Jemena Electricity Networks (Vic) Ltd

Response to the Annual Reporting Regulatory Information Notice issued 7 November 2019 for the 2021-22 regulatory year

Jemena
bringing energy to life

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Glossary

AER	Australian Energy Regulator
ACS	Alternative Control Service
ARENA	Australian Renewable Energy Agency
CAM	Cost Allocation Methodology
DM	Demand Management
DMIA	Demand Management Innovation Allowance
DMIAM	Demand Management Innovation Allowance Mechanism
DMIS	Demand Management Incentive Scheme
DNSP	Distribution Network Service Provider
DR	Demand Response
EV	Electric Vehicle
FY	Financial Year
JEN	Jemena Electricity Networks (Vic) Ltd
MAIFI	Momentary Average Interruption Frequency Index
MED	Maximum Event Day
NEL	National Electricity (Victoria) Law
PTRM	Post Tax Revenue Model
RIN	Regulatory Information Notice
RIT	Regulatory Information Test
SCS	Standard Control Service
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
STPIS	Service Target Performance Incentive Scheme

Introduction

Submission purpose

This submission is the Jemena Electricity Networks (Vic) Ltd (**JEN**) response to the Regulatory Information Notice (**RIN**) that the Australian Energy Regulator (**AER**) issued to JEN on **7 November 2019** under Division 4 of Part 3 of the National Electricity (Victoria) Law (**NEL**) (**Notice**). This response document covers the 2021-22 regulatory year ending on 30 June 2022 (the **relevant regulatory year**). Unless otherwise indicated, all numbers are expressed in nominal 2021-22 dollars. This RIN response provides:

- the information required in the regulatory template as attachment A2
- a basis of preparation for all information provided in the regulatory template as attachment A5
- a copy of the signed statutory declaration by JEN's authorised representative as attachment A6
- a copy of the audit report for financial information as attachments A8
- a copy of the review report for non-financial information as attachment A9.

Submission structure

This document provides JEN's responses to the information requested under Schedule 1 of the Notice for the relevant regulatory year. Each numbered section of this document corresponds to a section in Schedule 1 of the Notice. This document is structured as follows:

- Section 1 – General requirements
- Section 2 – Compliance
- Section 3 – Cost allocation to the distribution services
- Section 4 – Cost allocation to service segments
- Section 5 – Capitalisation policy
- Section 6 – Demand Management Incentive Scheme
- Section 7 – Demand Management Innovation Allowance Mechanism
- Section 8 – Tax standard asset lives
- Section 9 – Tax reporting – immediate expensing
- Section 10 – Regulatory Investment Test expenditure
- Section 11 – Corporate structure
- Section 12 – Audit opinion reports and review conclusion statements
- Section 13 – Confidential information
- Section 14 – Resubmission of information
- Section 15 – Reporting of fines and penalties
- Section 16 – Attachments.

1. General requirements

1.1 Regulatory templates

Paragraph 1.1 of Schedule 1 of the Notice requires JEN to provide the information required in each regulatory template in the Microsoft Excel workbooks attached at Appendix A of the RIN. For the relevant regulatory year, JEN is required to provide the information required by *Workbook 1 – Annual reporting – amended* and *Workbook 2 – New historical – amended* with respect to the relevant regulatory year. This information is provided as attachment A2 and attachment A10, respectively.

1.2 Reconciliation

Paragraph 1.2 of Schedule 1 of the Notice requires JEN to provide a Microsoft Excel Workbook or other information that reconciles and explains adjustments between the Audited Statutory Accounts and the Financial Information Templates, including a list that specifies the amount and nature of each adjustment made to derive the Financial Information Templates. This information is provided in attachment A3.

1.3 Policies

Paragraph 1.3 of Schedule 1 of the Notice requires JEN to provide:

a) the *regulatory accounting principles and policies* for the *relevant regulatory year*

b) the c*apitalisation policy* for the *relevant regulatory year*

c) a statement of policy for determining the allocation of *overheads* in accordance with the approved *cost allocation method* for the *relevant regulatory year*.

Items a) and c) are provided in attachment A4a.

For item b), in the relevant regulatory year, there was no change to JEN's property, plant and equipment guideline. However, JEN's intangible assets guideline has changed and has been provided as attachment A4b.

1.4 Changes to regulatory accounting principles and policies

Paragraph 1.4 of Schedule 1 of the Notice requires JEN to identify all material changes between the Regulatory Accounting Principles and Policies provided in response to 1.3(a) for the relevant regulatory year and the previous regulatory year. JEN advises that there have been no material changes to its principles and policy since the previous regulatory year.

1.5 Changes to cost allocation

Paragraph 1.5 of Schedule 1 of the Notice requires JEN to identify all material changes between the policy statements for determining the allocation of overheads in accordance with the approved Cost Allocation Methodology (**CAM**) for the relevant regulatory year and the previous regulatory year. JEN advises that it implemented an updated CAM[1] effective from 1 January 2021, which the AER approved in May 2019.[2] Notwithstanding this, JEN advises that there have been no material changes to its policy since the previous regulatory year.

[1] JEN, *Cost Allocation Methodology*, (Public), 29 March 2019.

[2] AER, *Jemena Electricity Networks (Vic) Ltd, Revised Cost Allocation Method, AER Final Decision*, May 2019.

1.6 Policies previously provided

JEN has not provided policies that were previously provided and have not materially changed.

1.7 Material differences in service performance

Paragraph 1.7 of Schedule 1 to the RIN requires JEN to identify each material difference (where the difference is greater than or equal to ±10 per cent) between the target performance measure specified in the Service Target Performance Incentive Scheme (**STPIS**) and actual performance reported in the response to paragraph 1.1 of Schedule 1 to the RIN. The material variances are set out below.

1.7.1 STPIS reliability

The performance measures used in assessing STPIS reliability are as follows:

- urban unplanned average sustained interruptions (System Average Interruption Frequency Index) (**SAIFI**)
- urban unplanned average minutes off supply (System Average Interruption Duration Index) (**SAIDI**)
- urban unplanned average momentary interruptions (Momentary Average Interruption Frequency Index) (**MAIFI**)
- rural unplanned SAIFI
- rural unplanned SAIDI
- rural unplanned MAIFI.

The comparison between JEN's actual and target STPIS reliability measures, after accounting for major event days (**MEDs**), is set out in Table 1–1.

Table 1–1: STPIS reliability

Performance Measure		FY22 Actual	FY22 Target	Variance
Urban (after removing excluded events MEDs)	Unplanned SAIDI	50.272	43.914	14%
	Unplanned SAIFI	0.748	0.728	2.7%
	Unplanned MAIFI	0.859	0.952	-9.8%
Rural (after removing excluded events and MEDs)	Unplanned SAIDI	19.530	48.440	-60%
	Unplanned SAIFI	0.376	0.743	-49.4%
	Unplanned MAIFI	1.084	1.416	-23.5%

An explanation for the variance is outlined in section **Error! Reference source not found.**.

The performance measure used in assessing STPIS customer service is call centre performance (telephone answering). The comparison between JEN's actual and target STPIS customer service measures is set out in Table 1–2.

Table 1–2: STPIS customer service

Performance Measure	FY22 Actual	FY22 Target	Variance
Telephone answering	66.507%	73.263%	9.2%

1.8 Reasons for material differences in-service performance

Paragraph 1.8 of Schedule 1 to the RIN requires JEN to explain the reasons for each material difference identified in the response to paragraph 1.7.

Four of the six STPIS performance measures in Table 1–3 show a variance of greater than 10 per cent. Three of these variances Rural Unplanned SAIDI, Rural Unplanned SAIFI and Rural Unplanned MAIFI related to better-than-target levels of performance. The main factors contributing to the favourable performance are:

- JEN's more stringent vegetation management practices arising from legislative changes to the Electricity Safety (Electric Line Clearance) Regulations in 2010 and JEN's effective condition-based asset replacement, prudent network augmentation and maintenance of current network performance standards; and

- mild temperatures experienced in the 2021-22 summer.

The main factor contributing to the unfavourable Urban Unplanned SAIDI was due to more severe weather days in this regulatory year compared with the last few years. Besides the MEDs on 29th and 30th October 2021, there were two more severe weather days on 19 December 2021 and 5 March 2022 when lightning and vegetation had damaged assets resulting in a total of 5.247 minutes SAIDI. Neither of these days qualified for an MED.

There was also an earthquake on 22 September 2021 that caused air bubbles in the gas protection relay of the Coburg North (CN) No.1 transformer to trip resulting in the loss of the CN-CS 66kV line. The TTS-CS 66kV line was isolated for planned maintenance at the time resulting in the total loss of the Coburg South (CS) zone substation supply for 27 to 45 minutes and 2.568 minutes SAIDI.

2. Compliance

This section sets out JEN's response to section 2 of Schedule 1 of the RIN.

2.1 Service classification

Paragraph 2.1 of Schedule 1 of the RIN requires JEN to explain the processes and procedures used by JEN to ensure that the distribution services have been classified as in the 2022-26 distribution determination. JEN's regulatory team monitors changes in service classification as part of its business-as-usual activities. Leading up to price reset review determinations—when service classifications are reviewed—JEN's regulatory team consults directly with the AER on its approach to service classification.

JEN's staff have reviewed and updated the activity codes for all of JEN's services and activities within JEN's SAP system to reflect changes to service classification resulting from the 2022-26 distribution determination. This approach ensures that the services JEN provide are correctly classified throughout the regulatory control period.

2.2 Negotiated distribution service criteria

Paragraph 2.2 of Schedule 1 of the RIN requires JEN to explain the procedures and processes used by JEN to ensure that the negotiated service criteria as set out in the 2022-26 distribution determination have been applied. Similar to the approach described in section 2.1, JEN's staff monitor compliance with the negotiated service criteria set out in the 2022-26 distribution determination as part of their business-as-usual activities.

JEN's staff regularly review the activity codes for all of JEN's services and activities within JEN's SAP system to ensure that its service classifications—including negotiated services—are mapped to the correct activity codes. This approach ensures that JEN's negotiated services (new public lighting services, alteration and relocation of distribution network service provider (**DNSP**) public lighting assets, and construction of reserve feeders) are correctly classified throughout the regulatory control period and comply with the negotiated service criteria set out in the 2022-26 distribution determination.

2.3 Negative change events

Paragraph 2.3 of Schedule 1 of the RIN requires JEN to explain the process to identify negative change events under clause 6.6.1(f) of the NER and the materiality threshold applied to these events. JEN staff monitor legislative and regulatory changes, and changes to technical and services standards within JEN as part of their business-as-usual responsibilities. Where a positive or negative change event that may have a material cost impact on JEN occurs, the regulation and legal teams assess whether a pass-through event has occurred and (if necessary) prepare the required cost pass-through application.

3. Cost allocation to the distribution services

JEN has applied its AER approved CAM in all relevant circumstances. JEN's new CAM applied from 1 January 2021 and therefore applied for the full regulatory year.

3.1 Expenditure or revenue items directly attributable or allocated to the distribution service

Paragraph 3.1(a) of Schedule 1 of the RIN requires JEN to identify each item of expenditure and revenue in worksheet 8.1 of the Financial Information Templates that is directly attributable. The items directly attributable to JEN have been identified and are listed in Table 3–1.

Paragraphs 3.1(b) and 3.1(c) of Schedule 1 of the RIN require JEN to identify each item in worksheet 8.1 of the Financial Information Templates that is allocated to JEN:

- not directly attributable but on a causation basis,
- not directly attributable and cannot be allocated on a causation basis.

The items allocated to JEN have been identified and are listed in Table 3–1. Each of these items has been allocated on a causation basis and thus there are no items allocated in the category identified in paragraph 3.2 (c) of Schedule 1.

Table 3–1: Directly attributable and allocated on a causation basis

Item	Directly attributable ($)	Allocated ($)
8.1.1.1 - REVENUE		
Distribution revenue	261,183,544	-
Cross boundary revenue	10,535,490	-
Contributions	-	-
Interest income	126,154	-
Jurisdictional scheme amounts	7,996,327	-
Profit from sale of fixed assets	-	-
TUOS revenue	83,478,252	-
Pass through revenue (F-factor)	116,400	-
Recoverable works	-	-
Other revenue	35,100,451	-
Total revenue	**398,536,617**	**-**
8.1.1.2 - EXPENDITURE		
TUOS expenditure	76,179,079	-
Avoided TUOS expenditure	438,396	-
Cross boundary expenditure	5,186,926	-
Depreciation	67,591,970	-
Finance charges	-	-
Impairment losses	-	-
Jurisdictional scheme amounts	7,262,923	-
Loss from sale of fixed assets	-	-

Item	Directly attributable ($)	Allocated ($)
Maintenance expenditure	25,106,161	-
Operating expenditure excluding maintenance expenditure	42,749,433	29,663,227
Recoverable works	-	-
Other	-	-
Total expenditure	**224,514,887**	**29,663,227**

3.2 Information on items identified in response to 3.1

Paragraphs 3.2(a) and 3.2(c) of Schedule 1 require JEN to state, for each item identified in response to paragraph 3.1, the amount of the item that has been allocated and the numeric amount of the allocators used. Section 3.2(b) requires JEN to explain the method of allocation and reasons for choosing that method. Table 3–2 sets out:

a) the amounts of these items

b) the method of allocation and reason for basis

c) the allocator percentages.

Table 3–2: Shared cost allocation

Cost Item	Amount ($) (Section 3.2(a))	Method of allocation and reason for basis (Section 3.2(b))	Allocator (%) (Section 3.2(c))
Digital Provision and management of IT infrastructure and services. Costs include residual labour costs and non-labour costs	15,460,953	Method: Management and support staff time effort and associated costs survey-based driver. Reason: Digital costs support the delivery of Jemena's capital and operating programs, including those of JEN. Costs are attributed to specific Digital activities based on time writing and goods and services receipting. Residual costs are allocated to Digital activities using SAP assessment cycles[3] on residual cost centre costs based on feedback from the latest survey of management and support staff time effort and associated costs.	27%
Finance Provision and management of commercial, financial shared services, management & external reporting, treasury & fund raising, risk & insurance and taxation services. Costs include residual labour costs and non-labour costs.	8,414,503	Method: Management and support staff time effort and associated costs survey based driver. Reason: Finance costs support the delivery of Jemena's finance operations & stewardship activities, including those of JEN. Costs are allocated to Finance activities using SAP assessment cycles on cost centre costs based on feedback from the latest survey on management and support staff time effort and associated costs.	21%

[3] Assessment cycles are used in SAP to allocate costs between different elements.

Cost Item	Amount ($) (Section 3.2(a))	Method of allocation and reason for basis (Section 3.2(b))	Allocator (%) (Section 3.2(c))
People, Safety & Legal Management of recruitment and remuneration benefit services, health and services training, performance, quality and adverse impact on the environment, advice on economic regulation, environmental law, employment law, property law, and company law, including the role of company secretary. Costs include salaries, employee-related expenses, recruitment agent fees, training, court and tribunal costs and procurement of external advice and licence fees.	4,562,607	Method: Management and support staff time effort and associated costs survey-based driver. Reason: People Safety & Legal supports Jemena's people, HSE and legal strategy, operations & compliance activities, including those of JEN. Costs are allocated to People Safety & Legal activities using SAP assessment cycles on cost centre costs based on the latest survey on management and support staff time effort and associated costs.	15%
Corporate Affairs and Marketing Management of corporate communications to all stakeholders, including customers, employees, neighbours, state and federal governments and regulators, and management of marketing & promotional affairs. Costs include salaries, employee related expenses, travel, communications print costs and subscriptions. Management of marketing & promotional affairs. Costs include salaries, employee related expenses, travel, and non-specific marketing related costs.	1,225,163	Method: Management and support staff time effort and associated costs survey based driver. Reason: Corporate Affairs and Marketing costs support the delivery of Jemena's corporate communications and marketing, including those of JEN. Costs are allocated to Corporate Affairs and Marketing activities using SAP assessment cycles on cost centre costs based on feedback from the latest survey on management and support staff time effort and associated costs.	24%

As outlined above, the causation basis of each cost item is shared, causal and operating in nature, so there are therefore no items for JEN that have been identified in response to paragraph 3.1(c). Paragraphs 3.3(a) to (c) of Schedule 1 are therefore not applicable to JEN.

4. Cost allocation to service segments

Paragraph 4.1 of Schedule 1 requires JEN to identify each item in the Financial Information Templates that is:

- directly attributable to JEN's service segments
- allocated to JEN's service segments on a causation basis
- cannot be allocated on a causation basis to a service segment.

Paragraph 4.2(a) of Schedule 1 requires JEN to state, for each item identified in response to paragraph 4.1(a), the quantum of the item that is directly attributable. Paragraphs 4.3(a) and 4.3(c) requires JEN to state, for each item identified in response to paragraph 4.1 (b), the quantum of the item that has been allocated and the numeric quantum of the allocators used. Paragraph 4.3(b) of Schedule 1 requires JEN to explain the allocation method and reasons for choosing that method in relation to items identified in 4.1(b). The items allocated to JEN on causation basis and JEN's responses to paragraph 4.3 are listed in Table 4–1.

Paragraph 4.4 of Schedule 1 requires JEN to state that each item in response to paragraph 4.1(c) has not been allocated on a directly attributable basis and cannot be allocated on a causation basis. This requirement is not applicable as there are no instances in JEN's response where operating, maintenance and capex costs were not allocated to an activity area in part on a directly attributable basis or on a causation basis (or both) to a service segment. All costs were allocated in a way that is consistent with JEN's approved CAM.

Table 4–1: Cost allocation to service segments

Cost Item (Section 4.1)	Total amount ($)	Direct ($) (Section 4.2(a))	Allocated ($) (Section 4.3(a))	Method of allocation and reason for Basis (Section 4.3(b))	Allocator % (Section 4.3(c))
SCS - Vegetation management	3,521,973	3,521,973	0	Directly charged.	-
SCS - Maintenance	7,140,112	7,140,112	0	Directly charged.	-
SCS - Emergency response	5,172,037	5,172,037	0	Directly charged.	-
SCS - Non-network	21,168,412	3,212,061	17,956,351	JEN allocates Non-network costs to these expense activities based on its internal policies and in accordance with the AER approved CAM. The Non-network costs include an allocation of residual Digital and Property costs.	84%
SCS - Network Overheads	26,299,522	20,523,238	5,776,284	JEN allocates Network overheads to these expense activities based on its internal policies and in accordance with the AER approved CAM. The overheads include an allocation of residual Asset Management costs.	83%
SCS - Corporate Overheads	17,000,566	4,728,371	12,272,195	JEN allocates Corporate overheads to these expense activities based on its internal policies and in accordance with the AER approved CAM. The overheads include an allocation of residual Corporate costs.	84%
ACS - Metering	4,828,533	4,828,533	0	Directly charged.	-

Cost Item (Section 4.1)	Total amount ($)	Direct ($) (Section 4.2(a))	Allocated ($) (Section 4.3(a))	Method of allocation and reason for Basis (Section 4.3(b))	Allocator % (Section 4.3(c))
ACS - Public Lighting	1,355,477	1,355,477	0	Directly charged.	-
ACS - Fee and Quoted	4,067,258	4,067,258	0	Directly charged.	-
ACS - Network Overheads	2,618,685	(1)	2,618,686	JEN allocates Network overheads to these expense activities based on its internal policies and in accordance with the AER approved CAM. The overheads include an allocation of residual Asset Management and Property costs.	17%
ACS - Corporate Overheads	4,346,245	1	4,346,244	JEN allocates Corporate overheads to these expense activities based on its internal policies and in accordance with the AER approved CAM. The overheads include an allocation of residual Digital and Corporate costs.	16%
CAPEX – SCS – Replacement Expenditure	45,670,466	45,670,466	0	Directly charged.	-
CAPEX – SCS – Connections	65,265,765	65,265,765	0	Directly charged.	-
CAPEX – SCS – Augmentation Expenditure	33,431,385	33,431,385	0	Directly charged.	-
CAPEX – SCS – Non-Network	19,604,379	19,604,379	0	Directly charged.	-
CAPEX – SCS - Capitalised Network Overheads	21,204,223	21,204,223	0	Directly charged.	-
CAPEX – ACS – Public Lighting	3,925,537	3,925,537	0	Directly charged.	-
CAPEX – ACS – Connection Services	8,305,696	8,305,696	0	Directly charged.	-
CAPEX – ACS – Metering Services	4,789,957	4,789,957	0	Directly charged.	-
CAPEX – ACS – Ancillary Network Services	55,032	55,032	0	Directly charged.	-

5. Capitalisation policy

5.1 Material changes

Paragraph 5.1 of Schedule 1 of the Notice requires JEN to identify all material changes between the capitalisation policy for the relevant regulatory year and the previous regulatory year. In the relevant regulatory year, the intangible assets guidance (Attachment A4b) was amended to include recognition, measurement and reporting of Software-as-a-Service (SaaS) Arrangements.

5.2 Changes identified

Paragraph 2 of Schedule 1 of the Notice requires JEN to, for each change identified in the response to paragraph 5.1:

(a) state, if any, the financial impact of the change;

(b) state the reasons for the change;

(c) explain the effect of the change, if any, on the actual operating expenditure and actual capital expenditure incurred, in comparison to the forecast operating expenditure and forecast capital expenditure determined in the 2022-2026 Distribution Determination for the relevant regulatory year; and

(d) explain the effect of the change, if any, on the actual operating and actual capital expenditure incurred, in comparison to the previous relevant regulatory year.

5.2(a) – IT capex costs of $4.47 million were recognised as SaaS and expensed as IT opex costs in the relevant regulatory year.

5.2(b) – In April 2021, the IFRS Interpretation Committee ("IFRIC") published its final agenda decision *'Configuration or Customisation Costs in a Cloud Computing Arrangement (IAS 38 Intangible Assets)*', which addresses whether configuration or customisation costs relating to Software-as-a-Service ("SaaS") arrangements can be recognised as an intangible asset and if not, over what time period the costs are expensed. The Group's accounting policy has historically been to capitalise certain costs related to cloud computing arrangements as an intangible asset. The adoption of the above agenda decision has resulted in the Group changing its accounting policy and a reclassification of these intangible assets in the Balance Sheet to an expense in the Income Statement.

Under the updated accounting policy, SaaS arrangements are service contracts providing the Group with the right to access the cloud provider's application software over the contract period. Costs incurred to configure or customise, and the ongoing fees to obtain access to the cloud provider's application software, are recognised as operating expenses when the services are received. Costs incurred for developing software code that enhances or modifies, or creates additional capability to, existing on-premise systems and meets the definition of and recognition criteria for an intangible asset are recognised as intangible software assets and amortised over the useful life of the software on a straight line basis. Judgement is required to determine whether the additional code meets the definition of an intangible asset. Where the SaaS arrangement supplier provides both the configuration and customisation services, and the SaaS access over the contract term, judgement is required to determine whether these services are distinct or not from each other. Distinct configuration and customisation costs are expensed as incurred as the software is configured or customised (i.e. upfront). Non-distinct configuration and customisation costs are expensed over the SaaS contract term (i.e. as a prepayment).

Non-distinct customisation activities significantly enhance or modify a SaaS cloud-based application. A materiality assessment is applied in determining whether the degree of customisation and modification of the SaaS cloud-based application is significant or not.

5.2(c) – See table 5-1 below.

Table 5–1: Effect of this change on opex and capex

	CPI adjusted forecast ($m)	Actual ($m)	Difference ($m)
SCS – Opex - excluding SaaS expensed	102.39	75.83	26.56
SCS – Opex - SaaS expensed	-	4.47	(4.47)
SCS – Opex - Total	102.39	80.30	22.09
SCS – Capex - before SaaS expensed	183.32	189.65	(6.33)
SCS – Capex - SaaS expensed	-	(4.47)	4.47
SCS – Capex - Total	183.32	185.18	(1.86)

5.2(d) – See table 5-2 below.

Table 5–2: Effect of this change on opex and capex

	FY2021 actual ($m)	FY2022 actual ($m)	Difference ($m)
SCS – Opex - excluding SaaS expensed	70.60	75.83	(5.23)
SCS – Opex - SaaS expensed	-	4.47	(4.47)
SCS – Opex - Total	70.60	80.30	(9.70)
SCS – Capex - before SaaS expensed	169.39	189.65	(20.26)
SCS – Capex - SaaS expensed	-	(4.47)	4.47
SCS – Capex - Total	169.39	185.18	(15.79)

6. Demand Management Incentive Scheme

Paragraph 6.1 of Schedule 1 of the Notice requires JEN to identify all eligible Demand Management Incentive Scheme (**DMIS**) projects and committed projects for which JEN seeks approval. JEN does not seek approval for any projects in relation to this DMIS. Therefore, JEN does not provide any further information in response to section 6 of Schedule 1 of the Notice.

7. Demand Management Innovation Allowance Mechanism

Paragraph 7.1 of Schedule 1 of the Notice requires JEN to identify each demand management eligible project for which JEN seeks approval. JEN seeks approval for one project for the relevant regulatory year, which is outlined below. Section 2.3(3)(f) of the demand management innovation allowance mechanism (**DMIAM**) requires a statutory declaration signed by an officer of JEN. This is provided in Attachment A7.

7.1 Dynamic electric vehicle (EV) charging trial (project establishment)

This project was included in our DMIAM submission for FY2021. The DMIAM funding request for FY2022 is an extension of this project and there is no funding duplication across these two regulatory years.

7.1.1 Project Criteria

Paragraph 7.2(a) of Schedule 1 of the Notice requires JEN to explain how JEN's initiative complies with the project criteria detailed in Section 2.2.1 of the DMIAM. JEN's eligibility is outlined below.

JEN is leading an Australian Renewable Energy Agency (**ARENA**) partially funded collaboration between five DNSPs (comprising JEN, AusNet Services, United Energy, TasNetworks and EvoEnergy) and a leading EV charging installer (JET Charge) to understand the impacts of EVs on the electricity system, consumer willingness for third party control and to demonstrate how DNSPs can play a direct role in EV charge management.

The trial will prove the concept of dynamically managing EV charging load by sending a dynamic operating envelope (**DOE**) to the charging infrastructure, with a real-time assessment of available network capacity, to accommodate more EVs without network augmentation. A small number of EVs per DNSP have been planned to be included in the trial. Incentives will be offered to customers to install smart EV chargers and to participate in EV charge management events referred to as solar soak and demand response events.

As a result of this trial, DNSPs will materially advance their preparedness for the expected impacts of EVs on the electricity system. The project also has the potential to improve the efficiency of JEN's future network investments through the deferral or avoidance of network augmentation capex and to mitigate supply risks on capacity-constrained feeders. JEN considers that works undertaken in the relevant regulatory year comply with the DMIAM criteria in the following ways:

- This trial will demonstrate demand management capability using residential EV chargers managed by the DNSP via the use of dynamic operating envelopes to manage the charging within the network limits. Two demand management scenarios are being investigated solar soak and demand response events. Solar soak events will encourage customers to charge and manage within the system limits to soak up excess solar during minimum demand periods. Demand response events will manage the EV charger (curtailing charging if required) during peak demand periods to ensure the demand does not exceed the network limits.
- The trial is innovative and will monitor the network in near real-time, (using network sensors, AMI data and EV Charging infrastructure data), to calculate the non-EV load and allocate the remaining capacity to the EVs via a dynamic operating envelope sent and updated every 5 minutes to provide a dynamic solution based on the current network conditions.
- The trial is a *non-tariff-based* project and the claimed costs are not recovered under any other incentive scheme.
- Costs recovered under the DMIAM are not recoverable under any other jurisdictional incentive scheme.

7.1.2 Project Compliance Reporting

Paragraph 7.2(b) of Schedule 1 of the Notice requires JEN to submit a compliance report in accordance with Section 2.3 of the demand management innovation allowance mechanism. JEN's compliance report is outlined below.

7.1.2.1 Nature and scope of the Dynamic EV charging trial

See section 7.1.1.

7.1.2.2 Aims and expectations of the Dynamic EV charging trial

The key objectives of this study are to prove the concept of managing EV charging load dynamically with a real-time assessment of available network capacity in order to accommodate more EVs without network augmentation.

The project will deliver the following:

- monitor network capacity in real-time and provide technologies that can automatically control charging, including time delay and throttling – initiating, delaying and/or varying EV charging rates
- obtain customer insights and preferences on multiple charge management initiatives and incentives
- obtain charging data for approximately 170 privately owned EVs with and without intervention
- demonstration of control boxes being used successfully to manage EV charging of Tesla cars, and smart chargers to manage other makes of EV
- demonstration of an aggregator as an intermediary between DNSPs and the charge points to orchestrate EV charging

7.1.2.3 Dynamic EV charging trial compliance with the project criteria

The dynamic EV charging trial complies with the project criteria detailed in Section 2.2.1 of the demand management innovation allowance mechanism.

- This trial will demonstrate demand management capability using residential EV chargers managed by the DNSP via the use of dynamic operating envelopes to manage the charging within the network limits. Two demand management scenarios are being investigated solar soak and demand response events. Solar soak events will encourage customers to charge and manage within the system limits to soak up excess solar during minimum demand periods. Demand response events will manage the EV charger (curtailing charging if required) during peak demand periods to ensure the demand does not exceed the network limits.
- The trial is innovative and will monitor the network in near real-time, (using network sensors, AMI data and EV Charging infrastructure data), to calculate the non-EV load and allocate the remaining capacity to the EVs via a dynamic operating envelope sent and updated every 5 minutes to provide a dynamic solution based on the current network conditions.
- The trial is a non-tariff-based project, and the claimed costs are not recovered under any other incentive scheme.
- Costs recovered under the DMIAM are not recoverable under any other jurisdictional incentive scheme.

7.1.2.4 Project implementation

The trial will be delivered in various milestones:

1. hardware and software development and customer acquisition;
2. customer acquisition and installation of hardware (chargers and network sensors);
3. demand response events and customer surveys; and
4. project completion and final report.

At each milestone, a milestone report will be submitted to ARENA to document knowledge sharing, and evidence the following deliverables have been met.

1. Hardware and software development and customer acquisition

    a) Provision of evidence that demonstrates the website for marketing, customer recruitment and customer feedback is functional

    b) Provision of evidence that demonstrates that a minimum of 40 EV owners have been registered for the trial

    c) Provision of evidence that demonstrates all DNSPs have finalised the overall system architecture and design for the DNSP platform, which will enable the DNSPs to calculate the network limitation for EV charging (the operating envelope) and to send the operating envelope to the aggregator for action

    d) Provision of specification of the control box, as well as test reports that demonstrate its capability to manage charging for Tesla EVs

    e) Provision of evidence that demonstrates that the customer-facing (aggregator) platform has been developed (by JET Charge).

    f) Provision of evidence to show the hiring of the project manager for the Project.

2. Customer acquisition and installation of hardware (chargers and network sensors)

    a) Provision of evidence that demonstrates that a minimum of 170 EV owners have been registered

    b) Provision of evidence that demonstrates that a minimum of 140 registered EV owners have charging hardware installed and commissioned at their premises

    c) Provision of evidence that demonstrates all DNSPs have developed and tested their platforms for interface to the JET Charge platform

    d) Provision of evidence that demonstrates that the network monitoring systems required at supply transformers have been installed and commissioned for the above EV owners

    e) Provision of evidence that demonstrates end-to-end testing has been conducted from the DNSP network monitoring system to the customer premise control box

    f) Provision of evidence to show that one customer survey has been completed

3. Demand response events and customer surveys

    a) Provision of evidence that demonstrates completion of customer acquisition, and charger and network monitoring system installation

    b) Provision of evidence that demonstrates that a minimum of eight demand response events have been scheduled and completed

    c) Provision of evidence to show that two customer surveys have been completed

4. Project completion and final report

    a) Provision of evidence to show that two customer surveys have been completed

    b) Provision of a minimum of 12 months of operational data for each of the smart charging technologies

7.1.2.5 Project outcome measurement and evaluation approach

At each milestone, a milestone report will be submitted to ARENA for approval to document knowledge sharing, and evidence that the deliverables have been met.

There will be extensive data gathering during the project to gain insights on the effectiveness of the EV charger response to the dynamic operating envelopes sent, monitoring the network in near real-time and the charging behaviour of the participants.

After each managed charging event, participants will be encouraged to answer a survey to gain further insights into customer behaviour.

7.1.2.6 Project costs

The actual expenditure for this project in the relevant regulatory year is $382,068 and reflects the following:

- Program management (42%)
- Digital solution implementation (7%)
- Network sensor procurement hardware (3%)
- Network sensor design, installation and commissioning (12%)
- Software development and data hosting platform costs (18%)
- Customer rewards and survey costs (18%)

The associated **$240,105** costs claimed under DMIAM for the project this regulatory year have not been:

- recovered under any other jurisdictional incentive scheme;
- recovered under any other Commonwealth or State Government scheme or ARENA funding; and
- included in the forecast capital or operating expenditure approved in the 2021-26 distribution determination or recovered under any other incentive scheme in that determination.

ARENA has partially funded this trial project and the amount outlined above excludes the funds that will be recovered from ARENA funding.

For milestones 3 and 4, in future regulatory years, the forecast additional cost of the project to completion is approximately $300,000, with $185,006 of this being funded by ARENA.

7.1.2.7 Ongoing project activity

At the time of writing, JEN and the consortium have completed Milestone 1 and Milestone 2 and are commencing activities towards Milestone 3. A summary of the key activities completed is outlined below:

- creation of a functional website for marketing, customer recruitment and customer feedback
- registration of all EV owners for the trial
- development and finalising the overall system architecture design and the communication protocol for sending the DOE signals
- installation of all EV chargers
- procurement, design, installation and commissioning of all network sensors
- digital system upgrades, software and DOE algorithm development, creation of a data hosting platform
- full end to end testing demonstrated
- 4 demand response events completed
- 4 customer surveys completed (Onboarding survey, Solar Soak event 1 survey, Demand Response event 1 survey, Solar soak event 2 survey)

- completed Knowledge Sharing deliverables and published Lessons Learned Report for Milestones 1 and 2

Changes to the project are:

- extension to the original milestone deliverable dates and project completion date – this was mainly due to delays on the project resulting from Covid-19 impacts on hardware supply and installation delays.
- The number of participants was reduced from 176 to 170 due to customers opting out of the trial at a late stage in the project.

7.1.2.8 Results of the project

The project is working towards Milestone 3 completing demand response events and customer surveys. In total, there will be 10 managed charging events; 5 being solar soak events and 5 being demand response events with a customer survey being completed after each event. At the time of writing, there have been 2 solar soak events and 2 demand response events completed.

Figure 7–1 below shows the aggregated EV load during the two solar soak events (orchestrated) compared to the maximum aggregated EV load observed for normal customer behaviour (unorchestrated), showing a significant increase in load demand can be initiated. Solar soak events intend to encourage customers to charge and manage their charging within the system limits to soak up excess solar during minimum demand periods.

Figure 7–1: Aggregated EV load profile (Solar Soak event customer behaviour Vs normal customer behaviour)

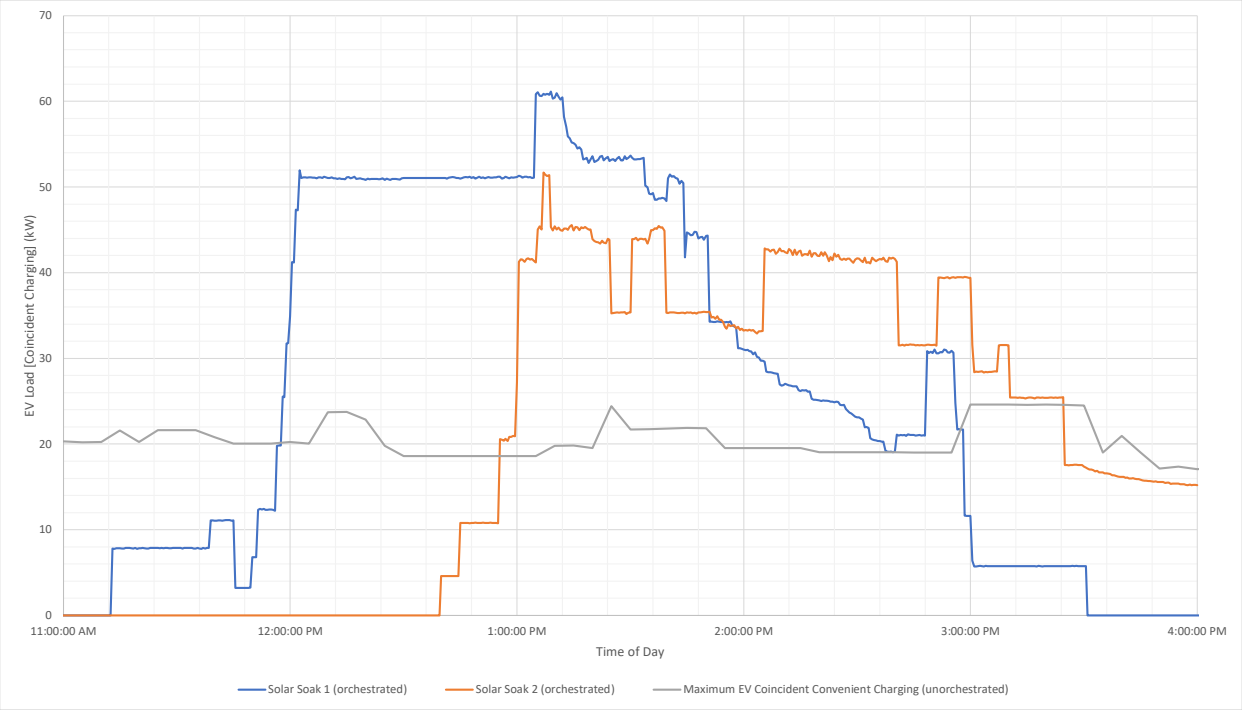


Figure 7–2 and Figure 7–3 compare the aggregated EV load to the aggregated dynamic operating envelope sent to the EVs for the two demand response events. The demand response events intend to manage the EV charger load (curtailing charging if required) during peak demand periods to ensure the demand does not exceed the network limits.

Figure 7–2: Aggregated EV load profile – demand response event 1 (EV load demand Vs EV DOE)

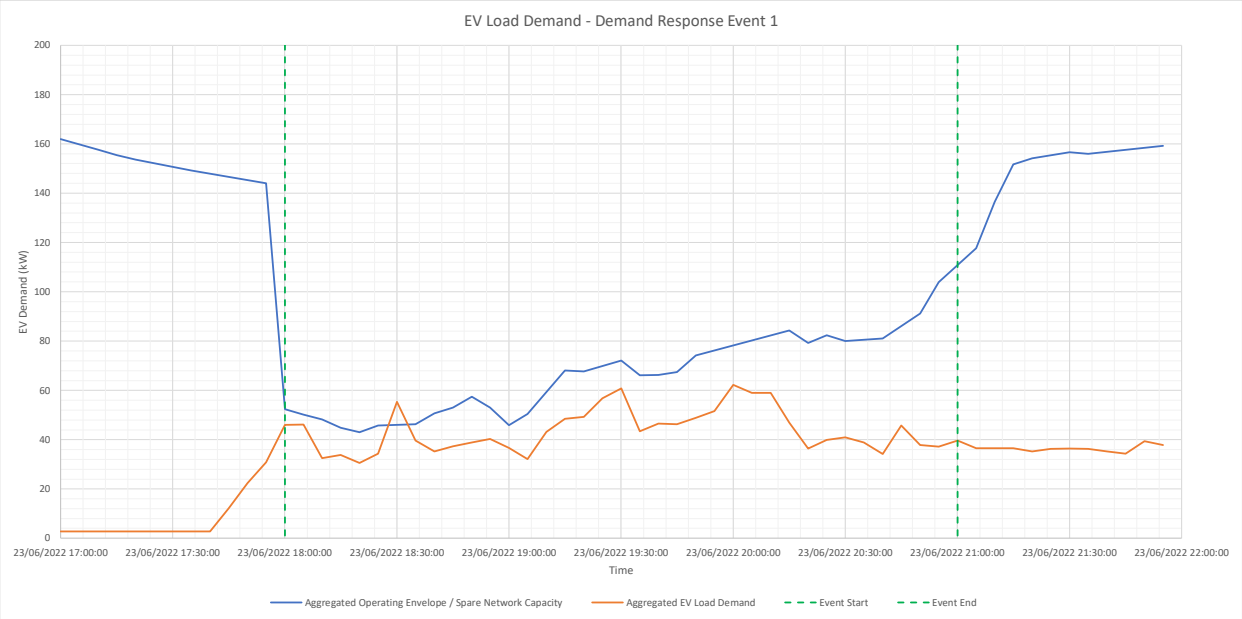


Figure 7–3: Aggregated EV load profile – demand response event 2 (EV load demand Vs EV DOE)

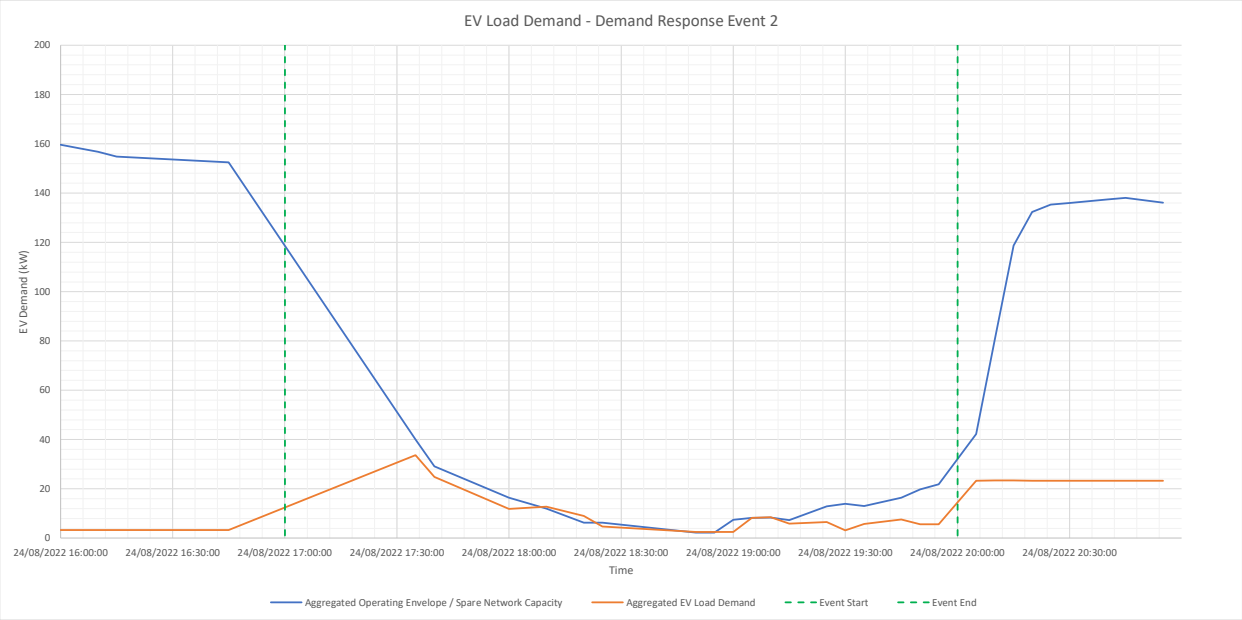
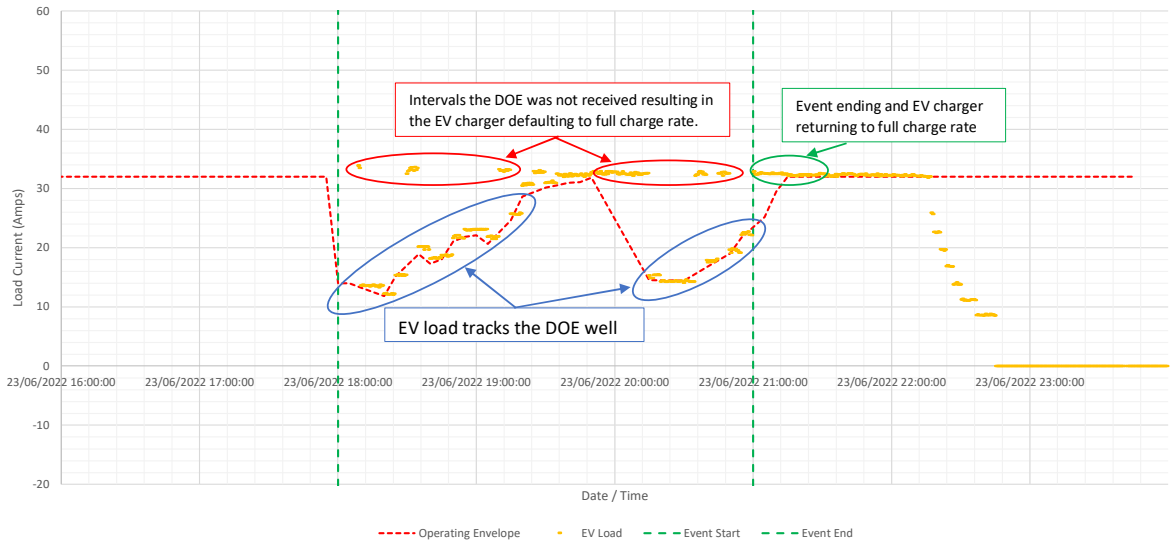


Figure 7–4 shows a detailed view of a single EV charger responding to the DOE signal that was sent to customers. The results show that the EV charger is curtailed accordingly as expected when the DOE is received demonstrating that DOEs can be used effectively for demand response events.

Figure 7–4: EV charging response to DOE



The project has produced two ARENA milestone knowledge-sharing reports[4, 5] and the following customer surveys:

- On-boarding survey
- Solar Soak – 11 May customer survey
- Demand Response – 23 June customer survey
- Solar Soak – 9 July customer survey

7.1.3 Project Developments and Results

Paragraph 7.3 of Schedule 1 of the Notice requires JEN to provide an overview of developments in relation to the project and of any results to date. The project developments and results to date are outlined in Section 7.1.2.8.

7.1.4 Total amount of DMIAM spent

Paragraph 7.4 of Schedule 1 of the Notice requires JEN to provide any other information as specified by the demand management innovation allowance mechanism. Section 2.3(3)(a) of the demand management innovation allowance mechanism requires JEN to state the total amount of DMIAM spent in the relevant regulatory period. The total amount of DMIAM spent in this regulatory year is **$240,105** and excludes any funds that will be recovered from ARENA.

4 Jemena Dynamic Electric Vehicle Charging Trial Project, Lessons Learnt Report #1, May 2021; https://arena.gov.au/assets/2021/05/jemena-dynamic-ev-charging-lessons-learnt-report.pdf

5 Jemena Dynamic Electric Vehicle Charging Trial Project, Lessons Learnt Report #2, May 2022; https://arena.gov.au/assets/2022/08/jemena-dynamic-electric-vehicle-charging-trial-project-lessons-learnt-2.pdf

8. Tax Standard Asset Lives

Paragraph 8.1 of Schedule 1 of the RIN requires JEN to identify all tax standard asset lives applied to asset classes that differ from those contained in JEN's approved Post Tax Revenue Model (**PTRM**) for the relevant regulatory year. Table 8–1 set out the tax standard asset lives for standard control services that JEN has applied.

Table 8–1: Summary of tax standard lives (standard control services)[1]

Asset class	AER approved tax standard lives (years)	Current tax standard lives (years)	Difference (years)
Subtransmission	43.0	43.0	0.0
Distribution system assets	45.2	45.2	0.0
Public lighting	N/A	N/A	N/A
SCADA/Network control	10.0	10.0	0.0
Non network - IT	4.0	4.0	0.0
Non network - other	10.3	10.3	0.0
Land	N/A	N/A	N/A
Buildings – capital works	40.0	40.0	0.0
In-house software	5.0	5.0	0.0

(1) AER, Jemena final decision PTRM 2022-23 return on debt update

8.1 Reasons for difference in asset lives applied within AER approved PTRM

As outlined in Table 8–1, JEN's current tax asset life inputs do not differ from the AER-approved asset lives.

9. Tax Reporting – Immediate Expensing

9.1 Provide information

Paragraph 9.1 of Schedule 1 of the Notice requires JEN to identify the amount of JEN's immediate expensing capital expenditure by asset class incurred within the relevant regulatory year. Refer to JEN's Annual Reporting RIN – Workbook 1 response (worksheet 8.2 capex, table 8.2.7 immediate expensing of capex – SCS) for this information.

9.2 Types of capex associated with immediate expensing capital expenditure

Paragraph 9.2 of Schedule 1 of the Notice requires JEN to list and explain the types of *capex* associated with the *immediate expensing capital expenditure*. Refer to JEN's Annual Reporting RIN – Workbook 1 response (worksheet 8.2 capex, table 8.2.7 immediate expensing of capex – SCS) for this information.

9.3 Changes in tax policy

Paragraph 9.3 of Schedule 1 of the Notice requires JEN to state if it has changed and/or intends to change its tax policy on *immediate expensing capital expenditure*. JEN has not and does not intend to change its tax policy on immediate expensing of capital expenditure.

10. Regulatory Investment Test - Expenditure

Table 10–1 sets out the required information for each project that has undergone the Regulatory Investment Test for distribution (**RIT-D**) in the relevant regulatory year.

Table 10–1: RIT-D projects

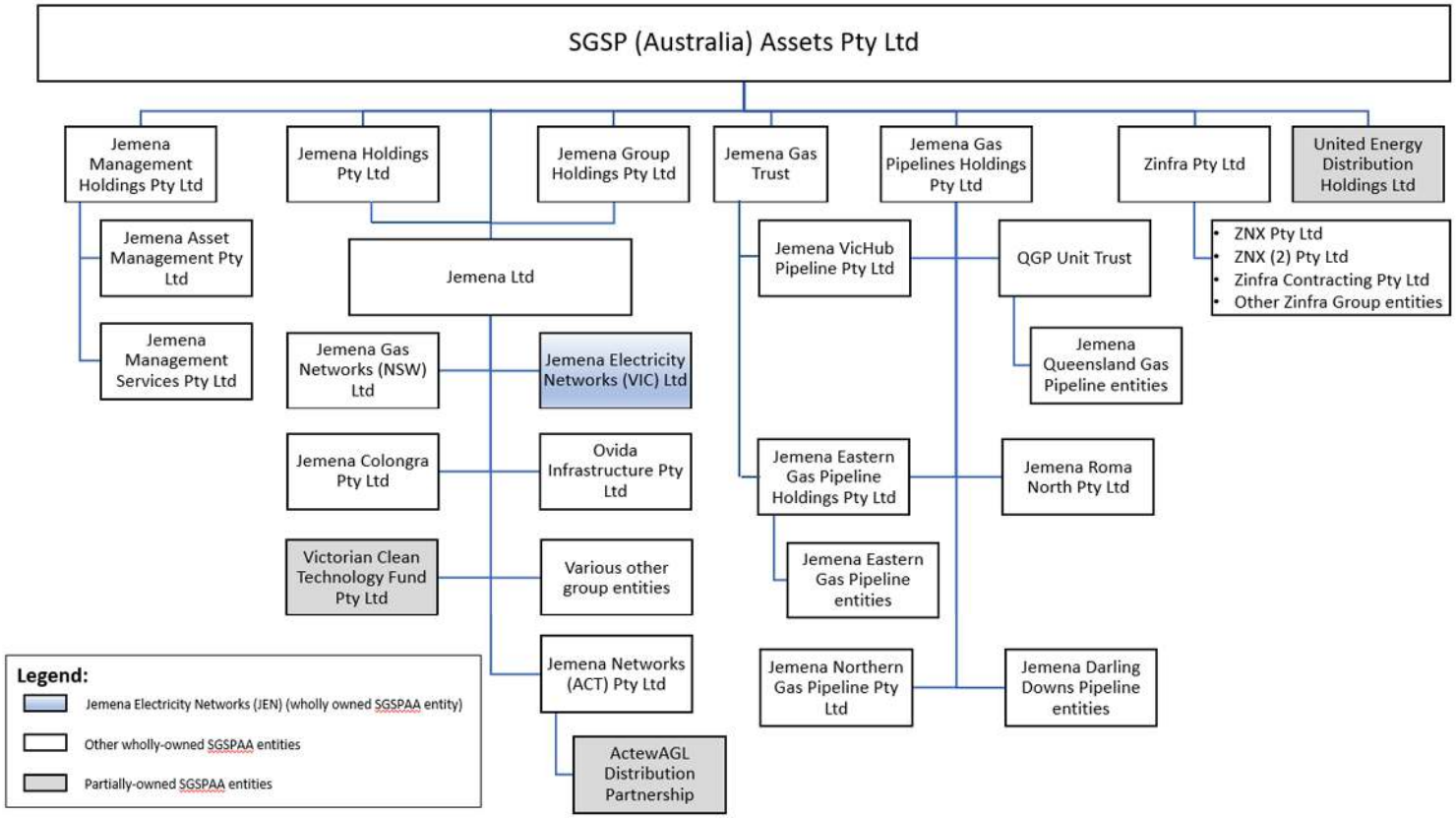
Project	Website link	RIT-D completion date	RIT-D status	Expenditure type	Total cumulative expenditure to date ($m, nominal, including overheads)	Forecast expenditure ($m, nominal, including overheads)
Keilor – Tullamarine – Airport West – Pascoe Vale 66 kV sub-transmission loop capacity constraint	https://jemena.com.au/electricity/network-info/replacement-project-rit-ds/kei-tul-aptw-pas-66kvsub-trans-loop-capacity-cstr	29/12/2017	Completed	Augmentation	14.34	14.34
East Preston Conversion Stage 5	https://jemena.com.au/electricity/network-information/rit-ds/east-preston-(ep)-conversion-stage-5	31/12/2019	Completed	Augmentation	3.48	6.92
Footscray East Zone Substation Switchgear condition	https://jemena.com.au/electricity/network-information/rit-ds/footscray-east-zone-substation-switchgear-conditio	31/12/2019	Completed	Replacement	11.11	15.11
Heidelberg Zone Substation Transformer condition	https://jemena.com.au/electricity/network-information/rit-ds/heidelberg-zone-substation-transformer-condition	31/12/2019	Completed	Replacement	2.92	16.50
Footscray West Zone Substation Switchgear and Relay condition	https://jemena.com.au/electricity/network-information/rit-ds/footscray-west-zone-substation-switchgear-and-rela	30/11/2020	Completed	Replacement	1.15	15.30

Project	Website link	RIT-D completion date	RIT-D status	Expenditure type	Total cumulative expenditure to date ($m, nominal, including overheads)	Forecast expenditure ($m, nominal, including overheads)
East Preston (EP) Conversion Stage 6	https://jemena.com.au/electricity/network-information/rit-ds/east-preston-(ep)-conversion-stage-6	31/12/2021	Completed	Augmentation	0.37	8.71
Comply with Bushfire Mitigation Regulations at Coolaroo	https://jemena.com.au/electricity/network-information/rit-ds/comply-with-bushfire-mitigation-regulations-at-coo	31/12/2021	Completed	Augmentation	27.90	60.53

11. Corporate Structure

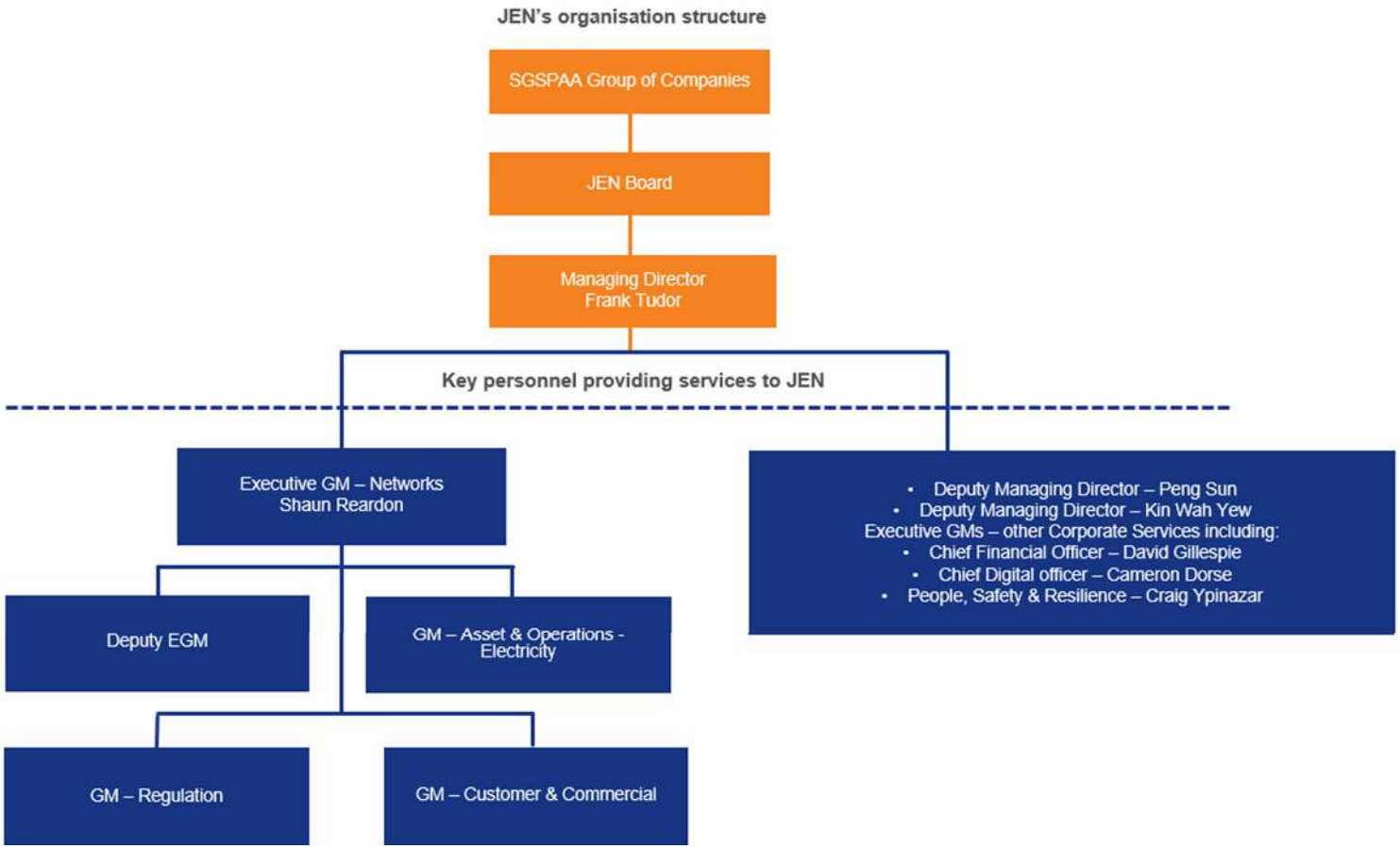
Paragraph 11.1(a) of Schedule 1 of the Notice requires JEN to provide a chart that sets out the corporate group structure of which JEN is a part. This is provided in Figure 11-1. As shown in the chart, JEN is a 100 per cent owned subsidiary of Jemena Ltd. Jemena Ltd is a wholly-owned indirect subsidiary of SGSP (Australia) Assets Pty Ltd which is in turn 60 per cent owned by State Grid International Development Australia Investment Company Limited and 40 per cent owned by Singapore Power International Pty Ltd.

Figure 11-1: Group corporate structure of which JEN is a part



Paragraph 11.1(b) of Schedule 1 of the Notice requires JEN to provide a chart that sets out the organisational structure of JEN. While JEN owns the electricity network assets, enterprise support services such as legal, finance and human resources are provided to JEN by Jemena Asset Management Pty Ltd. Jemena Asset Management Pty Ltd's current operational structure in relation to JEN is set out in Figure 11-2.

Figure 11-2: Jemena Asset Management Pty Ltd's operational structure in relation to JEN



12. Audit Opinion Reports and Review Conclusion Statements

Section 12 of Schedule 1 of the Notice requires JEN to provide audit opinion reports and review conclusion statements in relation to the information provided in the regulatory templates. JEN has provided these reports as attachments A8, A9, A12 and A13.

13. Confidential Information

13.1 Compliance with AER Confidentiality Guideline

Parts of JEN's RIN response are commercial-in-confidence. In preparing confidentiality claims, JEN has complied with the requirements of the AER's confidentiality guideline.

JEN has provided reasons detailing how and why disclosure of the information would cause detriment to the business in the accompanying cover letter to RIN A. JEN understands that this confidential information, being available to the AER to perform its functions under the National Electricity Rules, provides a public benefit. JEN has assessed that, in all identified cases, the confidentiality reasons and the benefits already realised through the AER's confidential use of this data are not outweighed by any additional public benefit to the disclosure of the information.

JEN's confidentiality claims are set out in the table attached to the covering letter of this submission. In addition to a confidential version of any information, JEN has provided a version of the information that the AER may publish.

13.2 Consent to disclose non-confidential information

JEN consents to the AER publicly disclosing (including on the AER website) all information provided in accordance with the RIN, except the confidential version of the information subject of a confidentiality claim under paragraph 13.1 of Schedule 1 of the RIN.

14. Resubmission of information

Section 12 of Schedule 1 of the Notice states that if JEN is required to resubmit information provided under this Notice, JEN must provide:

(a) the relevant Microsoft Excel Workbook(s), fully populated, with the revised information marked as amended using the macro function within the Microsoft Excel Workbook(s);

(b) the reason for the resubmission; and

(c) a statement as to whether or not the resubmitted information results in a material change in JEN's response to the notice.

Item (a) is provided as a Microsoft Excel workbook in attachment A14. The revised information for the Annual Reporting RIN workbook 2 (new historical) on worksheet 2.5 Connections has been marked as amended using the macro function in the RIN workbook.

For item (b), the connections data reported in this template incorrectly excluded gifted assets from the capital contributions table. We have corrected this error, consistent with the RIN notice.

For item (c), the net capex amount has not changed between the original FY2021 submission and the resubmission. Therefore, do not consider there has been a material change in JEN's response to the notice.

15. Reporting of fines and penalties

15.1 Fines or penalties incurred

JEN did not incur any fines or penalties under the instruments set out in the Notice during the relevant regulatory year.

15.2 Attestation

Paragraph 15.2 of Schedule 1 of the Notice requires that JEN makes certain statements in relation to fines or penalties identified in response to paragraph 15.1. As JEN did not identify any fines or penalties in response to paragraph 15.1, paragraph 15.2 is not applicable to JEN.

15.3 Attestation

Paragraph 15.3 of Schedule 1 of the Notice applies where no such fines or penalties have been identified in response to paragraph 15.1. Consistent with the requirement of paragraph 15.3, JEN states that no such fine or penalty has been incurred.

15.4 Exclusions

JEN notes these instructions.

16. Attachments

Attachments to JEN's response to the Notice are listed in the table below.

Attachment number	Title	Confidential?
RIN A workbook 1 - A2	Information templates - Consolidated	Yes
RIN A workbook 1 - A2a	Information templates - Consolidated	No
RIN A workbook 1 - A2b	Information templates - Actual	Yes
RIN A workbook 1 - A2c	Information templates - Estimated	Yes
RIN A workbook 1 - A3	Reconciliation between statutory and regulatory accounts	No
RIN A workbook 1 - A4a	Regulatory accounting principles and policies	No
RIN A workbook 1 - A4b	JEN intangible assets guidance	No
RIN A workbook 1 - A5	Basis of preparation	No
RIN A workbook 1 - A6	Statutory declaration	Yes
RIN A workbook 1 - A7	DMIAM statutory declaration	Yes
RIN A workbook 1 - A8	KPMG audit report	Yes
RIN A workbook 1 - A9	KPMG review report	Yes
RIN A workbook 2 - A10	Information templates - Consolidated	No
RIN A workbook 2 - A11	Basis of preparation	No
RIN A workbook 2 - A12	KPMG audit report	Yes
RIN A workbook 2 - A13	KPMG review report	Yes
RIN A workbook 2 - A14	FY2020-21 resubmission - Consolidated	No