

Revised Proposal Attachment 5.13.N.2 EY ADMS Business Case Independent Review

January 2019



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21 November, 2018

Trevor Armstrong Chief Operating Officer Ausgrid 570 George Street Sydney NSW 2000

Re: ADMS Business Case Review

Dear Trevor:

With the size and significance of Ausgrid in Australia and the responsibility it has to deliver electricity in a reliable, safe, and efficient manner, it is critical for Ausgrid to develop the internal capabilities to enable those responsibilities. This includes a scalable and flexible platform that integrates distribution control and management, while enabling forward-looking needs such as the integration of Distributed Energy Resources (DER) and anticipated customer demands for more real-time information regarding their power usage and ability to play an active role in managing it.

Industry-best practices in electric distribution management over the past few years have focused on an integrated Advanced Distribution Management System (ADMS) platform that combines SCADA, Outage Management, and includes a set of Advanced Applications to enable better field device management, optimize grid operations such as volt-var control, and also enable the integration of large-scale DER. The ADMS is to leverage a common set of data for all its functions and produce a real-time power flow that will be leveraged by all modules, providing the operator with accurate and timely data to make important decisions. The ADMS will also include modern cyber-security controls to guard against system vulnerabilities and external threats. The industry has looked toward a small set of product vendors who are able to provide an end-end integrated ADMS, have a product roadmap that enables needed functionality in the future, and are able to maintain/upgrade their installed systems in a way that provides utilities with robust capabilities and minimal disruptions.

I have reviewed the latest version of the ADMS business case document provided on 20 November, 2018, along with supporting documentation provided over the past two months, including: Technology Plan Business Case – DNMS and SCADA replacement (September, 2018).

I believe the business case to be thorough and detailed. I will attempt to focus my review on several key categories, including: costs, benefits, risks, and assumptions.

- Costs: the breakdown of costs provided in the business case covers the key elements that I would expect to see, including: labour, vendors, hardware/software, technology support, etc. Reasonable contingency has been allocated to account for scope/execution challenges. Significant scope changes are not likely to be accommodated by the included contingency and a re-planning effort will need to be considered in such case. Updates to the costs in response to the data access recommendations have been made and the relevant details have been provided.
- Benefits: the benefits and methodology used to assess them seem reasonable and in line with common ADMS benefits considered in other implementations. The input data, analysis, and assumptions are reasonable and traceable.
- Risks: the risks and associated ratings presented in the business case are reasonable and have been updated to reflect my recommendations. Working closely with the product vendor and internal



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stakeholders to manage scope, understand earned value/remaining work, and apply risk mitigations in a timely manner will be critical to the success of the project

Assumptions: as with any business case, many assumptions have been made throughout the analysis.
Based on my review, these assumptions are reasonable and in line with general guidelines for ADMS business cases.

Overall, I believe the Ausgrid ADMS business case is reasonable and sound. As with any program of this complexity, employing a rigorous program delivery methodology, closely managing scope, and proactively exercising risk mitigations will be key to the success of the program. This is especially important for ADMS, as the technology is new and the team will have to manage many unknowns throughout the next few years.

Yours sincerely,

Omar Al-Juburi

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Partner Ernst & Young LLP