on the quality and reliability of the electricity services supplied to customers. With the increasing drive for greater energy efficiency and lower power usage, technology has been changing rapidly, resulting in devices using less power and operating on extremely large voltage ranges. It is common for devices to operate on voltages as low as 110V and as high as 240V, such as phone chargers, laptop chargers and LED lights.

Accordingly, there is a continually reducing requirement for electrical appliances to operate within the tolerance levels that they have historically operated under. Customers are therefore typically not affected by undervoltage or overvoltage events that occur due to their lack of impact on the quality or reliability of their supply. Relative to other network service measures subject to GSLs, the value to customers of maintaining voltage within specified limits would be expected to be very low.

Where fluctuations in voltage on AusNet Services' network do lead to customers experiencing quality of supply issues – which occurs from time to time on some rural parts of its network – these are addressed directly with customers on a case-by-case basis. This has been found to be an efficient and effective way of addressing these concerns.

The ESC has stated that:

*“GSL payments are not intended to compensate customers for loss suffered as a result of poor service. Rather, they are intended to be an acknowledgement of poor service and provide an incentive for the electricity distributors to improve service.”<sup>5</sup>*

In light of the above considerations, the potential GSL payment flagged by the ESC would not achieve either of the two intended purposes identified by the ESC. That is, it would not be reflective of the service levels actually experienced by customers, nor would it provide an incentive for DNSPs to improve service levels unless set at a very high rate, which would promote inefficient network investment.

In any event, reporting against the proposed measure could create service and investment expectations not consistent with the long term interests of consumers.

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<sup>4</sup> Ibid., p.4

<sup>5</sup> Ibid., p.52

### ***Impact on DNSP systems and costs***

As noted above, AusNet Services has identified a number of additional costs it expects to incur to ensure compliance with the proposed new requirement.

AusNet Services' meters have the capability to record under and overvoltage events using settable voltage levels and settable time thresholds as this is specified under the Victorian Minimum AMI Functionality Specification.

However, this information is not stored in operational systems and AusNet Services does not currently have the capability to easily access the voltage event details for reporting purposes, as proposed by the ESC. Furthermore, while the voltage event capability is in place in AusNet Services' meters, the number of events currently collected from an installation in any day is limited to two, which was considered a reasonable indication of potential voltage issues at the time these meters were installed.

AusNet Services would therefore have to change the meter programs of all meters, build the interfacing to extract the voltage events from the Network Management System, create the handling and storage arrangements for the data in an accessible database, and develop the extraction and reporting capability proposed by the ESC. As these are relatively large changes to AusNet Services' metering and data capabilities, their implementation would result in substantial costs being incurred during the 2016-20 regulatory period.

In light of these costs and the issues set out above with respect to consistency with the ESC's objectives, AusNet Services does not support the proposed new requirement.

Should the AER proceed with the proposed new requirement, AusNet Services recommends that the date for the introduction of this obligation be deferred to 1 January 2017 at the earliest to allow time for the capability to be developed (AusNet Services does not have the capability to make this change in the coming few weeks). Further, this level of work would be most efficiently carried out concurrently with system changes required as part of the preparation for Metering Contestability, so as to ensure the most prudent and efficient work program is delivered.

Given that the ESC has proposed the new requirement to gather data to inform potential changes to GSL arrangements from 2021, an effective date of 1 January 2017 would provide ample time to meet this objective.

### ***Interactions with the AEMC's Metering Contestability final rule change***

The contestable metering framework set out in the AEMC's final determination on the expanding competition in metering and related services ("Metering Contestability") rule change creates a number of practical impediments to the proposed new requirement to report quality of supply data.

The Minimum Services Specification services listed in NER Chapter 7 under the Metering Contestability rule change (Schedule 7.5 – Metering Installation Inquiry Service) includes the provision of events recorded in meter logs. However, the rule change does not provide a good regulated basis for the provision of voltage events as proposed by the ESC.

The details of what events are included in the meter logs are not specified in Chapter 7. There is no obligation in the Rules for the contestable Metering Coordinator appointed by a Retailer and their service providers to include these voltage events in the meter capability, and even if they are provided, for the voltage level and/or the time threshold setting capabilities required to collect the data to be in place.

Even if suitable capability is in place in the meter, access to these voltage events would require the Metering Coordinator and their service provider to establish the interfacing to set the voltage and time

threshold parameters, extract the voltage events from their meters, create the handling and storage arrangements for the data in an accessible database, and establish the B2B capability to deliver these events to the Distributor.

The NER do not mandate that the Metering Coordinator provide this service. Even if the Metering Coordinator and their service provider have the end to end capability in place, the NER expect that the access to the service will be at a commercial rate. This commercial rate is not regulated or controlled in any way and fully subject to commercial pressures. As there would be a mandated requirement for the Victorian DNSPs to have access to this data under the ESC's proposal, there would be an opportunity for Retailer appointed Metering Coordinators to set a high rate for provision of this data.

Accordingly, the national framework which would be applicable to Retailer appointed Metering Coordinators' meters in Victoria would present barriers to DNSPs obtaining access to the voltage events from these meters to fulfil the proposed obligation. This would be a growing issue within the Metering Contestability regime as Retailer appointed Metering Coordinators' meters replace DNSP metres or are installed on new connections.

## **5. The timing of the commencement of the new scheme**

The ESC has proposed that the new scheme will apply from 1 January 2016. A commencement date of 1 January 2017 would be more appropriate as this would allow sufficient time for:

- DNSPs to make the system and process changes needed to capture the data required under the proposed new requirement to report quality of supply data, should the ESC elect to proceed with this new requirement (as discussed above); and
- The necessary amendments to be made to the relevant regulatory instruments.

Further, as the scheme will not be finalised until mid-January 2016, it is inconsistent with sound policy to apply an incentive scheme to a period which has already commenced. Doing so means that businesses are not given an adequate opportunity to understand the changes from an operational perspective and properly plan and implement their response to the scheme.