



Jemena Electricity Networks (Vic) Ltd

Technology Plan

IT Investment Brief - Future Grid Program

Non-Recurrent - New Capability



Page intentionally blank

Glossary

Current regulatory period	The period covering 1 Jan 2016 to 31 Dec 2020
Intervening period	The period covering 1 Jan 2021 to 30 Jun 2021 includes the time between the current regulatory period and the next regulatory period. The Intervening period arises with the move from a calendar year regulatory year to financial
Next regulatory period	The period covering 1 Jul 2021 to 30 Jun 2026
RYxx	Regulatory year covering the 12 months to 30 June of year 20xx for years in the Next Regulatory Period and the 12 months to 31 December of year 20xx for years in the Current Regulatory Period. For example, RY20 covers 1 January 2019 to 31 December 2020 and RY22 covers 1 July 2021 to 30 June 2022
CYxx	The calendar year which covers the 12 months to 31 December of year 20xx. For the current regulatory period, this is equivalent to RYxx
AER	Australian Energy Regulator
AMI	Advanced Metering Infrastructure
JEN	Jemena Electricity Network (Vic) Ltd
ICT	Information and Communications Technology
Jemena	Refers to the parent company of Jemena Electricity Network
RTS	Real-Time Systems
SCADA	Supervisory Control And Data Acquisition

Future Grid Program – Non-Recurrent – New Capability

Objective	The objective of this investment brief is to demonstrate the link between the attached Future Grid Program business case to the JEN 2021-26 regulatory proposal. The justification for expenditure in the Future Grid Program is in the business case document, and the cost forecast project list is in this document.																																																																																																																					
What We Are Recommending	<p>JEN is proposing an investment in new systems as a new capability to support and communicate with smart devices on the distribution network. These new systems will allow the monitoring of these devices, the capture of new streams of data from them and the analysis of that data for decision making.</p> <p>Investments will be made in new systems on both the corporate network and within the Operational Technology – SCADA/RTS environment which encompasses the Distribution Management System. The project ID shows this distinction with those beginning with “A” being Operational Technology projects and those starting with “IT” being in the corporate security zone.</p> <p>Costs</p> <table> <tr> <th>Project Title (\$2021)</th><th>Project ID</th><th>RY22</th><th>RY23</th><th>RY24</th><th>RY25</th><th>RY26</th></tr> <tr> <td>Condition Monitoring Software</td><td>A11</td><td></td><td>103,495</td><td>103,882</td><td></td><td></td></tr> <tr> <td>Future Grid - LV Network Monitoring (DMS/SCADA)</td><td>A558</td><td>293,960</td><td>53,638</td><td>53,839</td><td>54,041</td><td>54,245</td></tr> <tr> <td>Future Grid - Hosting Capacity (DMS-DPF)</td><td>A560</td><td>641,367</td><td>536,382</td><td></td><td></td><td></td></tr> <tr> <td>Future Grid - Hosting Capacity (DMS-DERMS)</td><td>A561</td><td></td><td>482,744</td><td>3,230,313</td><td></td><td></td></tr> <tr> <td>Future Grid - Hosting Capacity (DMS-VVC)</td><td>A562</td><td></td><td></td><td></td><td>1,296,986</td><td>1,084,904</td></tr> <tr> <td>Future Grid - Dynamic Network Ratings (DMS/SCADA)</td><td>A565</td><td></td><td></td><td>53,839</td><td>270,205</td><td>216,981</td></tr> <tr> <td>Future Grid - Customer DER data capture processes (SAP)</td><td>A945</td><td>106,894</td><td></td><td></td><td></td><td></td></tr> <tr> <td>Future Grid - Customer demand data extraction tools (PI, WMR, AMI)</td><td>A946</td><td>320,683</td><td></td><td></td><td></td><td></td></tr> <tr> <td>Future Grid - DER website and portal</td><td>A947</td><td>534,472</td><td></td><td></td><td></td><td></td></tr> <tr> <td>Future Grid - Integrated Design Stage 2</td><td>A948</td><td>641,367</td><td></td><td></td><td></td><td></td></tr> <tr> <td>Future Grid Program - Complete Set of LV Asset Data (GIS/SAP)</td><td>ITEG04</td><td>356,985</td><td></td><td></td><td></td><td></td></tr> <tr> <td>Future Grid Program - LV Network Monitoring</td><td>ITEG05</td><td>116,831</td><td>117,249</td><td></td><td></td><td></td></tr> <tr> <td>Future Grid Program - LV Network Modelling Tool</td><td>ITEG06</td><td></td><td></td><td>941,494</td><td>945,036</td><td></td></tr> <tr> <td>Future Grid Program - Network Asset Management Lifecycle System</td><td>ITEG07</td><td></td><td></td><td>647,277</td><td>649,712</td><td></td></tr> <tr> <td>Future Grid Program - Develop (Dynamic) Network Ratings</td><td>ITEG08</td><td></td><td></td><td></td><td>118,129</td><td>118,576</td></tr> </table>						Project Title (\$2021)	Project ID	RY22	RY23	RY24	RY25	RY26	Condition Monitoring Software	A11		103,495	103,882			Future Grid - LV Network Monitoring (DMS/SCADA)	A558	293,960	53,638	53,839	54,041	54,245	Future Grid - Hosting Capacity (DMS-DPF)	A560	641,367	536,382				Future Grid - Hosting Capacity (DMS-DERMS)	A561		482,744	3,230,313			Future Grid - Hosting Capacity (DMS-VVC)	A562				1,296,986	1,084,904	Future Grid - Dynamic Network Ratings (DMS/SCADA)	A565			53,839	270,205	216,981	Future Grid - Customer DER data capture processes (SAP)	A945	106,894					Future Grid - Customer demand data extraction tools (PI, WMR, AMI)	A946	320,683					Future Grid - DER website and portal	A947	534,472					Future Grid - Integrated Design Stage 2	A948	641,367					Future Grid Program - Complete Set of LV Asset Data (GIS/SAP)	ITEG04	356,985					Future Grid Program - LV Network Monitoring	ITEG05	116,831	117,249				Future Grid Program - LV Network Modelling Tool	ITEG06			941,494	945,036		Future Grid Program - Network Asset Management Lifecycle System	ITEG07			647,277	649,712		Future Grid Program - Develop (Dynamic) Network Ratings	ITEG08				118,129	118,576
Project Title (\$2021)	Project ID	RY22	RY23	RY24	RY25	RY26																																																																																																																
Condition Monitoring Software	A11		103,495	103,882																																																																																																																		
Future Grid - LV Network Monitoring (DMS/SCADA)	A558	293,960	53,638	53,839	54,041	54,245																																																																																																																
Future Grid - Hosting Capacity (DMS-DPF)	A560	641,367	536,382																																																																																																																			
Future Grid - Hosting Capacity (DMS-DERMS)	A561		482,744	3,230,313																																																																																																																		
Future Grid - Hosting Capacity (DMS-VVC)	A562				1,296,986	1,084,904																																																																																																																
Future Grid - Dynamic Network Ratings (DMS/SCADA)	A565			53,839	270,205	216,981																																																																																																																
Future Grid - Customer DER data capture processes (SAP)	A945	106,894																																																																																																																				
Future Grid - Customer demand data extraction tools (PI, WMR, AMI)	A946	320,683																																																																																																																				
Future Grid - DER website and portal	A947	534,472																																																																																																																				
Future Grid - Integrated Design Stage 2	A948	641,367																																																																																																																				
Future Grid Program - Complete Set of LV Asset Data (GIS/SAP)	ITEG04	356,985																																																																																																																				
Future Grid Program - LV Network Monitoring	ITEG05	116,831	117,249																																																																																																																			
Future Grid Program - LV Network Modelling Tool	ITEG06			941,494	945,036																																																																																																																	
Future Grid Program - Network Asset Management Lifecycle System	ITEG07			647,277	649,712																																																																																																																	
Future Grid Program - Develop (Dynamic) Network Ratings	ITEG08				118,129	118,576																																																																																																																

	Future Grid Program - Deliver AMI Data Benefits for Network Management	ITEG09	428,382	429,912	215,759	216,571	217,389
	Total		3,440,941	1,723,420	5,246,401	3,550,680	1,692,094
	Total expenditure on these <i>non-recurrent – new capability</i> projects during the next regulatory period is \$15.7m.						
Relationship to ICT Capital Forecast	The proposed projects are contained in the ICT investment plan as 15 separate non-recurrent projects. These are Project IDs: A11, A558, A560-562, A565, A945-948 and ITEG04-09.						