## STATUTORY DECLARATION

State of South Australia - Oaths Act 1936

	I, Mr Andrew Bills	
	[full name]	
	do solemnly and sincerely declare that	
pu de	I am an officer, for the purposes of the National Electricity (South Australia) Law, letworks (ABN 13 332 330 749) (SA Power Networks) a regulated network service proviurposes of section 28D of the NEL. I am authorised by SA Power Networks to make this eclaration as part of the response of SA Power Networks to the Regulatory Information N 1 October 2023 (notice) served on SA Power Networks by the Australian Energy Regulat	der for the statutory lotice dated
Hi	istorical information	
to (a)	I say that the actual information (as defined in the notice) provided in SA Power Network the notice is, to the best of my information, knowledge and belief:  a) in accordance with the requirements of the notice; and  b) true and accurate.	ks' response
ha: (a) of (b)	Where it is not possible to provide actual information to comply with the notice, SA Powas, to the best of my information, knowledge and belief:  a) provided SA Power Networks' best estimate of the information in accordance with the fithe notice; and  b) provided the basis for each estimate, including assumptions made and reasons why the best estimate.	requirements
Fo	precast information	
Ne is \$	Where SA Power Networks' has provided forecast information in response to the notice etworks has, to the best of my information, knowledge and belief provided forecast information SA Power Networks' best forecast of the information in accordance with the requirementice.	nation which
	And I make this solemn declaration conscientiously believing the same to be true, by virtue of the provisions of the <i>Oaths Act 1936</i> .	and
	Declared at 1 Anzac Highway Keswick SA	
	in the State of South Australia, this 3 th day of	
	January 2024	
	Before me,	
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#### SA Power Networks 2025-30 Regulatory Proposal

**Directors' Certification Statement** 

The Directors certify that:

- In accordance with clause S6.1.1(5) of the National Electricity Rules, the key assumptions that underlie the 2025-30 capital expenditure forecast, set out in this document below, are reasonable.
- In accordance with clause S6.1.2(6) of the National Electricity Rules, the key assumptions that underlie the 2025-30 operating expenditure forecast, set out in this document below, are reasonable.

Signed in accordance with a resolution of Directors:

Date: 12/12/2023

Date: 12 12 2023



# Reasonableness of key assumptions underlying the SA Power Networks 2025-30 expenditure forecasts

	Key assumption	Evidence of reasonableness
#	General	
1	Proposal complies with information requirements	Legal review by Minter Ellison to confirm proposal complies with all information required by the National Electricity Rules (NER) and AER Regulatory Information Notice (RIN) dated 11 October 2023.
2	Expenditure forecast enables compliance with obligations	The proposal includes all activities driven by compliance with regulatory and legislative obligations – these are described in the 'identified need' section of each business case supporting our forecast expenditure.
3	Expenditure forecast is required to meet the NER expenditure objectives	<ul> <li>Only expenditure with an 'identified need' addressing the NER expenditure objectives is included – business cases provide justifications against the NER.</li> </ul>
4	Expenditure forecast is guided by the National Electricity Law	<ul> <li>Only costs and benefits within the scope of the National Electricity Objective in the NEL are included in business cases, being those pertaining to: safety, reliability, security, quality, and price. Further, only direct impacts on SA Power Networks, customers, and community members have been evaluated.</li> </ul>
5	Expenditure forecasting	<ul> <li>Forecasting methodologies for all expenditure areas are documented and were workshopped with AER to confirm alignment.</li> </ul>
	methodologies accord with AER guidance	<ul> <li>Replacement expenditure (repex) method accords with AER 'Industry Practice Application Note on Asset Replacement Planning'. The method identifies economic investment by comparing costs with risk-cost to customers, derived using age and condition data to estimate failure probability, likelihood and cost of consequence.</li> <li>Information and Communications Technology (ICT) expenditure method accords with AER 'Guidance note: non-network ICT capex forecast assessment', by considering recurrent and non-recurrent drivers (including: maintenance of service, compliance with new obligations, service / benefits improvement).</li> <li>Customer Energy Resource (CER) integration method accords with AER 'Distributed Energy Resources integration expenditure guidance note', and 'Customer Export Curtailment Value Methodology'. The method identifies economic investment by estimating growth in service demand and resulting hosting capacity constraints, and the benefits to the National Electricity Market of alleviating those constraints.</li> <li>Other general approaches to capex and opex accord with AER 'Expenditure Forecast Assessment Guideline' (EFAG) and 'Better Resets Handbook', including:         <ul> <li>Opex was forecast using a 'base-trend-step' method; and</li> </ul> </li> </ul>
		<ul> <li>business cases with cost / benefit analyses are provided in support of expenditure, containing an identified need aligned to the NER, base-case counterfactual compared against multiple investment options (where credible), and evidence of engagement with consumers on preferences.</li> </ul>
6	Expenditure forecast enables outcomes shaped by customers	<ul> <li>SA Power Networks posed three alternative forecast scenarios to customers, and refined these down over five iterations to arrive at a forecast shaped by customer preferences on service outcomes. The engagement is documented, with evidence published on TalkingPower.com.au.</li> </ul>
		The majority of the capex forecast was shaped by customers, via recommendations of the People's Panel.
	Capex – cost estimation	
7	Unit costs reflect costs of delivering capital work in the forecast period	<ul> <li>Unit rates are largely based on historic costs in annual RINs in accordance with general AER practice, and thereby incorporate recent increases in materials costs.</li> <li>Exceptions to reliance on historic costs pertain to projects involving new activities and delivery methods, which have been estimated using a bottom-up approach.</li> </ul>



8	Capitalised overhead rates remain the same during the forecast period	<ul> <li>A capitalised network overhead rate of 1.83% is based on the actual 2022-23 weighted average service delivery by the Field Services and Network Management groups.</li> <li>This rate is assumed to remain the same during the forecast period.</li> </ul>
9	Materials price escalations are assumed to be no greater than CPI	■ No real escalation in materials was applied as per AER's 'Better Resets Handbook'. We also obtained an independent forecast from Oxford Economics which indicated recent increases in materials prices would unlikely continue in 2025-30.
10	Real labour price escalation reflects forecast expectations in the South Australian utilities sector	<ul> <li>Real labour price escalation was applied to internal labour costs, using a forecast of the South Australian Electricity Gas Waste Water Services Wage Price Index obtained from independent forecasters, Oxford Economics Australia. The method applied used an average of our forecast and a placeholder for the AER's independent forecast from KPMG as expected – KPMG placeholder based on an average of the forecast prepared for the South Australian transmission network service provider, Electranet.</li> <li>No real labour price escalation was applied to contract labour, as per AER 'Better Resets Handbook' expectation.</li> <li>Labour input weightings applied via our analysis of labour components of capex, using a combination of historic averages (over the current regulatory period) or</li> </ul>
	a .	comparable historic averages for new activity lines.
11	Expenditures reflect approaches aligned to Australian industry standards in asset and risk management	<ul> <li>Network Strategic Asset Management Plan outlines how our approaches to managing network assets aligns to industry standards.</li> <li>Business cases outline how individual expenditure forecasts have been guided by good asset management principles.</li> </ul>
12	Discount rates used in cost benefit analyses are relevant to the investment	■ Real Pre-tax WACC (4.05%) is used as the central case to present options analyses in Net Present Value terms, a rate that is consistent with that used in the Proposal more broadly. Further, sensitivity analyses were conducted for upper bound rate of 4.5% and lower bound rate of 3.5%.
Capex – demand for service		vice
13	Net connections expenditure reflects South Australian economic activity and costs recoverable over all customers	<ul> <li>Gross connections forecast obtained from independent forecasters Oxford Economics, based on economic modelling and known major projects.</li> <li>SA Power Networks Connections Policy is used to calculate expected customer contributions to adjust gross connections and arrive at a net connections forecast – customer rebate estimates incorporate a real pre-tax WACC of 4.05%.</li> </ul>
14	Load capacity constraints reflect expected South Australian conditions	<ul> <li>Constraint alleviation considers requirements of our Distribution Network Planning Criteria, and probabilistic / economic risk based analysis.</li> <li>Demand forecast input to modelling applies growth rates consistent with those in the Australian Energy Market Operator (AEMO) central forecast scenario ('step change') in its 2022 Electricity Statement of Opportunities (ESOO).</li> <li>Forecast connection point upgrades are based on joint-planning requirements with Electranet and our Transmission Connection Agreement.</li> </ul>
15	Export hosting capacity constraints reflect expected South Australian conditions	<ul> <li>Growth in demand for export services is based on the AEMO central forecast scenario in its ESOO ('step change').</li> <li>Hosting capacity evaluation is based on the SAPN Low Voltage network model, and was subject to external technical verification by consultants, Blunomy.</li> </ul>
16	Network repex reflects risks posed by network asset condition	<ul> <li>Repex forecast is arrived at by considering the economic timing of replacement based on the service risk to customers avoided by undertaking replacement, and the timing of replacement required to maintain risk.</li> <li>We developed a 'risk-cost model' which accords with the AER guideline, and was subject to external technical review by consultants Frazer-Nash on probability of failure estimation, and Cutler Merz on the overall approach to model development.</li> </ul>



		Where condition data is available, the Risk-cost model is used, and where unavailable, historic spend proxies the estimated spend required to maintain service.
17	Network augmentation to manage reliability responds to expected non-asset condition drivers	<ul> <li>Forecast upgrades are based on analysis of historic expenditure and service performance trends, and analysis of likely continuation in non asset condition effects such as weather, and populations of Flying Foxes affecting performance in urban areas.</li> </ul>
18	Network augmentation to manage bushfire risk reflects expected South Australian conditions	<ul> <li>Quantum of forecast bushfire risk is guided by independent modelling simulation from the Commonwealth Scientific and Industrial Research Organisation (CSIRO). In 2021 the CSIRO extended its model to provide a view of bushfire risk (and loss quantification) beyond High Bushfire Risk Areas and into Medium Bushfire Risk Areas, enabling identification of further economic risk reduction opportunities.</li> </ul>
19	Property expenditure responds to assessed asset condition and capacity constraints	<ul> <li>Underlying assessments of property condition were obtained independently from KPMG Property and Environmental Services who produced physical condition and asset criticality reports for all property sites.</li> </ul>
20	Fleet expenditure responds to expected	<ul> <li>Base expenditure is forecast assuming continuation of existing asset replacement cycles reviewed / approved by the AER for 2020-25.</li> </ul>
	condition and volume requirements	<ul> <li>Growth in volume is calculated based on forecast growth in the total quantum of network capital work over 2025-30, using a resourcing cost model developed together with KPMG.</li> </ul>
21	ICT expenditure reasonably reflects	<ul> <li>Recurrent expenditure is based on the costs of maintaining existing functionality – guided by revealed historic costs, and subject to benchmarking comparisons.</li> </ul>
	expected recurrent and non-recurrent cost drivers	<ul> <li>Non-recurrent expenditure is based on (1) replacements on cycles greater than every 5 years to maintain existing functionality (2) new compliance obligations and (3) new or expanded services preferred by customers and efficiency opportunities.</li> </ul>
22	Additional resourcing requirements are reasonably scaled with the forecast uplift in network capital work	• Additional forecast costs of resourcing to support the proposed uplift in network capex are assumed to require an additional 101 Trade Skilled Worker-Powerline and 79 Trade Skilled Worker-Electrical. All additional support costs (e.g. fleet, property, ICT) are calculated off this core assumption, using current utilisation rates and staff to equipment correlations. A resourcing model was developed together with KPMG and documented in support of these estimates.
Capex (and opex adjustments / step		ments / step changes) – monetised benefits
23	Quantified consumer benefits in cost	Only benefits pertaining to the services experienced by our customers, and or direct risks to the community, have been valued. Key assumptions include:
	benefit analyses accord with the regulatory framework in the NEL and NER	<ul> <li>AER Value of Customer Reliability (VCR) is used to value unserved energy.</li> <li>AER Customer Export Curtailment Value (CECV, June 2022) is used to value unserved energy exports. An additional value stream (long run generation investment cost avoidance) was added to the CECV, as the AER permits – this is developed by Houston Kemp using with/without electricity system modelling.</li> </ul>
		<ul> <li>Australian Government Disability Weighted Value of Life / Value of Statistical Life is used to value the risk of personal injury or death, as the accepted method of valuing society's willingness to pay to avoid serious injuries or death.</li> </ul>
		■ Estimates of direct costs (using historic data) of property damage to customers / community is used to value the direct physical impact of network faults (including bushfires). Avoided bushfire risk costs is based on modelling prepared by the CSIRO
		<ul> <li>Customer Value of Time savings is based on average weekly earnings from the Australian Bureau of Statistics.</li> </ul>



		<ul> <li>Customer willingness to pay for service improvements considered in the Proposal are based on a survey of South Australian customers conducted by independent economic researchers, Marsden Jacobs Associates, using discrete choice modelling.</li> <li>Other benefits are only input if they affect changes in capital and / or operating expenditure in terms of savings on current operations or avoidance of future costs.</li> </ul>
24	The Asset Management Transformation Program will drive material efficiency improvements	■ The program is assumed to derive an average labour efficiency saving in the delivery of network capital works of 7% over the 2025-30 period.
	Орех	
25	Forecasting method accords with AER guidelines	<ul> <li>Base-trend-step method has been applied, as per guidance in the AER's 'Better Resets Handbook' and Expenditure Forecast Assessment Guideline.</li> </ul>
26	Revealed opex (2020- 25) can be assumed to reflect an efficient base for forecasting	Latest AER benchmarking report (2022) indicates that SAPN efficiency rating is above the 0.75 threshold (at 0.782) used by the AER to determine the efficient frontier.
27	Selected opex base year (2023/24) reasonably reflects expected efficient forecast requirements (before adjustments for capex to opex shifts)	<ul> <li>Base year is expected to not be materially dissimilar to other revealed years. It is approximately 3% higher than the average of the earlier years of the current Regulatory Period.</li> <li>Internal review has not revealed any material one-off expenditure that should be removed from the base year.</li> <li>The base year will be the closest revealed year with audited accounts to the forecast period when the AER forms its Final Decision.</li> </ul>
28	Real labour price escalation reflects forecast expectations in the South Australian utilities sector	<ul> <li>As per capex</li> <li>Labour input weightings applied consistent with AER expectation and November 2022 benchmarking results.</li> </ul>
29	Materials prices are not assumed to escalate above forecast CPI	■ As per capex.
30	Output growth escalation reflects expected increase in network scale (under a business-as-usual mode of operation)	<ul> <li>Output specifications from the AER's November 2022 benchmarking report are applied with no departures.</li> <li>Customer number growth forecast and circuit length forecast consistent with historic trend (10 year trend).</li> <li>Adopted Australian Energy Market Operator (AEMO) demand forecasts from the 2023 ESOO.</li> </ul>
31	Forecast reflects the productivity expected of a typical network on the efficiency frontier	Applied the minimum expected productivity adjustment forecast of 0.5 percent per annum as expected by the AER.
32	Step changes reflect expected increases in efficient costs not otherwise covered via the 'base + trend' components	<ul> <li>Step changes forecast by examining (1) new regulatory obligations (2) capex to opex shifts, and (3) major external factors. These accord with AER categories.</li> <li>Costs are incremental to the base year.</li> <li>Cost increases driven by major external factors are material, representing on average 1.1% of our annual revenue requirement. Proposed costs are adjusted to remove the 'growth-trend' component to avoid double-counting.</li> </ul>



		<ul> <li>Capex to opex shifts relating to changes in accounting treatment of ICT Software-as- a-Service activities are included as a base year adjustment as the AER directs.</li> </ul>
33	Base year adjustments accord with accounting practice	■ In accordance with AER guidance and accounting standards, the base year has been adjusted to account for capex to opex shifts pertaining to ICT Software-as-a-Service activities which clarified have previously been categorised as capex.
34	Debt raising costs reflecting AER preferred approach	<ul> <li>Costs derived using the preferred AER approach using Bloomberg estimates for the 'arrangement fee' and Chairmont's 2019 estimates for the remaining debt raising costs.</li> </ul>