Powerco CPP Application

Powerco Annual CPP Delivery Report (ADR)

DRAFT WORKING VERSION FOR STAKEHOLDER COMMENT (Nov 17)

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1 PURPOSE AND OVERVIEW

1.1 CPP - ANNUAL DELIVERY REPORT (CPP-ADR)

The CPP Annual Delivery Report (CPP-ADR) is a formal report intended to be published by Powerco each year alongside annual information disclosures (on 31 August). It contains information that allows customers and stakeholders to review Powerco's CPP delivery performance (i.e. actual vs planned expenditure / actual vs planned work delivered and actual vs planned outputs achieved).

The investment proposed by Powerco as part of its CPP application is linked to achieving a number of network and customer performance outcomes (referenced to delivering the expenditure objective). The Final Determination on Powerco's CPP application, made by the Commerce Commission, set an annual maximum allowable revenue, based in part, on an approved forecast expenditure allowance.

The publication of an annual CPP-ADR is part of a commitment made by Powerco to provide transparency on how these outcomes are being delivered and how and where expenditure is being incurred, compared to CPP forecasts. It will provide an annual update on Powerco's progress to optimise its expenditure plan to deliver targeted customer outcomes and achieve long-term network performance goals.

Over the course of the five-year period it is expected that Powerco's actual investment mix and delivered outputs will vary from that forecast at the time of the CPP application / final determination. This will be not only to reflect an appropriate response to customers' changing requirements, but the regulatory framework appropriately seeks to incentivise companies to continually seek better and more cost-effective ways to deliver optimal outcomes for customers. Any such material variations will be discussed in the CPP-ADR.

The requirement for Powerco to publish a CPP-ADR will form part of the CPP Final Determination. The Determination will also specify the scope and broad contents of the ADR; although the final format of the report will be at Powerco's discretion.

The ADR is intended for information only.

1.2 ANNUAL DELIVERY STAKEHOLDER MEETING (ADSM)

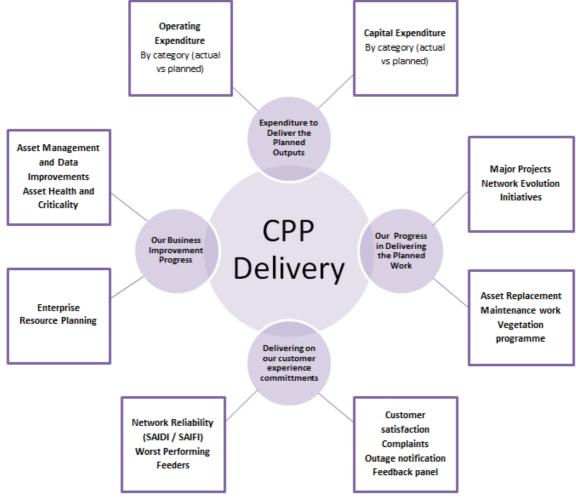
Powerco has signalled the intent to hold regional, annual CPP Delivery Stakeholder Meetings to complement the information reported each year in the ADR. These would be public / stakeholder meetings where Powerco would present an overview of the ADR and the status of major growth and security projects (including the status of network evolution initiatives). The meetings would also provide an opportunity to address stakeholder Q&A's on the annual delivery report.

1.3 STRUCTURE OF THE REPORT AND DELIVERY METRICS

This draft CPP-ADR contains suggested metrics to track delivery performance across four main areas:

- 1. Expenditure to deliver the planned output;
- 2. Progress in delivering the planned work;
- 3. The achievement of business process improvements; and,
- 4. Delivering on customer experience commitments and customer service outcomes.

The figure below summarises the indicative KPIs and delivery metrics that could be included in the CPP-ADR.



1.4 AT A GLANCE SUMMARY- EXPENDITURE VS PLAN

Nominal - \$m		CPP regulatory period								
		FY 2019			FY20	FY21	FY22	FY23		
CAPITAL EXPENDITURE (CAPEX)	Proposed (from application)	Adjusted (based on Final Determination)	Actual	Variance	Proposed (from application)	Proposed (from application)	Proposed (from application)	Proposed (from application)		
Total renewals capex	89.0	-	-	-	101.3	105.7	105.2	104.3		
Total growth and security capex	66.4	-	-	-	60.6	66.7	70.0	68.6		
Total other network capex	15.7	-	-	-	16.1	16.9	16.8	18.0		
Total non-network capex	22.7	-	-	-	10.8	16.4	10.2	9.9		
Total capex -	193.8	-	-	-	188.8	205.9	202.2	200.7		

Nominal - \$m		CPP regulatory period									
		FY 2019			FY20	FY21	FY22	FY23			
OPERATING EXPENDITURE (OPPEX)	Proposed (from application)	Adjusted (based on Final Determination)	Actual in the year	Variance (from adjusted)	Proposed (from application)	Proposed (from application)	Proposed (from application)	Proposed (from application)			
Network opex	58.9	-	-	-	62.8	64.9	63.9	63.8			
Non-network opex	34.4	-	-	-	36.1	36.5	36.6	36.4			
Total opex	93.3	-	-	-	98.9	101.3	100.5	100.3			

TOTAL EXPENDITURE (TOTEX) 287.1	-	287.8	307.2	302.7	301.0

2 EXPENDITURE TO DELIVER THE PLANNED OUTPUTS

This section provides a summary of actual expenditure compared to the CPP forecast. Capital and operating expenditure is reported separately and by major expenditure category (i.e. asset renewal, growth and security, maintenance, business support etc.).

Reporting metrics show actual vs planned expenditure for the reporting year in question as well as an indication of cumulative tracking against the five year CPP forecast.

Commentary is provided to explain any major variances against the plan, the rationale for any major plan changes, whether achievement of the overall targeted CPP outcomes are on track and an explanation of any major changes to underlying planning assumptions.

2.1 CAPITAL EXPENDITURE

2.1.1 ASSET RENEWAL EXPENDITURE

	FY19 e				diture since the started v actual)
	Planned	Actual	Variance		,
Renewal summary	\$\$\$	\$\$\$	+/-	Year 1: FY19	Year 5: FY23
Overhead structures	\$\$\$	\$\$\$	+/-	Year 1: FY19	Year 5: FY23
Overhead conductors	\$\$\$	\$\$\$	+/-	Year 1: FY19	Year 5: FY23
Cables	\$\$\$	\$\$\$	+/-	Year 1: FY19	Year 5: FY23
Zone substations	\$\$\$	\$\$\$	+/-	Year 1: FY19	Year 5: FY23
Other network expenditure	\$\$\$	\$\$\$	+/-	Year 1: FY19	Year 5: FY23
Commentary	This section includes a the rationale for any mato achieve the targeted planning assumptions.	ajor plan changes	, comments on	whether the progran	nme remains on trac

2.1.2 GROWTH & SECURITY EXPENDITURE

	FY19 expend	liture (\$m)		Cumulative expend start of the CPP (pl	
	Planned	Actual	Variance		
Growth & security summary	\$\$\$	\$\$\$	+/-	Year 1: FY19	Year 5: FY23
Major projects (total)	\$\$\$	\$\$\$	+/-	Year 1: FY19	Year 5: FY23
Minor work (total)	\$\$\$	\$\$\$	+/-	Year 1: FY19	Year 5: FY23
Commentary	explains the ra remains on tra	ationale for any r	major plan changes, co le targeted CPP outcor	major variances against thomments on whether the panes and comments on any	orogramme

2.1.3 OTHER NETWORK CAPITAL EXPENDITURE

	FY19 ex	penditure		Proportion of overa incurred	III CPP expenditure
	Planned	Actual	Variance		
Other network Capex			+/-		
Consumer connection & asset relocations			+/-	Year 1: FY19	Year 5: FY23
Network evolution			+/-	Year 1: FY19	Year 5: FY23
Commentary	rationale for a	ny major plan cha	anges, comments on w	ajor variances against the hether the programme ren n any major changes to ur	nains on track to

2.1.4 NON-NETWORK CAPITAL EXPENDITURE

	FY19 expenditure			Proportion of overa incurred	II CPP expenditure
	Planned	Actual	Variance		
Non-network Capex			+/-	Year 1: FY19	Year 5: FY23
Commentary	explain the ra	tionale for any ma	ijor plan changes, com	n major variances against t nment on whether we rema n any major changes to und	in on track to

2.2 OPERATING EXPENDITURE

2.2.1 NETWORK OPEX

	FY19 expenditure			Proportion of overall CF expenditure incurred	р
	Planned	Actual	Variance		
Network opex summary			+/-	Year1: FY19	Year 5: FY23
Maintenance			+/-	Year 1: FY19	Year 5: FY23
Vegetation management			+/-	Year 1: FY19	Year 5: FY23
System operations and network support			+/-	Year 1: FY19	Year 5: FY23
Commentary	rationale for any	major plan changes	s, comments on wheth	variances against the plan. It e er the programme remains on y major changes to underlying	track to

2.2.2 NON-NETWORK OPEX

	FY19 ex	cpenditure		Proportion of overall CPP expenditu incurred	
_	Planned	Actual	Variance		
Non-network opex			+/-	Year 1: FY19	Year 5: FY23
Commentary	rationale for	any major plan chang targeted CPP outcome	jes, comments on whet	r variances against the pla her the programme remair ny major changes to under	s on track to

3 PROGRESS IN DELIVERING THE PLANNED WORK

This section provides a summary of progress to deliver planned work (volumetric outputs). It provides a snapshot of delivery performance across five major expenditure areas:

- Major projects
- Asset replacement
- Maintenance work
- Vegetation Management
- Network evolution initiatives

The accompanying commentary explains any major variances against the plan. It explains the rationale for any major plan changes, comments on whether the programme remains on track to achieve the targeted CPP outcomes and comments on any major changes to underlying planning assumptions.

A more detailed summary for all major projects (>\$5m) that have reached the commissioning stage is provided. This summarises planned vs actual expenditure (commissioning value) and provides a commentary on any additions, major changes to scope, timing and / or outputs delivered.

3.1 MAJOR PROJECTS

3.1.1 SUMMARY STATUS

Major Project	Start Date	Commission Date	Project status					
	(Planned)	(Planned)	Planning	Design & procurement	Construction	Commissioned	On track	
Feilding - Sanson - Bulls	XXXX	xxxx						
Inglewood 6.6kV - 11kV						os only		
Kaimarama - Whitianga				ıllustr	ation purpos	250		
Kereone – Walton								
Kerepehi-Paeroa								
Kopu – Kauaeranga								
Kopu – Tairua								
Matarangi								
Moturoa - NPL GXP								
Omokoroa								
Palmerston North								
Papamoa								
Putaruru								
Putaruru - Tirau								
Pyes Pa zone substation								
Whangamata								
Whenuakite								

3.1.2 MAJOR PROJECT COMMISSIONING SUMMARY

The following major projects were commissioned during the reporting year.

Commi	ssioning date	Expen	diture	Variance
Planned	Actual	Planned	Actual	+/-
XXXX	XXXX	\$m	\$m	+/-

3.2 ASSET RENEWAL AND REPLACEMENT PROGRAMME

For the major asset categories, this section reports on the volume of assets replaced during the year compared to the plan. It also reports on the cumulative performance since FY19 and progress in achieving the planned five year total. A commentary to explain any material variances against the plan will be provided.

3.2.1 RENEWAL ASSET VOLUMES

	FY19 asset renewal quantities			Proportion of overall CPP renew complete	
	Planned	Actual	Variance		
Poles (No.)			+/-	Year 1: FY19	Year 5: FY23
Cross-arms (No.)			+/-	Year 1: FY19	Year 5: FY23
Conductor (circuit km)			+/-	Year 1: FY19	Year 5: FY23
Power transformers (No.)			+/-	Year 1: FY19	Year 5: FY23
Zone sub. switchgear (No.)			+/-	Year 1: FY19	Year 5: FY23
Commentary	rationale for any	major plan change:	s, comments on whethe	ariances against the plan. It or the programme remains o hanges to underlying planni	n track to achieve

3.3 PLANNED MAINTENANCE PROGRAMME

This section reports on the planned maintenance programme and provides an update on the number of defects rectified as part of the corrective maintenance programme, progress in addressing the backlog of amber defects, and the number of new defects identified during the year. It also provides an update on the volume of overhead line inspections completed. Five year trends tracking existing and new defects are provided.

3.3.1 MAINTENANCE

	FY19			Trend	
	Plan	Actual	Variance		
Defects rectified					
Number of amber defects addressed in the year			+/-	Graphic to show trend	
Number of amber defects in the backlog at year end			+/-	F/19 20 21 22 23	
Number of new amber defects identified through inspections in the year			+/-	FV19 20 21 22 23	
			+/-		
Overhead line inspection					
Number of poles inspected (all types)			+/-	FY19 20 21 22 23	
Km of lines inspected			+/-	FY19 20 21 22 23	
Commentary	explains the ra remains on tra	tionale for any ma	jor plan changes, com argeted CPP outcome	jor variances against the plan. It ments on whether the programme s and comments on any major	

3.4 VEGETATION MANAGEMENT PROGRAMME

This section reports on the progress of the vegetation management programme during the year compared to the plan. It also reports on the cumulative performance since FY19 and progress in achieving the targeted volume of cyclical vegetation work. It will provide a commentary to explain any material variances against the plan

3.4.1 VEGETATION MANAGEMENT WORK VOLUMES AND AVERAGE COST

	FY	FY19		Trend
	Planned	Actual	Variance	_
Network length inspected (route length km)			+/-	FY19 20 21 22 23
Number of tree sites managed (planned and unplanned)			+/-	FY19 20 21 22 23
Number of tree sites managed (reactive)			+/-	FY19 20 21 22 23
Average cost per tree site (total sper / number of sites)	end \$\$	\$\$	+/-	FY19 20 21 22 23
1	rationale for any majo	or plan changes,	comments on whether	ariances against the plan. It explains the programme remains on trace major changes to underlying plan

3.5 NETWORK EVOLUTION INITIATIVES

This section provides an update on the various network innovation initiatives which together comprise the category of "network evolution". For each initiative, that has been commenced, the section provides an update on the status of the work, together with a summary setting out how the work is progressing compared to plan, details of any sharing of learnings and collaboration with third parties, and a summary of the benefits that have / are being realised will also be provided.

[Note that the ADR would report only at a high level. As noted earlier, Powerco has proposed an annual briefing / presentation meeting (public and peers), which would complement the ADR and allow for a more in depth discussion and Q&A on this part of the CPP investment plan.]

3.5.1 NETWORK EVOLUTION INITIATIVES

Initiative	
Automatic fault detection and location	Powerco proposed investment to progress work on 12
Voltage support applications	network evolution initiatives during the course of the five yea
Automatic restoration (self-healing) and network reconfiguration	CPP period. The total expenditure across all twelve work areas is forecas
Smart meter data analysis (predominantly an opex activity)	to be \$18m
Electric vehicle charging control systems	Each of these projects includes an element of innovation
Integrating community energy schemes	trialling to test new technologies and operational practices that will be required to develop our network to support our
Tauranga Network Visibility trial (Comms Network only)	customers' energy futures
Demand management (predominantly an opex activity)	We have committed to collaborate with other industry

Network Insights (first priority 50%)	participants and share the findings of our research and technology trials where this is appropriate
Real time asset ratings	technology thats where this is appropriate
State estimation and network automation	
Network Insights (second priority 50%)	

3.5.2 NETWORK EVOLUTION INITIATIVES IN PROGRESS

The following progress was made against major network evolution initiatives during the reporting year.

	Commissioning date	Expe	nditure	Variance
Planned		Planned	Actual	+/-
XXXX	(XXXX	\$m	\$m	+/-

4 BUSINESS IMPROVEMENT PROGRESS

4.1 ASSET MANAGEMENT AND DATA IMPROVEMENT INITIATIVES

This section reports on progress against the key business improvement programme programmes included on the Powerco's CPP proposal.

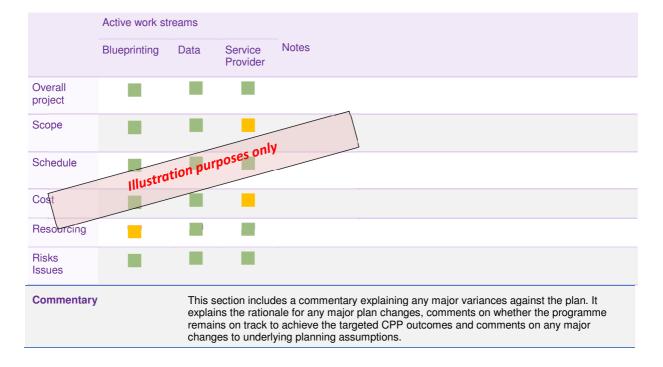
4.1.1 ASSET HEALTH FRAMEWORK

Initiative	Specific goal / objective set	Progress update on initiative
Data quality improvement initiatives		
ISO 55000 certification		
Asset criticality and health framework		
Commentary	delivered during the year and the bene	nanagement and data improvements that have been fits that are being realised including how these approved asset planning / management decisions.

4.2 ENTERPRISE RESOURCE PLANNING

This section reports on the progress of the ERP programme.

4.2.1 ERP PHASE 1 IMPLEMENTATION



5 DELIVERING ON CUSTOMER EXPERIENCE COMMITMENTS

5.1 NETWORK RELIABILITY

Average network reliability (SAIDI and SAIFI) is reported on an annual basis as part of regulatory compliance reporting. The ADR will report on planned and unplanned SAIDI and SAIFI at a network level and also disaggregated by region. Annual progress to address worst performing feeders is also reported.

5.1.1 SAIDI AND SAIFI PERFORMANCE DURING FY19

		SAIDI		SAIFI		
	FY19 Target	Actual	Variance	FY19 Target	Actual	Variance
Powerco overall			+/-			+/-
Planned			+/-			+/-
Unplanned			+/-			+/-
East			+/-			+/-
Planned			+/-			+/-
Unplanned			+/-			+/-
West			+/-			+/-
Planned			+/-			+/-
Unplanned			+/-			+/-
Commentary						
,						

5.1.2 WORST PERFORMING FEEDERS

	FY19		
_	Target	Actual	Variance
Number of worst performing feeders addressed - class F1			+/-
Number of worst performing feeders addressed - class F2			+/-
Number of worst performing feeders addressed - class F3			+/-
Number of worst performing feeders addressed - class F4			+/-
Number of worst performing feeders addressed - class F5			+/-
Commentary		-	-

5.2 CUSTOMER SATISFACTION

The CPP investment programme represents a package of work designed to ensure the delivery of services that customers have indicated that they value. Overall customer satisfaction will be reported each based on the results of an annual customer survey – this would allow consistent tracking of this index annually. The survey would be run by an independent third party provider. Customers would be selected at random and asked to score performance out of 10 for a number of service attributes, including measures such as effectiveness at communicating and response to customer requirements and enquiries.

5.2.1 CUSTOMER SATISFACTION SCORES

Service attribute	Powerco Overall	Eastern Network	Western Network
e.g. Communication			
e.g. Reliability			
etc.			
etc.			
Weighted ave. of "satisfaction" scores across all measures			
Commentary			

5.3 OUTAGE NOTIFICATION AND CUSTOMER COMMUNICATION

5.3.1 PLANNED OUTAGE NOTIFICATION PERFORMANCE

Milestone	FY actual	Target	Variance
Outages proceeding as planned (% of total)			+/-
Outages proceeding on reserve day (% of total)			+/-
Outages proceeding within notified time frame (% of total)			+/-
Commentary			

5.4 COMPLAINTS

5.4.1 PLANNED OUTAGE NOTIFICATION PERFORMANCE

Milestone	FY actual (average)	Target	Variance
Response time to customer queries - initial response			+/-
Response time to customer complaints – initial response			+/-
Complaints resolved within 1 working day (proportion of total)			+/-
Complaints resolved within 1 month (proportion of total)			+/-
Complaints deemed deadlocked and referred to UDL		N/A	

Commentary

5.5 POSITIVE FEEDBACK

5.5.1 NUMBER OF POSITIVE FEEDBACK CONTACTS RECEIVED IN THE YEAR

Milestone	Prior year	Current year
Total number of positive feedback contacts received**		
Commentary		

^{**} This measure records the number of letters, email contact, phone calls and digital media posts were customers express their thanks or acknowledge the good service they have received from Powerco

5.6 ESTABLISHMENT OF A CUSTOMER EXPERIENCE FEEDBACK PANEL

How customer communication occurs and how information is provided to customers is a critical determinant of overall customer experience (and satisfaction). This will become even more critical over the next regulatory period given the level of work Powerco has planned. Powerco has proposed a number of business improvements that will be delivered across a number of areas during the CPP period, including the development of a customer digital information hub; supported by Powerco taking more accountability for dealing directly with customer enquiries and managing service calls.

Powerco has indicated an intention to internally research and test major improvements to existing processes, and to then test ideas externally by establishing an informal external "customer experience feedback panel". The panel would comprise of invited customer representatives and key stakeholders. The panel would meet annually, in an informal capacity, to act as an external sounding board for our proposed customer experience improvement plans to ensure the understanding of customer priorities is challenged and tested.

5.6.1 CUSTOMER EXPERIENCE FEEDBACK PANEL

Milestone	Goal	Comment
Establish and convene customer experience and feedback panel	First meeting by December 2018	
Commentary		

6 NETWORK PERFORMANCE TRENDS

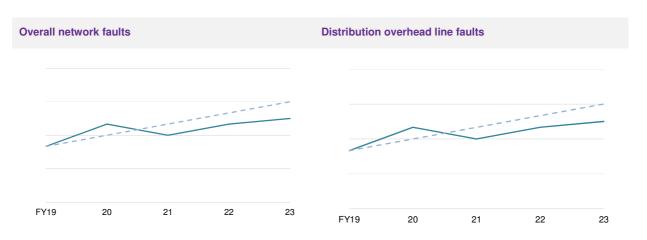
This section summarises network performance trends in key areas such as asset health, overall fault rates, network reliability and overall customer satisfaction. The trend analysis for each metric will be reported annually to compare forecast trends against actuals.

6.1 ASSET HEALTH TRENDS ON MAJOR CATEGORIES



^{**} The appropriate frequency of reporting for asset health will need to be determined (i.e. annually, mid period or at the end of the CPP period?).

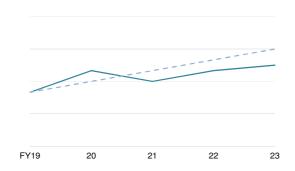
6.2 FAULTS TRENDS



6.3 RELIABILITY (PLANNED AND UNPLANNED SAIDI AND SAIFI) TREND



6.4 CUSTOMER SATISFACTION TREND (REFER TO SECTION 5.2)



-----END------