

Supporting material list

APP10 - Supporting materials list - Jan2020 - Public

Powercor January 2020

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PAL APP02	What we have delivered	No
PAL APP03	Maximum demand and customer numbers	No
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PAL APP05	Tariff structure statement - Reasons paper	No
PAL APP06	Tariff structure statement	No
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2 Business cases

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PAL BUS 4.02	Pole replacement forecast overview	Replacement capex	No
PAL BUS 4.03	Transformer risk monetisation and investment evaluation methodology	Replacement capex	No
PAL BUS 4.04	HV ABS replacement program	Replacement capex	No
PAL BUS 4.05	Mitigating REFCL reliability impacts	Replacement capex	No
PAL BUS 6.01	Surf coast supply area	Augmentation capex	No
PAL BUS 6.02	Solar enablement	Augmentation capex IT capex Operating expenditure	No
PAL BUS 6.03	Tarneit supply area	Augmentation capex	No
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PAL BUS 6.05	HV feeder program justification	Augmentation capex	No
PAL BUS 6.06	Network communications: 3G shutdown	Augmentation capex	No
PAL BUS 6.07	Network communications: spectrum changeover	Augmentation capex	No
PAL BUS 6.08	REFCL ongoing compliance (Tranche 1 & 2 only)	Augmentation capex	No
PAL BUS 6.09	Upgrading regional supply	Augmentation capex	No
PAL BUS 6.10	Corio supply area	Augmentation capex	No
PAL BUS 7.01	SAP/4HANA lifecycle upgrade	IT capex	No
PAL BUS 7.02	Customer enablement	IT capex	No
PAL BUS 7.03	Business intelligence, reporting and data management	IT capex	No
PAL BUS 7.04	Cyber security	IT capex	No
PAL BUS 7.05	Network management systems	IT capex	No
PAL BUS 7.06	Market systems currency	IT capex	No
PAL BUS 7.07	Intelligent engineering	IT capex	No
PAL BUS 7.08	Digital Network	IT capex Augmentation capex	No

PAL BUS 7.09	Five minute settlement rule change	IT capex Augmentation capex Operating expenditure	No
PAL BUS 7.10	ICT Infrastructure refresh and cloud migration	IT capex Operating expenditure	No
PAL BUS 7.11	Enterprise management systems	IT capex	No
PAL BUS 7.12	Device replacement	IT capex	No
PAL BUS 7.13	Telephony	IT capex	No
PAL BUS 7.14	General IT compliance	IT capex	No
PAL BUS 8.01	Building compliance uplift	Non-network capex	No
PAL BUS 8.02	Echuca depot construction	Non-network capex	No
PAL BUS 8.03	New Warrnambool depot construction	Non-network capex	No
PAL BUS 8.04	Brooklyn depot construction	Non-network capex	No
PAL BUS 8.05	Bendigo depot upgrade	Non-network capex	No
PAL BUS 8.06	Ballarat depot upgrade	Non-network capex	No
PAL BUS 8.07	Facilities' physical security upgrade	Non-network capex	No
PAL BUS 9.01	Security of Critical Infrastructure	Operating expenditure	Yes
PAL BUS 9.02	On-going incremental operating expenditure related to operation of REFLCs	Operating expenditure	No
PAL BUS 9.03	HBRA reclassification of Food Belt	Operating expenditure	No
PAL BUS 9.04	EDO replacement with fault tamers	Operating expenditure	No

3 Models

Code	Name	Proposal reference	Confidential
PAL MOD 4.01	Repex Model - Scenarios	Replacement capex	No
PAL MOD 4.02	HV air-break switches: CRO tagged interrupters	Replacement capex	No
PAL MOD 4.03	REFCL reliability cost model	Replacement capex	No
PAL MOD 4.04	REFCL reliability benefits model	Replacement capex	No
PAL MOD 4.05	Transformer Risk - WBL	Replacement capex	No
PAL MOD 4.06	Lines Replacement Capex	Replacement capex	No
PAL MOD 4.07	Environmental Capex	Replacement capex Operating expenditure	No
PAL MOD 4.08	Environmental Risk	Replacement capex Operating expenditure	No
PAL MOD 4.09	Plant and Stations Replacement Capex	Replacement capex	No
PAL MOD 4.10	Protection Replacement Capex	Replacement capex	No
PAL MOD 4.11	Network Faults Capex	Replacement capex	No
PAL MOD 4.12	Transformer Risk - IWD Regulator	Replacement capex	No
PAL MOD 4.13	Transformer Risk - RVL No.1	Replacement capex	No
PAL MOD 4.14	Transformer Risk - RVL No.2	Replacement capex	No
PAL MOD 5.01	Connections Capex	Connections capex	No
PAL MOD 6.01	Augmentation Capex	Augmentation capex	No
PAL MOD 6.02	Solar enablement	Augmentation capex IT capex Operating expenditure	No
PAL MOD 6.03	AMI comms	Augmentation capex Metering services	No
PAL MOD 6.04	Network Comms Capex	Augmentation capex	No
PAL MOD 6.05	Network communications: 3G shutdown	Augmentation capex	No
PAL MOD 6.06	Tarneit supply area	Augmentation capex	No
PAL MOD 6.07	Bacchus Marsh supply area	Augmentation capex	No
PAL MOD 6.08	Upgrading regional supply	Augmentation capex	No

PAL MOD 6.09	Bushfire safety and contingent project capex	Augmentation capex	No
PAL MOD 6.10	REFCL cost	Augmentation capex	No
PAL MOD 6.11	Surf coast options analysis	Augmentation capex	No
PAL MOD 6.12	ACMA spectrum changeover	Augmentation capex	No
PAL MOD 6.13	REFCL T3 expenditure build-up	Augmentation capex	No
PAL MOD 6.14	REFCL T3 amended PTRM	Augmentation capex	No
PAL MOD 6.15	REFCL T3 amended depreciation	Augmentation capex	No
PAL MOD 6.16	REFCL T3 amended Repex	Augmentation capex	No
PAL MOD 7.01	Consolidated IT capex cost	IT capex	No
PAL MOD 7.02	SAP Modernisation S/4 HANA cost	IT capex	No
PAL MOD 7.03	SAP Modernisation S/4 HANA risk	IT capex	No
PAL MOD 7.04	BI/BW cost	IT capex	No
PAL MOD 7.05	Cyber security cost	IT capex	No
PAL MOD 7.06	Cyber security risk	IT capex	No
PAL MOD 7.07	Networks Management cost	IT capex	No
PAL MOD 7.08	Networks Management risk	IT capex	No
PAL MOD 7.09	Market Systems cost	IT capex	No
PAL MOD 7.10	Market Systems risk	IT capex	No
PAL MOD 7.11	Intelligent engineering cost	IT capex	No
PAL MOD 7.12	Digital Network cost	IT capex Augmentation capex	No
PAL MOD 7.13	Digital Network Jacobs benefit	IT capex Augmentation capex	No
PAL MOD 7.14	5 minute settlement cost	IT capex Augmentation capex Operating expenditure	No
PAL MOD 7.15	Cloud - Infrastructure cost	IT capex Operating expenditure	No
PAL MOD 7.16	Cloud - Infrastructure risk	IT capex Operating expenditure	No

PAL MOD 7.17	EMS cost	IT capex	No
PAL MOD 7.18	Device replacement cost	IT capex	No
PAL MOD 7.19	Telephony cost	IT capex	No
PAL MOD 7.20	General IT compliance cost	IT capex	No
PAL MOD 7.21	Customer enablement	IT capex	No
PAL MOD 8.01	Consolidated non-network capex	Non-network capex	No
PAL MOD 8.02	Property bottom up costs	Non-network capex	No
PAL MOD 8.03	Facilities security	Non-network capex IT capex	No
PAL MOD 9.01	Step Change model	Operating expenditure	Yes
PAL MOD 9.02	Rate of Change model	Operating expenditure	No
PAL MOD 9.03	CIE Customer numbers forecast	Operating expenditure	No
PAL MOD 9.04	CIE, CitiPower and Powercor maximum demand forecasts	Operating expenditure	No
PAL MOD 9.05	EDO replacements: risk monetisation - ELCAs	Operating expenditure	No
PAL MOD 9.06	EDO replacements: risk monetisation - HBRAs	Operating expenditure	No
PAL MOD 9.07	Oakley Greenwood, new technologies	Operating expenditure	No
PAL MOD 10.01	Roll forward model to June 2021	Revenue	No
PAL MOD 10.02	2021 - 2026 PTRM	Revenue	No
PAL MOD 10.03	2021-2026 Depreciation	Revenue	No
PAL MOD 10.04	Rate of return model	Revenue	No
PAL MOD 10.05	SCS opex model	Revenue	No
PAL MOD 10.06	SCS capex model	Revenue	No
PAL MOD 10.07	Accelerated depreciation	Revenue	No
PAL MOD 10.08	Roll forward model to 2020	Revenue	No
PAL MOD 10.09	Half year PTRM	Revenue	No
PAL MOD 10.10	Half year depreciation	Revenue	No

PAL MOD 10.11	STPIS incentive rates model	Incentives	No
PAL MOD 10.12	STPIS targets model	Incentives	No
PAL MOD 10.13	STPIS targets model (half year)	Incentives	No
PAL MOD 11.01	Metering RFM 2016-Jun 2021	Metering	No
PAL MOD 11.02	Metering PTRM & exit fees 2021/22-2025/26	Metering	No
PAL MOD 11.03	Metering 2015 closing RAB model	Metering	No
PAL MOD 11.04	Metering cost model	Metering	No
PAL MOD 11.05	Metering RFM 2016-2020	Metering	No
PAL MOD 11.06	Metering PTRM & exit fees (half year)	Metering	No
PAL MOD 11.07	Metering PTRM 2020 debt update	Metering	No
PAL MOD 12.01	ACS fee-based model	Alternative control services	No
PAL MOD 12.02	ACS quoted services labour rate model	Alternative control services	No
PAL MOD 13.01	Public lighting model	Alternative control services	No
PAL MOD 13.02	Public lighting model inputs	Alternative control services	No

4 RIN documents

Code	Name	Proposal reference	Confidential
PAL RINO01	Workbook 1 – Regulatory determination	Reset RIN	Yes
PAL RIN002	Workbook 2 – New CY historical	Reset RIN	Yes
PAL RINO03	Workbook 3 – Recast category analysis	Reset RIN	No
PAL RINO04	Workbook 4 – Recast economic benchmarking	Reset RIN	No
PAL RIN005	Workbook 5 - Efficiency Benefit Sharing Scheme	Reset RIN	No
PAL RINO06	Workbook 6 – Capital Expenditure Sharing Scheme	Reset RIN	No
PAL RIN007	Workbook 7 – Indicative Bill Impact	Reset RIN	No
PAL RIN008	Workbook 8 – Historical FY category analysis	Reset RIN	Yes
PAL RIN009	Workbook 9 – Historical FY annual reporting	Reset RIN	Yes
PAL RINO10	Workbook 10 – Historical FY economic benchmarking	Reset RIN	No
PAL RINO11	Deloitte - Audit opinion report and review conclusion statements	Reset RIN	No
PAL RINO12	Claim for confidentiality - AER template	Reset RIN	No
PAL RINO13	Expenditure factors and criteria	Reset RIN	No
PAL RINO14	Basis of preparation	Reset RIN	No
PAL RINO15	RIN Schedule 1 Cross-reference matrix	Reset RIN	No
PAL RINO16	RIN response question 5 asset replacement	Reset RIN	No
PAL RINO17	Map of distribution system	Reset RIN	No
PAL RINO18	Statutory declaration	Reset RIN	No

5 Attachments

Code	Name	Proposal reference	Confidential
PAL ATT001	Powercor, Augmentation planning policy and guideline, September 2016	Augmentation capex	No
PAL ATT002	Powercor, Distribution annual planning report, December 2019	Augmentation capex	No
PAL ATT003	Powercor, Demand side engagement strategy, July 2019	Augmentation capex	No
PAL ATT004	Oakley Greenwood, Profiling uptake of solar PV, March 2019	Augmentation capex	No
PAL ATT005	Essential Service Commission Victoria, Public lighting code, December 2015	Alternative control services	No
PAL ATT006	Telstra, 3G service closure, 2019	Augmentation capex	No
PAL ATT007	Powercor, IT deliverability plan, January 2020	IT capex	No
PAL ATT008	Powercor, IT risk monetisation guide, January 2020	IT capex	No
PAL ATT009	Jacobs, Cost benefit analysis for Digital Network implementation, December 2019	IT capex Augmentation capex	No
PAL ATT010	Deloitte, Regulatory impact statement: proposed environment protection regulations, DELWP and EPA, August 2019	Operating expenditure Replacement expenditure	No
PAL ATT011	ENEA, Top-down and bottom-up forecast reconciliation, February 2019	Reset RIN	No
PAL ATT012	NERA, Review of the AER's proposed output weightings, Prepared for CitiPower, Powercor, United Energy and SA Power Networks, December 2018	Operating expenditure	No
PAL ATT013	Frontier Economics, Estimation of opex input weights, A report prepared for CitiPower, Powercor and United Energy, March 2019	Operating expenditure	No
PAL ATT014	BIS Oxford, Labour cost escalation forecasts 2025/26, April 2019	Operating expenditure	No
PAL ATT015	Energy Safe Victoria, Compliance reports 2019 safety performance report on Victorian electricity distribution and transmission businesses, October 2019	Reset RIN	No
PAL ATT016	Energy Safe Victoria, Compliance reports, 2018 safety performance report on Victorian electricity distribution and transmission businesses, October 2018	Reset RIN	No
PAL ATT017	Energy Safe Victoria, Compliance reports, 2017 safety performance report on Victorian electricity distribution and transmission businesses, October 2017	Reset RIN	No

PAL ATT018	Energy Safe Victoria, Compliance reports, 2016 safety performance report on Victorian electricity distribution and transmission businesses, September 2016	Reset RIN	No
PAL ATT019	Centre for International Economics, Powercor and CitiPower customer number forecasts, May 2019	Operating expenditure	No
PAL ATT020	Powercor, Asset management policy, March 2018	Replacement capex	No
PAL ATT021	Powercor, Strategic asset management plan, December 2019	Replacement capex	No
PAL ATT022	CIE, CitiPower and Powercor maximum demand forecasts, March 2019	Operating expenditure	No
PAL ATT023	ACIL Allen, Connection point forecasting, June 2013	Connections capex	No
PAL ATT024	Oakley Greenwood, Report post-model adjustments for terminal station Forecasts, Decembr 2018	Operating expenditure Augmentation capex	No
PAL ATT025	ENEA - Long run marginal cost report, March 2019	Tariff structure statement	No
PAL ATT026	Powercor, Electricity distribution licence, August 2005	Operating expenditure IT capex	No
PAL ATT027	Powercor, Proposed cost allocation method, January 2020	Operating expenditure Revenue	No
PAL ATT028	Powercor, Stand alone and avoidable cost model	Tariff structure statement	No
PAL ATT029	ACIL Allen, Vulnerable customer analysis, March 2019	Tariff structure statement	No
PAL ATT030	JWS Research, Community perceptions toward preparing for electric vehicles, September 2019	Tariff structure statement	No
PAL ATT031	Seed, Victorian electricity, Future forum: household network pricing, April 2019	Tariff structure statement	No
PAL ATT032	Powercor, Indicative tariffs	Tariff structure statement	No
PAL ATT033	Powercor, Connection policy, January 2020	Connections capex	No
PAL ATT034	Powercor, Model standing offer with micro embedded generation (MEG), September, 2019	Connections capex	No
PAL ATT035	Powercor, Model standing offer without micro embedded generation (MEG), march 2019	Connections capex	No
PAL ATT036	Order in council, Environmental Protection Act 2017, Environment reference standard, 2017	Operating expenditure Replacement capex	No
PAL ATT037	Environment Protection Transitional Regulations, Exposure Draft	Operating expenditure Replacement capex	No

PAL ATT038	GHD, Feasibility study for acoustic treatments substation sites, CitiPower and Powercor, Dec 2019	Replacement capex	No
PAL ATT039	Hays, Salary guide, 2019	Operating expenditure	No
PAL ATT040	AEMO, System strength impact assessment guidelines, June 2018	Replacement capex	No
PAL ATT041	Energy Safe Victoria, Forum minutes and levy, February 2019	Operating expenditure	No
PAL ATT042	Standing Committee on Economics, Reserve Bank of Australia annual report, 2018	Connections capex	No
PAL ATT043	AEMO, Value of customer reliability review, September 2014	Augmentation capex Replacement capex	No
PAL ATT044	AER, Final framework and approach for AusNet Services CitiPower Jemena Powercor and United Energy, January 2019	Operating expenditure	No
PAL ATT045	AER, 2019 Distribution network service provider benchmarking report, November 2019	Operating expenditure	No
PAL ATT046	BDO, Report for Cloud business case review, November 2019	Operating expenditure	No
PAL ATT047	Powercor, Cyber strategy and program review, November 2019	IT capex	Yes
PAL ATT048	Bellrock Group, CitiPower and Powercor strategic security review, June 2019	Non-network capex	No
PAL ATT049	CitiPower and Powercor, Facilities security site implementation schedule January 2020	Non-network capex IT capex	No
PAL ATT050	ACIF, Australian construction market report, November 2018	Connections capex	No
PAL ATT051	Jardine Lloyd Thompson, VPN Invoice for insurance for 2019/20, November 2019	Operating expenditure	Yes
PAL ATT052	Frontier Economics, Review of econometric models used by the AER to estimate output growth, December 2019	Operating expenditure	No
PAL ATT053	Frontier Economics, Assessment of the AER's approach to forecasting labour escalation rates, December 2019	Operating expenditure	No
PAL ATT054	Jacobs, Market benefits for solar enablement, August 2019	Augmentation capex IT capex Operating expenditure	No
PAL ATT055	Jacobs, Solar enablement review of Python Code, November 2019	Augmentation capex IT capex Operating expenditure	No
PAL ATT056	Powercor, Insurance credit management policy, November 2019	Uncertainty appendix	No

PAL ATT057	Food & Fibre Great South Coast Inc., Letter to support power upgrade, January 2020	Augmentation capex	
PAL ATT058	Australian Treaty Series, Geneva Conventions, 12 August 1949	Uncertainty appendix	No
PAL ATT059	Australian Treaty Series, Protocol additional to the Geneva Conventions of 12 August 1949 - Protocol III, December 2005	Uncertainty appendix	No
PAL ATT060	Australian Treaty Series, Protocol additional to the Geneva Conventions of 12 August 1949 - Protocol I, December 2005	Uncertainty appendix	No
PAL ATT061	Australian Treaty Series, Protocol additional to the Geneva Conventions of 12 August 1949 - Protocol II, December 2005	Uncertainty appendix	No
PAL ATT062	United Nations, The Prosecutor v Fatmir Limaj judgment, November 2015	Uncertainty appendix	No
PAL ATT063	United Nation General Assembly, Resolution 3314 (XXIX) - Definition of Aggression, November 1974	Uncertainty appendix	No
PAL ATT064	International Criminal Court, Rome Statute of the International Criminal Court, 2011	Uncertainty appendix	No
PAL ATT065	Powercor, Substation loads and transfers report, December 2019	Reset RIN	No
PAL ATT066	Powercor, Feeder loads and transfers report December 2019	Reset RIN	No
PAL ATT067	Australian Energy Market Commission, 2018 residential electricity price trends review, December 2018	Overview	No
PAL ATT068	Powercor, Customer insights November 2017	Stakeholder engagement	No
PAL ATT069	Powercor, Regulatory reset stakeholder engagement plan, November 2017	Stakeholder engagement	No
PAL ATT070	Powercor, Energised 2021-25 stakeholder engagement extension plan, November 2019	Stakeholder engagement	No
PAL ATT071	Powercor, Energised 2021-25 open house findings report, October 2019	Stakeholder engagement	No
PAL ATT072	Powercor, Energised 2021-25 Community Survey, Engagement findings report October 2019	Stakeholder engagement	No
PAL ATT073	Woolcott, Draft proposal customer engagement report, May 2019	Stakeholder engagement	No
PAL ATT074	Woolcott, Future Networks Forum Report, April 2019	Stakeholder engagement	No
PAL ATT075	Woolcott, Business survey results, July 2018	Stakeholder engagement	No
PAL ATT076	Woolcott, Commercial and Industrial Customers and Industry Associations report on key findings September 2019	Stakeholder engagement	No

PAL ATT096	Marsh, Liability market and claims overview October 2019	Operating expenditure	No
	applicating regional supply) variously 2020		
PAL ATT095	The United Dairyfarmers of Victoria, Letter in support of upgrading regional supply, January 2020	Augmentation capex	No
PAL ATT094	Powercor, Bushfire mitigation plan, December 2019	Operating expenditure Replacement capex Augmentation capex	No
PAL ATT093	ARMS Reliability, CP/PAL wooden power poles, 2019 RCM study report, October 2019	Replacement capex	No
PAL ATT092	AER, Powercor pricing proposal 2018, October 2017	Reset RIN	No
PAL ATT091	AEMC, Rule determination: National Electricity Amendment (Managing power system fault levels) Rule, September 2017	Connections capex	No
PAL ATT090	AER, Powercor pricing proposal 2017, October 2016	Reset RIN	No
PAL ATT089	AER, Powercor pricing proposal 2016, October 2015	Reset RIN	No
PAL ATT088	Woolcott, Integrated summary report, August 2019	Stakeholder engagement	No
PAL ATT087	Woolcott, Residential survey results, November 2017	Stakeholder engagement	No
PAL ATT086	Woolcott, Business survey results, December 2017	Stakeholder engagement	No
PAL ATT085	Powercor, Pop-ups results, September 2019	Stakeholder engagement	No
PAL ATT084	Powercor, Residential survey results, September 2019	Stakeholder engagement	No
PAL ATT083	Woolcott, Residential and SME deliberative forum report June 2018	Stakeholder engagement	No
PAL ATT082	Woolcott, Investment options forum report, September 2018	Stakeholder engagement	No
PAL ATT081	Woolcott, Exploration of electricity issues, qualitative findings, September 2017	Stakeholder engagement	No
PAL ATT080	Woolcott, Exploration of energy issues, C&I findings, October 2017	Stakeholder engagement	No
PAL ATT079	Woolcott, Commercial and Industrial customer interviews (Round 1) Report	Stakeholder engagement	No
PAL ATT078	Woolcott, Business survey results, October 2018	Stakeholder engagement	No
PAL ATT077	Woolcott, Community Opinion Leader Forum Report May 2018, June 2018	Stakeholder engagement	No

PAL ATT098	ACIF, Australian construction market report, May 2019	Connections capex	No
PAL ATT099	AER, Industry practice application note: asset replacement planning, January 2019	Replacement capex	No
PAL ATT100	Ofgem, DNO common network asset indices methodology, V1.1, January 2017	Replacement capex	No
PAL ATT101	Powercor, Related parties, January 2020	Reset RIN	No
PAL ATT102	CutlerMerz, Review of demand management unit rates, February 2019	Operating expenditure	No
PAL ATT103	Christine Couzens MP, Letter in support of solar enablement, December 2019	Augmentation capex IT capex Operating expenditure	No
PAL ATT104	Fonterra, Letter of support for power line upgrade proposal October 2019	Augmentation capex IT capex Operating expenditure	No
PAL ATT105	Mr Holmes, Letter in support of regional upgrades	Augmentation capex	No
PAL ATT106	Rabobank, Letter in support of regional upgrades April 2019	Augmentation capex supply	No
PAL ATT107	UDV, New energy options for the Victorian dairy industry, January 2017	Augmentation capex	No
PAL ATT108	ESV, End of fire season summary, June 2019	Operating expenditure	No
PAL ATT109	AEMO, Power system data communication standard, December 2019	Augmentation capex	No
PAL ATT110	ACIF, Building and construction activity forecasts for the Powercor electricity distribution region, March 2019	Connections capex	No
PAL ATT111	Geelong Region Alliance G21, Letter in support of solar enablement, December 2019	Augmentation capex IT capex Operating expenditure	No
PAL ATT112	ACIF Forecasts PCR regions, March 2019	Connections capex	No
PAL ATT113	CitiPower and Powercor Electricity Safety Management Scheme (ESMS) version 3.25, November 2019	Operating expenditure	No
PAL ATT114	ACIL Allen, RIS, Bushfire mitigation regulations amendment, 17 November 2018,	Operating expenditure	No
PAL ATT115	ACMA, The ACMA's long-term strategy for the 803–960 MHz band, Decision paper, November 2015	Augmentation capex	No
PAL ATT116	ACMA, Band change letter, August 2017	Augmentation capex	No

PAL ATT117	ACMA, Spectrum reform of the 803–960 MHz band, November 2015	Augmentation capex	No
PAL ATT118	ACMA, Future use of the 1.5 GHz and 3.6 GHz bands, October 2016	Augmentation capex	No
PAL ATT119	ACMA, Status of the ACMA's review of the 1.5 GHz band email, May 2019	Augmentation capex	No
PAL ATT120	Powercor, Surf coast supply area - TQY scope, January 2020	Augmentation capex	No
PAL ATT121	Powercor, Surf coast supply area - WPD scope, January 2020	Augmentation capex	No
PAL ATT122	Powercor, Implementation and optimisation of REFCL systems, March 2018	Augmentation capex	No
PAL ATT123	Geelong Sustainability, Letter of support for Powercor enabling residential rooftop solar regulatory proposal, November 2019	Augmentation capex IT capex Operating expenditure	No
PAL ATT124	BDO EconSearch, Economic impact of the dairy industry in Regional Victoria, March 2016	Augmentation capex	No
PAL ATT125	Woolcott, Residential survey results, July 2018	Stakeholder engagement	No
PAL ATT126	Powercor, Cost sharing agreement 2017 - 2019 – executed, December 2019	Reset RIN	Yes
PAL ATT127	CHED, Constitution CHED services discretionary risk management scheme, December 2004	Reset RIN	Yes
PAL ATT128	Powercor, Network services agreement 2017 - 2019 (PNS to PAL), December 2019	Reset RIN	Yes
PAL ATT129	Powercor, Resources agreement 2017 - 2019 (PAL to CHED), December 2019	Reset RIN	Yes
PAL ATT130	Powercor, Resources agreement 2017 - 2019 (PAL to PNS), December 2019	Reset RIN	Yes
PAL ATT131	CHED, Corporate Services Agreement 2017 - 2019 (CHED to PAL), December 2019	Reset RIN	Yes
PAL ATT132	CHED, Corporate Services Agreement 2017 - 2019 (CHED to PAL) signed, December 2019	Reset RIN	Yes
PAL ATT133	ESV, Technical investigation report, the condition of power poles in south west Victoria, July 2019	Replacement capex	No
PAL ATT134	Victorian Planning Authority, Bacchus Marsh urban growth framework, August 2018	Augmentation capex	No

PAL ATT135	Metropolitan Planning Authority, Wyndham North development contributions plan, July 2017	Augmentation capex	No
PAL ATT136	Powercor, Certification of key assumptions, December 2019	NER requirement	No
PAL ATT137	AER, Letter on Victorian distribution reset timing proposed interim measure, November 2019	Transition period	No
PAL ATT138	AER, Application of the 2018 Rate of return instrument, September 2019	Transition period	No
PAL ATT139	MP D'Ambrosio, Changes to timing of annual Victorian network price updates, October 2019	Transition period	No
PAL ATT140	Revo Group, Impacts of the revised pole calculator, January 2020	Replacement capex	No
PAL ATT141	AER, Approved Powercor pricing proposal 2019, October 2018	Reset RIN	No
PAL ATT142	AER, Approved Powercor pricing proposal 2020, November 2019	Reset RIN	No
PAL ATT143	Department of Premier and Cabinet, Best practice regulation guidance note, VSL, August 2019	Replacement capex	No
PAL ATT144	AER, Transitional arrangement and application of STPIS to 2021- 26 revenue determinations for Victorian distributors, November 2019	Transition period	No
PAL ATT145	CGI, Quote for CHED and UE MIS Onshore model pricing estimate, August 2019	Operating expenditure	Yes
PAL ATT146	Dimension Data, Quote for on-shoring, September 2019	Operating expenditure	Yes
PAL ATT147	FIRB, Condition 16: post-acquisition audit work program, transition to compliance work plan, November 2017	Operating expenditure	Yes
PAL ATT148	FIRB, Letter of no objection, April 2017	Operating expenditure	Yes
PAL ATT149	FRIB, Letter of approval of work plan, May 2018	Operating expenditure	Yes
PAL ATT150	CIC, Resilience Strategy Plan	Operating expenditure	No
PAL ATT151	CIC, Resilience Strategy Policy Statement	Operating expenditure	No
PAL ATT152	CIC, Guidance note on protecting critical infrastructure assets from foreign investment	Operating expenditure	No
PAL ATT153	Powercor, IT external labour rates, March 2019	IT capex	No
PAL ATT154	AER, Electricity distribution network service providers, Service target performance incentive scheme, Version 2.0, November 2018	Incentives	No
PAL ATT155	AER, Distribution reliability measures guideline, November 2018	Incentives	No

PAL ATT156	AER, Values of customer reliability, final report on VCR values, December 2019	Incentives	No
PAL ATT157	AER, Capital expenditure incentives guideline for electricity network service providers, November 2013	Incentives	No
PAL ATT158	Australian Tax Office, Taxation ruling, income tax: effective life of depreciating assets (applicable from 1 July 2019), TR 2019/5, May 2019	Revenue	No
PAL ATT159	AER, Shared asset guideline, November 2013	Revenue	No
PAL ATT160	AER, Draft customer service incentive scheme, November 2019	Incentives	No
PAL ATT161	AER, Demand management incentive scheme, electricity distribution network service providers, December 2017	Incentives	No
PAL ATT162	AER, Demand management innovation allowance mechanism, electricity distribution network service providers, December 2017	Incentives	No
PAL ATT163	AER, Expenditure forecast assessment guideline for electricity distribution, November 2013	Replacement capex Operating expenditure	No
PAL ATT164	AER, Non-network ICT capex assessment approach, November 2019	IT capex	No
PAL ATT165	Department of Primary Industries, Advanced metering infrastructure, advanced metering infrastructure functionality specification (Victoria), September 2008	Metering services	No
PAL ATT166	AER, Final decision paper, forecasting productivity growth for electricity distributors, March 2019	Operating expenditure rate of change	No
PAL ATT167	AEMO, 2019-20 integrated system plan, 2019 inputs and assumptions workbook December 2019	IT capex	No
PAL ATT168	Climate Council, Fully charged - renewables and storage powering Australia, February 2018	Our energy future	No
PAL ATT169	ClimateWorks, Australia on behalf of the Electric Vehicle Council, The state of EVs in Australia: second report: driving momentum in electric mobility, June 2018	Our energy future	No
PAL ATT170	Government of Victoria, Renewable energy action plan, January 2020	Our energy future	No
PAL ATT171	Marlene Motyka, Andrew Slaughter and Carolyn Amon, Global renewable energy trends - Solar and wind move from mainstream to preferred, Deloitte Insights, September 2018	Our energy future	No
PAL ATT172	Office of the Premier, Cheaper electricity with solar batteries for 10,000 homes, media release, September 2018	Our energy future	No

PAL ATT173	Office of the Premier, Cutting power bills with solar panels for 650,000 homes, media release, August 2018	Our energy future	No
PAL ATT174	Victorian Government, Victorian Infrastructure Plan 2018, October 2017	Our energy future	No
PAL ATT175	AER, Industry practice application note: asset replacement planning, January 2019	Replacement capex	No
PAL ATT176	ESV, Draft report (public), Powercor wood pole management, an assessment of sustainable wood pole safety outcomes, December 2019	Replacement capex	No
PAL ATT177	Australian Government, Australian Signals Directorate, ACSC threat report 2017, Australian cyber security centre, October 2017	IT capex	No
PAL ATT178	ESC, Victorian electricity distribution code, January 2020	Operating expenditure IT capex	No
PAL ATT179	International association for public participation (IAP2's), Public Participation Spectrum	Augmentation capex	No
PAL ATT180	Victorian Government, Residential tenancies regulations 2020 RIS, November 2019	Augmentation capex	No
PAL ATT181	Gartner, 2018 top priorities for customer service and support, April 2019	IT capex	No
PAL ATT182	Gartner, Protect your organisation from cyber and ransomware attacks, April 2019	IT capex	No
PAL ATT183	Oracle, Introducing oracle database 18c, July 2018	IT capex	No
PAL ATT184	MuleSoft, SAP integration best practice, May 2019	IT capex	No
PAL ATT185	ACSC, Essential eight explained, April 2019	IT capex	No
PAL ATT186	Australian Energy Market Operator Limited, 2018 cyber security preparedness report, December 2018	IT capex	No
PAL ATT187	Office of the Australian Information Commissioner, Data breach preparation and response, February 2018	IT capex	No
PAL ATT188	Department of Home Affairs, Cyber security strategy, November 2019	IT capex	No
PAL ATT189	OAIC, guide to securing personal information, reasonable steps to protect personal information June 2018	IT capex	No
PAL ATT190	Cyber Infrastructure ICS, Alert cyber-attack against Ukraine, February 2016	IT capex	No

PAL ATT191	Alan Finkel, Independent review into the future security of the national electricity market, June 2017	IT capex	No
PAL ATT192	ACSC Routers targeted, Cisco smart install feature continues to be targeted by Russian state - sponsored actors, April 2018	IT capex	No
PAL ATT193	State Government of Victoria, Emergency Management Victoria, Critical infrastructure resilience strategy, July 2015	IT capex	No
PAL ATT194	State Government of Victoria, Emergency Management Victoria, Victoria's critical infrastructure all sectors resilience report 2018	IT capex	No
PAL ATT195	United States DHS, Alert (TA18-074A)-Russian government cyber activity targeting energy and other critical infrastructure sectors, March 2018	IT capex	No
PAL ATT196	World Economic Forum, Cyber resilience in the electricity ecosystem-principles and guidance for boards, January 2019	IT capex	No
PAL ATT197	World Economic Forum, The global risks report, 2019	IT capex	No
PAL ATT198	SAPN, Draft plan, 2019	IT capex	No
PAL ATT199	Yale Environment, 360 EV half of new car sales in Norway, July 2019	IT capex	No
PAL ATT200	ENA, National guidelines for the prevention of unauthorised access, 2006	IT capex	No
PAL ATT201	Australian New Zealand, Counter-terrorism committee National guidelines protection critical infrastructure from terrorism	IT capex	No
PAL ATT202	Office of Projects Victoria, Victorian digital asset strategy, February 2019	IT capex	No
PAL ATT203	ASIC, ASIC - Users of financial reports, list of financial reporting and audit questions, October 2014	IT capex	No
PAL ATT204	ASUG News, SAP S4HANA live customer numbers continue to grow, February 2018	IT capex	No
PAL ATT205	ESV, Acceptance of bushfire mitigation plan, December 2019	Operating expenditure Augmentation capex Replacement capex	No
PAL ATT206	AEMC, Electricity network economic regulatory framework review, integrating distributed energy resources for the grid of the future, September 2019	IT capex	No
PAL ATT207	AER, Preliminary decision Powercor distribution determination 2016 to 2020 Attachment 6 Capex, October 2015	Connections capex	No
PAL ATT208	Powercor, 2016 - 2020 price reset appendix E capital expenditure, April 2015	Connections capex	No

PAL ATT209	OAIC, Australian privacy principle, security of personal information, July 2019	IT capex	No
PAL ATT210	AER, Final decision Powercor distribution determination - Attachment 6 - Capital expenditure, May 2016	Augmentation capex	No
PAL ATT211	United Energy, Review of United Energy IT systems, September 2019	IT capex	No
PAL ATT212	AER, Final decision Powercor Australia contingent project, Installation of Rapid Earth Fault Current Limiters (REFCLs) tranche 1, August 2017	Augmentation capex Operating expenditure	No
PAL ATT213	AER, Final decision Powercor Australia contingent project, Installation of Rapid Earth Fault Current Limiters (REFCLs) — tranche 2, August 2018	Augmentation capex Operating expenditure	No
PAL ATT214	The Commonwealth Of Australia Senate, Minerals resource rent tax repeal and other measures Bill 2014, Schedule 6, December 2019	Operating expenditure	No
PAL ATT215	AER, Draft Decision SA Power Networks, Distribution determination 2020 to 2025, Attachment 6, Operating expenditure, October 2019	Operating expenditure	No
PAL ATT216	AER, Draft Decision Ausgrid distribution determination 2015–16 to 2018–19, Attachment 6: capital expenditure, November 2014	Operating expenditure Augmentation capex	No
PAL ATT217	Powercor, Proposed negotiating framework, regulatory period commencing July 2021, January 2020	NER compliance	No
PAL ATT218	2009 Victorian Bushfires Royal Commission, final report, summary, July 2010	Augmentation capex Operating expenditure	No
PAL ATT219	SAPN, Powerline bushfire safety taskforce, final report, September 2011	Augmentation capex Operating expenditure	No
PAL ATT220	AEMC, Five minute settlement final determination, November 2017	IT capex Operating expenditure Augmentation capex	No
PAL ATT221	Powercor, Contingent project application, REFCL tranche 1, March 2017	Augmentation capex Replacement capex	No
PAL ATT222	Powercor, Contingent project application, REFCL tranche 2, April 2018	Augmentation capex Replacement capex	No
PAL ATT223	Powercor, Contingent project application, REFCL tranche 3, August 2019	Augmentation capex Replacement capex	No
PAL ATT224	Australian Government, Emissions reduction fund white paper, Minister's foreword, April 2014	Augmentation capex IT capex Operating expenditure	No

PAL ATT225	AEMC, Distribution market model, August 2017	Augmentation capex IT capex Operating expenditure	No
PAL ATT226	Geelong Council, Zero carbon emissions strategy, May 2019	Augmentation capex IT capex Operating expenditure	No
PAL ATT227	Department of Environment and Energy, About the climate solutions fund - emissions reduction fund, April 2014	Augmentation capex IT capex Operating expenditure	No
PAL ATT228	Clean Energy Regulator, auction, July 2019	Augmentation capex IT capex Operating expenditure	No
PAL ATT229	Powercor, Enabling rooftop solar exports April 2019	Augmentation capex IT capex Operating expenditure	No
PAL ATT230	AER, Application guidelines regulatory investment test for distribution, December 2018	Augmentation capex IT capex Operating expenditure	No
PAL ATT231	Victorian Farmers Federation, UDV, Policy priorities	Augmentation capex	No
PAL ATT232	Victorian Farmers Federation, Annual report 2012-2013	Augmentation capex	No
PAL ATT233	Dairy Australia, Farming milk price, January 2020	Augmentation capex	No
PAL ATT234	AEMO, Guide to generation exemptions and classification of generating units, November 2018	Connections capex	No
PAL ATT235	AEMO, Data dashboard	Connections capex	No
PAL ATT236	Department of Environment, Water, Land and Planning, Victorian renewable energy auction scheme, 2018	Connections capex	No
PAL ATT237	The Guardian, Coles signs long-term contract for electricity from three new solar farms, August 2019	Connections capex	No
PAL ATT238	Business Insider, Atlassian is just one of several Aussie companies which have pledged to use 100% renewable energy, September 2019	Connections capex	No
PAL ATT239	AER, final decision: United Energy distribution determination 2016 to 2020, attachment 6 – capital expenditure, May 2016	Connections capex	No
PAL ATT240	Woolcott, Warrnambool stakeholder roundtable report, report prepared for Powercor, April 2019	Stakeholder engagement	No
PAL ATT241	AER, final decision, Ausgrid distribution determination 2019 to 2024, April 2019	Operating expenditure	No

PAL ATT242	Surf Coast Shire, Economic insights, 2018	Augmentation capex	No
PAL ATT244	2018 Powercor category analysis RIN BOPs, 2018	Reset RIN	No
PAL ATT245	ESV, Powercor wood pole management, Sustainable wood pole safety management approach, detailed technical report, December 2019	Replacement capex	No
PAL ATT246	Victorian Farmers Federation, Upgrading regional supply, January 2020	Augmentation capex	No
PAL ATT247	Moyne Shire, Network upgrades to support dairy farmers, January 2020	Augmentation capex	No
PAL ATT248	Beverley McArthur MP, Upgrade investment in Tyrendarra, Strathdownie, Cape Bridgewater, and Gorae West, January 2020	Augmentation capex	No