Appendix 1.25: Business Case for ADMS Upgrades

Regulatory proposal for the ACT electricity distribution network 2024–29

Contents

1. Background to the Upgrade Requirements

1.1. Current Position of the ADMS

The SE ADMS at Evoenergy has been upgraded to v3.8 in 2022. This is a major upgrade from v3.4 and as well as extending the functionality has including the hardware, communications infrastructure and operating system.

Evoenergy selected v3.8 for the upgrade despite v3.9 now being available. This was because no major utilities in Australia have yet deployed v3.9 and the magnitude of the upgrade meant this would have introduced additional project risks to an already complex upgrade.

1.2. Overview of Options

The ADMS is a critical system delivering many benefits to Evoenergy's customers. It is therefore important to ensure that regular updates and replacements are undertaken to remain current and supported. Several options were considered for the upgrade strategy to the ADMS with all options assuming that the ADMS and hardware/Comms were upgraded at the same time. The options were:

1) **Option 1 - Upgrade the system during the current regulatory period**. This would have the upgrade design commencing in FY27 and the upgrade in FY28. This would allow the ADMS to remain on the vendor's Mainstream Support, which is described in section 2.1.

   The upgrade design for all options requires reviewing the new capabilities within the latest version of the ADMS and detailing how to configure the system to meet the needs of users. This will involve detailed review between the utility and the vendor to detail exactly what will be delivered and consider how it will impact the existing business processes.

   The upgrade will require the implementation of the new ADMS solution which will need to operate on replacement hardware, communication equipment and operating system.

2) **Option 2 - Undertake the design work for the upgrade in FY29 and purchase and install the hardware**. This option would allow an upgrade to the System in the first year of the 29-34 regulatory period.

3) **Option 3 - Defer the entire system upgrade until the 29-34 regulatory period**. In this option FY30 would have the design work and FY31 the upgrade.

Alternative options that would be more expensive, such as replacement of the ADMS, have not been considered within the assessment.

1.3. Cost of Upgrade Options

The capex cost for the upgrade will be the same between options, but there will be a difference in timing of the expenditure. The cost for the implementation of the upgrade have not yet been formalised as it is expected this will arise during the 29-34 regulatory period and formal quotes have not been requested from SE.

The costs for the Upgrade Design Work are $950k. This is split between SE charges, which are 70% of the cost and the remaining 30% of the cost for Evoenergy resources. The hardware costs for servers, workstations, storage and networking equipment are $2m. The total cost is $2.95m.

No comparison is made of support costs as these are expected to be similar between options.

1.4. Business Case Approach

The business case approach is based on a review of options rather than a financial justification for the upgrade. The upgrade is not intended to deliver any enhancement to functionality, but instead has a focus on risk reduction and ensuring critical infrastructure remains supported. Should additional modules be recommended as part of the upgrade these would be separately proposed in the 29-34 regulatory submission.

2. ADMS Support Policy

2.1. SE – Support Policy

A critical part of the decision on when to upgrade is the support policy of the application vendor.

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[1] EcoStructure, ADMS End of Life Policy, User Manual V1.0 July 2022, Schneider Electric.

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3. Support Policy for Other Components

3.1. Hardware

The hardware for the latest upgrade was purchased in 2020. Evoenergy have commitment from Dell, the supplier of the hardware, that it will be supported until 2030. This would be a 10 year life for the hardware if it was replaced at this point. In order to allow replacement by 2030 the new hardware would need to be purchased in FY29 and then utilised in the system upgrade.

At this stage no investigation has been made for extended support after this date. If extended support is available, it is likely to come at an additional cost as well as the risk of operating on older hardware.

3.2. Communications

The communications equipment has been provided by Cisco who offer standard support for 5 years. It is expected that Cisco will offer additional extended support for a period of 2-3 years after this date. However, at the end of extended support the product would be unsupported.

3.3. Operating System

The Operating System has been upgraded as part of the ADMS Upgrade. The Operating System should have a similar period of support to the ADMS as the Vendor aligns its application development with the Operating System.

4. Options for ADMS Upgrade

4.1. Comparison of Options

A table summarising the options is shown below.

Table 2 ADMS upgrade options

	Option 1 – Design and Upgrade next RCP	Option 2 – Design at end of next RCP and Upgrade in following RCP	Option 3 – Design and Upgrade after the next RCP
Description	Design in FY27 and Upgrade commencing in FY28. Allows ADMS Support to remain as Mainstream Support	Upgrade design and hardware purchase in FY29. Upgrade will commence in FY30 (following RCP). Allows ADMS to remain covered by Extended Support.	Defer all upgrade components until the following regulatory period
Cost	Highest NPV cost as results in replacement of hardware and communications earlier. Overall Cost is the same between options.	Lower NPV cost than option 1, but will be higher than Option 3 where costs of upgrading are deferred	Lowest NPV cost as all cost deferred until 29-34 regulatory period. This may be partly offset by increased support costs as elements of the system are out of even extended support (assuming some form of end of life support is available)
Advantages	Evoenergy remain on Mainstream Support for most of the period and only have 1 year when the system is reliant on extended support. This will also provide earlier access to any product improvements	Still maintaining system within expected lifetime of the key components and the timing of Extended Support. Evoenergy believe this is an acceptable level of risk for this critical system.	Defers upgrade costs and therefore the lowest NPV capex costs of the option
Disadvantages	Higher costs and will replace hardware and some elements whilst still supported	Higher NPV cost than Option 3. Doesn't provide as early access to product enhancements as Option 1.	Likely to result in operating on an unsupported system as will be beyond Extended Support. Also results in a longer wait for any product enhancements
Risks	Lowest risk option as earliest upgrade to latest ADMS and Comms, Hardware and remain on Mainstream Support. Will create need for earliest follow up upgrade	Slightly higher risk than Option 1 as continuing to operate on existing system with only extended support	Creates risk in duration of time without upgraded system and operating without even extended support. Also likely to be operating with hardware/Comms out of support and risk of hardware failures.

5. Recommendations

5.1. Recommendation

Evoenergy are conscious of the cost and complexity of the upgrade which needs to be considered alongside the risk reduction from upgrading the ADMS. Evoenergy are therefore recommending Option 2.

This option has the design, along with the purchase of the hardware, to allow the preparation work for the upgrade to be undertaken in FY29. The upgrade can then commence at the start of the following regulatory period. This will allow Evoenergy to remain on Extended ADMS Support until June 2030, at which point the upgrade should be complete.