



Hon Lily D'Ambrosio MP

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Dear Mr Pattas

CONTINGENT PROJECTS – INSTALLATION OF RAPID EARTH FAULT CURRENT LIMITERS – TRANCHE 2

The Andrews Labor Government welcomes the opportunity to make a submission on the 20 April 2018 applications for contingent project funding from AusNet Services and Powercor for the second tranche of Rapid Earth Fault Current Limiters (REFCL) installations and associated works.

General Comments

We are committed to supporting endeavours to move with a sense of urgency to implement measures that will reduce the risk of catastrophic bushfires like those that occurred on Black Saturday in 2009, recognizing that powerlines were found to have been the cause of 159 of the 173 deaths in that tragic event. The Contingent Project Applications (CPAs) now under the consideration of the Australian Energy Regulator (AER) apply to critical works associated with implementing the Victorian Bushfires Royal Commission's (VBRC) Recommendations 27 and 32, which are designed to respond to that risk.

I am pleased to see the detailed planning that AusNet Services and Powercor have put into their respective applications for the second tranche of their REFCL installation programs. It is particularly gratifying to learn that the works for their first deployment tranches are progressing well. I commend both businesses for their dedication to this important safety initiative that appears to be on course to deliver an unparalleled improvement in safety standards for the benefit of all Victorians.

The Andrews Labor Government is also committed to ensuring that all improvements to the electricity network, including the works that are the subject to the CPAs, are provided at a fair and reasonable cost to electricity consumers. AusNet Services is forecasting total (capital and operating) expenditures of \$144.6 million (real, \$2015) and Powercor is forecasting total expenditures of \$133.4 million (real, \$2015) – a total of \$278 million altogether – for tranche two REFCL installations and associated works. These forecast expenditures represent a considerable increase (52 per cent) from the expenditures the AER authorised for tranche one REFCL works (approximately \$182.7 million). On behalf of Victorian consumers, I therefore expect that the AER will undertake all regulatory, technical and financial due diligence in its interrogation of the claims put forward in the distribution businesses' CPAs. To be clear, I support the work of AusNet Services and Powercor to expeditiously reduce powerline bushfire risk in line with Recommendations 27 and 32 of the VBRC. However, this important safety outcome should not be provided at an unreasonable cost to Victorian households.

By letter dated 5 May 2017 I made submissions to you about the contingent projects for the first tranche of REFCL delivery. In those submission, I proposed, amongst other items, that the blanket installation of isolating transformers to protect the assets of High Voltage (HV) Customers without consideration of other options would place an excessive cost burden on Victorian energy consumers.

It is pleasing to note that both AusNet Services and Powercor have considered other options in their tranche two applications, such as network hardening and conversion to low-voltage connection, in their analysis of managing HV Customers' solutions for tranche two REFCL installation.

The AER will also be aware of the review of Victoria's Electricity Distribution Code that is currently being undertaken by the Essential Services Commission Victoria (**the Commission**). The commission released its draft decision on amendments to the code on 22 May 2018. Those amendments appear to address the issue of over voltages that led to the claims for significant funding being made by AusNet Services and Powercor to protect their HV Customers' assets, both in their tranche 1 and now in their tranche two CPAs. I expect that the AER will take the commission's final decision with respect to code amendments into account in reaching its own determination about the funding levels sought for work on HV Customers' networks in the tranche two CPAs.

I further note that the proposed changes to the code place responsibility for preparing HV Customer assets for REFCL operations on individual HV Customers. I support this clarification of the code. However, I recognize that AusNet Services and Powercor have an important ongoing role to play in supporting HV Customers' transition of their sub-networks to a REFCL compliant state.

Specific Comments

The materials presented in support of the tranche two CPAs have been reviewed closely by the Department of Land, Water, Planning and Environment (DELWP). A detailed comparison of cost variances between the tranche one and tranche two programs of work was not undertaken, as cost values were redacted from the public versions of tranche two CPAs used to undertake the review. It is assumed that the standard benchmarking practices of the AER will identify and address any anomalies in unit cost variances. Notwithstanding the foregoing, the following specific concerns associated with that review are raised for the AER's consideration.

1. Distribution Feeder Automation (DFA) System costs – AusNet Services

Consistent with its tranche one CPA, AusNet Services has claimed significant costs associated with upgrades to its DFA system. It advises that this system is integral to maintaining reliability of supply, and that certain equipment used within the DFA System is incompatible with a RECL operated network and needs to be changed. AusNet Services also advises that the algorithms used in the software component of the system need to be modified to support the integration of the DFA System with a REFCL operated network.

DELWP notes that the need to update algorithms was also nominated in AusNet's tranche one CPA. DELWP urges the AER to ensure that, to the extent upgrades to the DFA system are a one off exercise – which appears likely at least for software upgrades – the costs of these upgrades are only recovered once.

2. Reactive replacement of cables – AusNet Services and Powercor

The experience gained by AusNet Services and Powercor implementing their tranche one programs of REFCL installation and associated works, has apparently led to a more sophisticated understanding that certain cables have an increased likelihood of failure when operated under REFCL operating conditions. Both businesses have included costs for the proactive replacement of targeted cables and a larger capital component for reactive replacement of such elements of their supply networks.

As the cost of the reactive replacement component is high, DELWP is keen to ensure that the forecasting of the reactive replacement demand volumes is reasonable and does not give rise to a contingency fund surplus to requirement.

3. Investigation of alternative technologies – AusNet Services

DELWP notes that, consistent with its tranche one CPA, AusNet Services has sought funds to explore alternative technology solutions and suppliers of critical components associated with this roll-out. AusNet asserts that approval of such funding is necessary to address an identified 'sole supplier risk', which has the potential to affect both continuity of supply and the cost of materials.

The department supports endeavours to safeguard the delivery of REFCL safety benefits by securing supply and promoting competitive pricing. However, AusNet has not adequately explained the costs of expanding options. In particular, the operational costs associated with its investigation of alternative technologies have nearly tripled from tranche one (\$0.495 million) to tranche two (\$1.387 million). The AER should require AusNet to fully justify both the funding sought and the substantial increase in these forecast costs. Further, DELWP suggests that the AER consider whether the contingent project application process is the appropriate vehicle to consider questions related to the recovery of such costs or whether it is more appropriate that such costs be addressed in the periodic electricity network revenue decisions for the company.

4. System capacitance – Powercor

In its tranche one CPA, Powercor advised that: 'We estimate a single [Ground Fault Neutraliser] GFN can support the required performance standards to a maximum total system capacitance of approximately 130A'. Where this capacitance level is breached an additional GFN is needed.

In its tranche two CPA, Powercor has now reduced the relevant capacitance level by nearly 17 per cent. Powercor now advises that it estimates that 'a single Ground Fault Neutraliser (GFN) can support the required performance standards to a maximum total system capacitance of approximately 108A'. As a result, the capacitance levels are more easily breached than at the levels indicated in Powercor's tranche one CPA. There are many more zone-substations in Powercor's tranche two CPA that require multiple GFNs compared to its tranche one program of works. This increase in the number of GFNs presumably strongly correlates to the reduced capacitance levels cited in its tranche two CPA.

The increase in the number of GFNs required for each zone-substation is a significant driver of the escalated costs reflected in Powercor's tranche two CPA, DELWP believes that the AER should give close consideration to the change in capacitance level thresholds reflected between Powercor's tranche one and two CPAs, in order to verify and understand the basis for that change and how it affects the requirement for additional GFNs at zone-substations.

Conclusion

The Victorian Government is committed to ensuring that all improvements to the electricity network, including the works that are the subject to the CPAs, are provided at a fair and reasonable cost to electricity consumers. It also trusts that the AER will undertake all regulatory, technical and financial due diligence in its interrogation of the claims put forward in the distribution businesses' CPAs.

If you require further information please contact Lorna Mathieson, Project Director Energy Programs Department of Environment, Land, Water and Planning, on 03) 9194 4010 or lorna.mathieson@delwp.vic.gov.au.

Yours sincerely



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