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Glossary

AMC	Asset Management Capability
CAIDI	Customer Average Interruption Duration Index (a measure of reliability)
CB	Circuit breaker
CT	Current transformer
DAR	Defective Apparatus Record
EMC	Executive Management Committee
FIS	Facilities Information System
HV	High voltage
LTAP	Long Term Action Plan
MMS	Maintenance Management System
OCB	Oil circuit breaker
PEP	Project Execution Plan
RAMP	Remedial Asset Management Program
RISQ	Risk, Investigation, Safety and Quality – Power and Water’s hazard investigation database, among other things
RWP	Remedial Works Plan
SAIDI	System Average Interruption Duration Index (a measure of reliability)
SAIFI	Customer Average Interruption Frequency Index (a measure of reliability)
SCADA	System Control and Data Acquisition
VT	Voltage transformer
WIMS	Works Implementation Management System

1 Introduction

This is the Power and Water Corporation's second Progress Report on the Northern Territory Government's independent enquiry into electrical equipment failures at Casuarina Zone Substation and general asset maintenance practices.¹

This summarises Power and Water's actions to:

- ensure that the condition of Power and Water's electrical equipment meets established industry standards;
- improve maintenance practice and performance; and so
- fulfil all the Enquiry's recommendations.

Our goal is to provide a reliable electricity supply to customers. To do this we must ensure that all Power and Water's electrical assets meet and operate at established industry standards. We are changing our maintenance practices, training, leadership and culture to achieve this.

1.1 Background

In September and October 2008, a number of electrical equipment failures resulted in electricity supply disruption to Darwin's Northern suburbs. As a result, the Northern Territory Government established an independent enquiry headed by Mervyn Davies into these events, Power and Water's operational response and electrical substation maintenance practices in Darwin.

The Enquiry's principal recommendations were that Power and Water should:

- Move its maintenance approach to 'condition based maintenance.'
- Implement 'condition based maintenance' in substations as quickly as possible by acquiring information, support and clarifying accountabilities.
- Bed down organisational changes.
- Deliver improved systems and processes.
- Enhance policies and policy documentation.
- Develop substations maintenance planning and works program.
- Report on maintenance delivery, asset condition, risks and failures.
- Enhance workforce capability, training, numbers and equipment.
- Implement a development program, with the objective of a more collaborative leadership style, improved communication and individual accountability.
- Review incident management and investigations, and complete some outstanding investigations.

¹ Independent Enquiry into Casuarina Zone Substation Events and Substation Maintenance Across Darwin, Final Report. Chairman: Mervyn Davies. 26 January 2009.

- Undertake an overall remedial program.
- Take immediate action to replace the Casuarina Zone Substation 11kV switchboard.

The full Davies' recommendations are provided in Appendix A.

1.2 Report structure

Power and Water's progress in meeting these recommendations follows:

- A summary of remedial works and the reform of substation maintenance operations, in [Section 2](#).
- An extensive program of equipment condition monitoring in [Section 3](#).
- Longer term measures to bring the standard of substation maintenance to established industry practice in its circumstances in [Section 4](#).
- The effect on customers of these activities, both in the short and longer term in [Section 5](#).

Each of the principal recommendations and associated timelines is presented in Appendix B.

1.3 Future reports

Power and Water will report quarterly to stakeholders (including the Board, Utilities Commission, NT Government and the wider community) for the life of this project.

Feedback would be welcomed. This report will be subject to an independent audit, an example scope of which is provided in Appendix C.

2 Progress

As can be seen from the table, some of this work began before the Casuarina incident and some began immediately after, where it was urgent or obviously had merit.

Ref	Recommendation summary	Start date	Target completion	On track
1	Move maintenance approach to 'condition-based maintenance.'	02/09	06/14	Yes
2	Implement 'condition based maintenance' in substations as quickly as possible by acquiring information, support and clarifying accountabilities.	11/08	06/10	Largely
3	Bed down organisational changes.	02/09	07/09	Largely
4	Deliver improved systems and processes.	02/08	12/10	Yes
5	Enhance policies and policy documentation.	11/08	06/10	Largely
6	Develop substation maintenance planning and works program.	02/09	12/09	Yes
7	Report on maintenance delivery, asset condition, risks and failures.	11/08	08/09	Largely
8	Enhance workforce capability, training, numbers and equipment.	12/08	02/10	Largely
9	Implement a development program, with the objective of a more collaborative leadership style, improved communication & individual accountability.	02/09	02/11	Yes
10	Review incident management and investigations, and complete some outstanding investigations.	02/09	12/09	Yes
11	Undertake Remedial Programs	11/08	09/10	Yes
11.3	Take immediate action to replace the Casuarina Zone Substation 11kV switchboard.	10/08	11/09	Yes

The remainder of this section highlights the most significant areas where progress has been made.

4 What it means for customers

Power and Water has ramped up its maintenance schedule, which means more equipment than usual will be taken out of service for testing and repair. Every protection measure is in place, but as we progress this project, there is an increased risk of customer outages.

In the longer term, customers will benefit from a more reliable electricity supply. With reliable switchgear outages are less likely and - when they occur - they affect customers for a shorter time.

4.1 There may be some interruptions

RAMP is driving significant maintenance activity. Power and Water is planning work carefully to minimise the risk of outages and doing work at night to minimise inconvenience should an outage occur.

We have committed to:

- Avoid outages for our customers whenever possible.
- Where a planned outage is unavoidable, notify affected customers using letterbox leaflets, newspaper or radio advertising at least seven days in advance.
- Where maintenance activity increases the risk that equipment cannot be returned to service within a reasonable period, we will make arrangements to limit the impact on customers. Week night and weekend work will reduce the need for planned outages during weekdays.

4.2 Long term, reliability will improve

This increased maintenance will provide customers with more reliable electricity supply as Darwin's population continues to increase. The emphasis on:

- education for trades people, technicians, supervisors and the management team;
- a streamlined maintenance cycle;
- increased accountability of maintenance activities;
- improvements in maintenance documentation;
- increased resources to perform the work; and
- specific requirements for reporting maintenance performance to the Board and executive management;

will ensure that maintenance practices, in line with established industry asset management practices, are kept up to date and plant failures minimised.

The costs of these improvements will be far outweighed by the benefits of a more secure and reliable electricity supply.

Ref	Recommendation	Plan ref	Owner	Target date	Progress
7.2	Develop simple multi level reporting of asset class condition, risks, and asset failure reporting.	LTAP	M-AM		Condition based index reporting complete, risk based started.
7.3	Implement ad hoc paper/PC based reporting systems, in the interim, before new AMC systems and reporting capability is developed.	LTAP	M-AM		Consultants engaged to develop.
8	Enhance workforce capability, training, numbers and equipment.	LTAP	GM-PN	02/10	Effective development and implementation of Workforce Training and development program
8.1	Provide workforce and supervisor training and development.	LTAP	M-TPN		2 Power Network based training managers identified, first one commenced within RAMP team.
8.2	Recruit an additional 6 electrically trades qualified personnel experienced in condition monitoring techniques.) and annually review need.	LTAP	M-C&MD		Commenced.
8.3	Upgrade and progressively acquire additional new condition monitoring equipment.	LTAP	GM-RAMP		All equipment either arrived or on order.

Ref	Recommendation	Plan ref	Owner	Target date	Progress
9	Implement a development program, with the objective of a more collaborative leadership style, improved communication and individual accountability.	LTAP	GM-PN	02/11	Leadership Program initiated. PN has also commenced regular leadership forums.
10	Review incident management and investigations, and complete some outstanding investigations.	LTAP	GM-PN	12/09	
10.1	Review the current incident management arrangements, including escalation procedures.	LTAP	M-SC		Progressing.
10.2	Assign clear asset failure investigation accountabilities.	LTAP	GM-PN		Progressing.
10.3	Pursue further the Manton Investigation, and undertake investigation work in an attempt to establish the root cause of the failure	LTAP	C-PTC		Identified design issue with YSF6 gear and need to replace all three examples.
10.4	Complete the residual Casuarina incidents' investigation.	LTAP	GM-RAMP		Will be completed as the existing switchboard is decommissioned.
10.5	Complete the investigation of Hazard/Incident No 1768, without further delay.	LTAP	GM-RAMP		Completed.
11	Undertake Remedial Programs	RAMP	GM-RAMP	09/10	Completion of RAMP Program.
11.1	Initiate a program of rigorous condition assessment of all Zone Substation equipment.	RWP	M-RWP		Commenced, includes immediate remediation of assets in unsatisfactory condition.
11.2	Implement a program to verify the efficacy of all frame leakage protection systems.	RAMP	M-RWP		Commenced, Included in RAMP.

Ref	Recommendation	Plan ref	Owner	Target date	Progress
11.4	Undertake a rigorous condition assessment of all Distribution Substation Equipment.	RAMP	M-RWP		Commenced, RAMP managing.
11.3	Take immediate action to replace the Casuarina Zone Substation 11kV switchboard.	PEP	PM-C		Switchboard ordered, completion expected first quarter 2010.

Key to People

C-PTC	Chairman – Power Technical Committee	M-RWP	Manager Remedial Works Plan
GM-PN	General Manager Power Networks	M-S&P	Manager Strategy & Planning
GM-RAMP	General Manager RAMP	M-SC	Manager System Control
M-AM	Manager – Asset Management	M-TPN	Manager Training, Power Networks
M-C&MD	Manager Capital & Maintenance Delivery	PD-AMC	Project Director AMC
MD	Managing Director	PM-C	Project Manager Casuarina

Appendix C: Scope of audit

The following indicative scope of work is for the procurement of an independent auditor to enable the Power and Water Board to enforce compliance with the controls it has established in response to the recommendations of the Mervyn Davies' Enquiry for the short term and long term improvement in network maintenance activities:

B.1 Introduction

The Power and Water Corporation (Power and Water) is an entity owned by the Northern Territory Government. Power and Water operates four business units, being Generation (of electricity), Power Networks, Retail (of electricity), Water Services (including sewage services) and Remote Operations.

In the Power Networks business unit, asset management covers construction activities, response to emergency events, and network maintenance activities. The need for improvements in the undertaking of network maintenance has been a focus of the business unit for several years, including actions to review all processes in an Asset Management Capability project that commenced in late 2006 and will be progressively implemented across the organisation in 2010 and 2011. In 2008 a restructure of the Power Networks business unit was undertaken to improve the focus on network maintenance delivery. Also in 2008, and due to an interruption at a substation in the suburbs of Darwin, the reform of maintenance activities has accelerated through recommendations arising from the Mervyn Davies' Enquiry, which was handed down in January 2009.

To understand the extent of compliance of the network maintenance activity with corporate controls, the Board of Power and Water require an independent auditor to undertake an audit of the maintenance activities of the Power Networks business unit.

B.2 Audit objective

The objective of the Power Networks maintenance audit is to provide an opinion on the extent of compliance of the maintenance activity against the:

- Major milestones specified in the Power and Water's First Progress Report on the Mervyn Davies' Enquiry; and
- Maintenance Policy, Maintenance Procedures and Maintenance Work Instructions that have been established and revised to control the maintenance activity.

B.3 Audit frequency and duration

The audit is to be conducted on an annual basis, and are to be based on a sample of activities that represent high or medium risk to the organisation. Twenty days of audit work are to be allocated to this task annually.

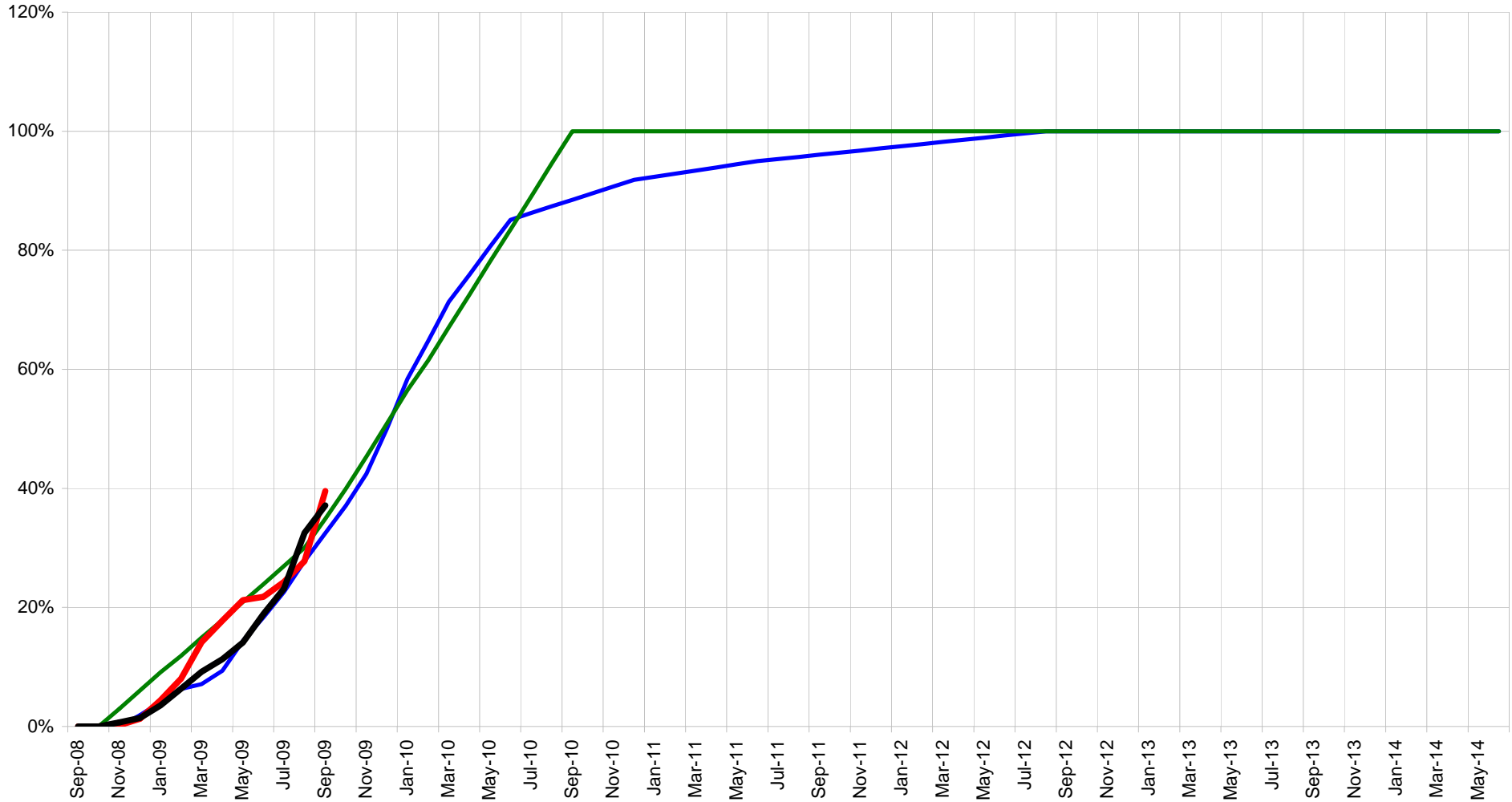
B.4 Audit report

The auditor is required to provide a report to the Audit and Risk Sub-committee in accordance with an agreed work plan which will be confirmed at the commencement of the audit. The structure of the audit report is to be agreed at the commencement of the audit, and would be expected to provide an opportunity for management to respond to any audit findings.

The auditor is to provide in the report a review opinion on compliance with the nominated controls (including specified major milestones) established by the Board.

LTAP & RAMP - PROGRESS AGAINST BASELINE

- Baseline LTAP
- Baseline RAMP
- Actual LTAP
- Actual RAMP



ID	Task Name	Duration	Start	% Complete	Finish	Qtr 1, 2009			Qtr 2, 2009			Qtr 3, 2009			Qtr 4, 2009			Qtr 1, 2010			Qtr 2, 2010		
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1	RAMP Plan	438 days?	Thu 01/01/09	26%	Sun 14/03/10																		
2	McMinns 66/22 kV SS	22 days?	Thu 01/01/09	100%	Thu 22/01/09																		
3	RAMP Plan	22 days	Thu 01/01/09	100%	Thu 22/01/09																		
4	OCB	1 day?	Thu 01/01/09	100%	Thu 01/01/09																		
5	CT	1 day?	Thu 01/01/09	100%	Thu 01/01/09																		
6	VT	1 day?	Thu 01/01/09	100%	Thu 01/01/09																		
7	West Bennett St 11 kV Sw St	13 days?	Mon 02/02/09	100%	Sat 14/02/09																		
8	RAMP Plan	13 days	Mon 02/02/09	100%	Sat 14/02/09																		
9	OCB	1 day?	Mon 02/02/09	100%	Mon 02/02/09																		
10	Katherine 132/22 kV SS	15 days?	Sun 01/02/09	100%	Sun 15/02/09																		
11	RAMP Plan	15 days	Sun 01/02/09	100%	Sun 15/02/09																		
12	OCB	1 day?	Sun 01/02/09	100%	Sun 01/02/09																		
13	CT	1 day?	Sun 01/02/09	100%	Sun 01/02/09																		
14	VT	1 day?	Sun 01/02/09	100%	Sun 01/02/09																		
15	Humpty Doo 66/22 kV SS	6 days?	Sun 01/03/09	100%	Fri 06/03/09																		
16	RAMP Plan	6 days	Sun 01/03/09	100%	Fri 06/03/09																		
17	OCB	1 day?	Sun 01/03/09	100%	Sun 01/03/09																		
18	CT	1 day?	Sun 01/03/09	100%	Sun 01/03/09																		
19	VT	1 day?	Sun 01/03/09	100%	Sun 01/03/09																		
20	City Zone 66kV	93 days?	Mon 30/03/09	71%	Tue 30/06/09																		
21	RAMP Plan	93 days	Mon 30/03/09	46%	Tue 30/06/09																		
22	Actual/Revised Plan	79 days?	Mon 13/04/09	100%	Tue 30/06/09																		
23	OCB	1 day?	Mon 13/04/09	100%	Mon 13/04/09																		
24	CT	1 day?	Mon 13/04/09	86%	Mon 13/04/09																		
25	VT	1 day?	Mon 13/04/09	86%	Mon 13/04/09																		
26	Tennant Creek 22kV	13 days?	Fri 01/05/09	100%	Wed 13/05/09																		
27	RAMP Plan	13 days	Fri 01/05/09	100%	Wed 13/05/09																		
28	OCB	1 day?	Fri 01/05/09	100%	Fri 01/05/09																		
29	CT	1 day?	Fri 01/05/09	100%	Fri 01/05/09																		
30	VT	1 day?	Fri 01/05/09	100%	Fri 01/05/09																		
31	City Zone 11kV	21 days?	Tue 19/05/09	100%	Mon 08/06/09																		
32	RAMP Plan	21 days	Tue 19/05/09	100%	Mon 08/06/09																		
33	OCB	1 day?	Tue 19/05/09	100%	Tue 19/05/09																		
34	Snell St 66kV	145 days?	Tue 09/06/09	14%	Sat 31/10/09																		
35	RAMP Plan	83 days?	Tue 09/06/09	23%	Sun 30/08/09																		
36	Actual/Revised Plan	104 days	Mon 20/07/09	20%	Sat 31/10/09																		
37	OCB	104 days?	Mon 20/07/09	0%	Sat 31/10/09																		
38	CT	1 day?	Mon 20/07/09	30%	Mon 20/07/09																		
39	VT	1 day?	Mon 20/07/09	30%	Mon 20/07/09																		
40	Hudson Creek 132/66 kV SS	215 days?	Fri 01/05/09	0%	Tue 01/12/09																		
41	RAMP Plan	32 days?	Fri 01/05/09	0%	Mon 01/06/09																		
42	Actual/Revised Plan	32 days	Sat 31/10/09	0%	Tue 01/12/09																		
43	OCB	1 day?	Sat 31/10/09	0%	Sat 31/10/09																		
44	CT	1 day?	Sat 31/10/09	0%	Sat 31/10/09																		
45	VT	1 day?	Sat 31/10/09	0%	Sat 31/10/09																		
46	Sadadeen 22/11kV	175 days?	Mon 01/06/09	0%	Sun 22/11/09																		
47	RAMP Plan	54 days?	Mon 01/06/09	0%	Fri 24/07/09																		
48	Actual/Revised Plan	40 days	Wed 14/10/09	0%	Sun 22/11/09																		
49	OCB	1 day?	Wed 14/10/09	0%	Wed 14/10/09																		

Project: RAMP Plan - 1stdraft
Date: Mon 05/10/09

Task: Progress Summary External Tasks Deadline

Split: Milestone Project Summary External Milestone

Page 1

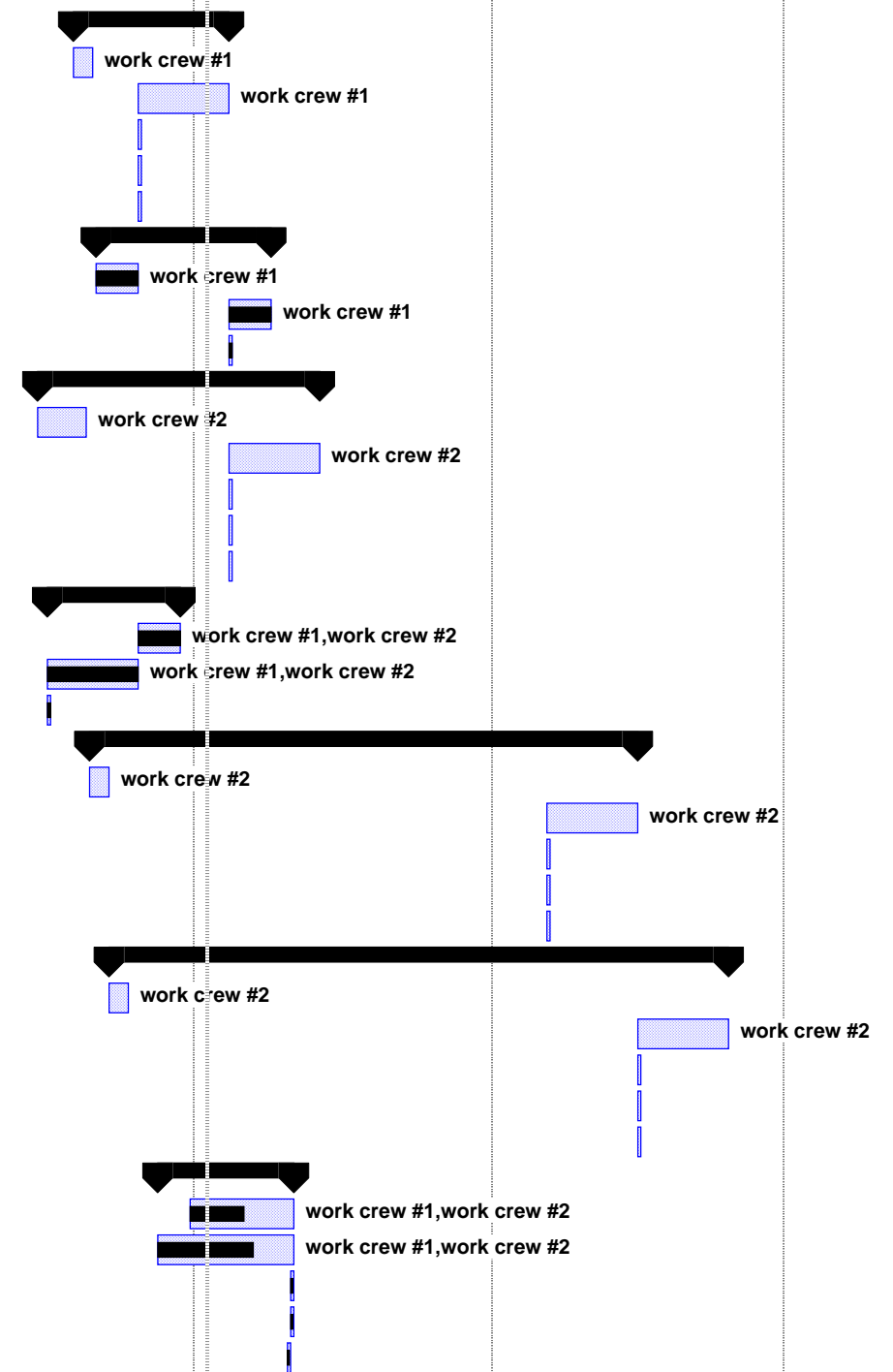
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50	Snell St 11kV	104 days?	Tue 02/06/09	50%	Sun 13/09/09																		
51	RAMP Plan	8 days?	Tue 02/06/09	100%	Tue 09/06/09																		
52	Actual/Revised Plan	28 days	Mon 17/08/09	34%	Sun 13/09/09																		
53	OCB	1 day?	Mon 17/08/09	100%	Mon 17/08/09																		
54	Hudson Creek 132/66 kV SS	206 days?	Fri 01/05/09	0%	Sun 22/11/09																		
55	RAMP Plan	58 days?	Fri 01/05/09	0%	Sat 27/06/09																		
56	Actual/Revised Plan	70 days	Mon 14/09/09	0%	Sun 22/11/09																		
57	OCB	1 day?	Mon 14/09/09	0%	Mon 14/09/09																		
58	CT	1 day?	Mon 14/09/09	0%	Mon 14/09/09																		
59	VT	1 day?	Mon 14/09/09	0%	Mon 14/09/09																		
60	Berrimah 66kV	26 days?	Mon 30/11/09	0%	Fri 25/12/09																		
61	RAMP Plan	26 days?	Mon 30/11/09	0%	Fri 25/12/09																		
62	Actual/Revised Plan	21 days	Mon 30/11/09	0%	Sun 20/12/09																		
63	OCB	1 day?	Mon 30/11/09	0%	Mon 30/11/09																		
64	CT	1 day?	Mon 30/11/09	0%	Mon 30/11/09																		
65	VT	1 day?	Mon 30/11/09	0%	Mon 30/11/09																		
66	Berrimah 11 kV Retrofit	125 days?	Sun 28/06/09	0%	Fri 30/10/09																		
67	RAMP Plan	119 days?	Sun 28/06/09	0%	Sat 24/10/09																		
68	Actual/Revised Plan	125 days	Sun 28/06/09	0%	Fri 30/10/09																		
69	OCB	1 day?	Sun 28/06/09	0%	Sun 28/06/09																		
70	Retrofit VCB	1 day?	Sun 28/06/09	0%	Sun 28/06/09																		
71	Palmerston 66 & 22kV	168 days?	Mon 06/07/09	0%	Sun 20/12/09																		
72	RAMP Plan	21 days?	Mon 06/07/09	0%	Sun 26/07/09																		
73	Actual/Revised Plan	14 days?	Mon 07/12/09	0%	Sun 20/12/09																		
74	OCB	1 day?	Mon 07/12/09	0%	Mon 07/12/09																		
75	CT	1 day?	Mon 07/12/09	0%	Mon 07/12/09																		
76	VT	1 day?	Mon 07/12/09	0%	Mon 07/12/09																		
77	Mary River 66/22 kV SS	119 days?	Mon 27/07/09	0%	Sun 22/11/09																		
78	RAMP Plan	5 days?	Mon 27/07/09	0%	Fri 31/07/09																		
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80	OCB	1 day?	Mon 26/10/09	0%	Mon 26/10/09																		
81	CT	1 day?	Mon 26/10/09	0%	Mon 26/10/09																		
82	VT	1 day?	Mon 26/10/09	0%	Mon 26/10/09																		
83	Lovegrove 22/11kV	14 days?	Sat 01/08/09	100%	Fri 14/08/09																		
84	RAMP Plan	14 days?	Sat 01/08/09	100%	Fri 14/08/09																		
85	OCB	1 day?	Sat 01/08/09	100%	Sat 01/08/09																		
86	Cox Pen. Transmitter 66/11 k	160 days?	Tue 11/08/09	0%	Sun 17/01/10																		
87	RAMP Plan	9 days?	Tue 11/08/09	0%	Wed 19/08/09																		
88	Actual/Revised Plan	29 days?	Sun 20/12/09	0%	Sun 17/01/10																		
89	OCB	1 day?	Sun 20/12/09	0%	Sun 20/12/09																		
90	CT	1 day?	Sun 20/12/09	0%	Sun 20/12/09																		
91	VT	1 day?	Sun 20/12/09	0%	Sun 20/12/09																		
92	Cox Pen. Centre Yard 66/11 k	5 days?	Thu 20/08/09	100%	Mon 24/08/09																		
93	RAMP Plan	5 days?	Thu 20/08/09	100%	Mon 24/08/09																		
94	OCB	1 day?	Thu 20/08/09	100%	Thu 20/08/09																		
95	CT	1 day?	Thu 20/08/09	100%	Thu 20/08/09																		
96	VT	1 day?	Thu 20/08/09	100%	Thu 20/08/09																		
97	Wood St 11 kV Sw St	13 days?	Sat 01/08/09	50%	Thu 13/08/09																		
98	RAMP Plan	13 days?	Sat 01/08/09	50%	Thu 13/08/09																		

Project: RAMP Plan - 1stdraft
Date: Mon 05/10/09

Task: Progress Summary External Tasks Deadline

Split: Milestone Project Summary External Milestone

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99	OCB	1 day?	Sat 01/08/09	50%	Sat 01/08/09																		
100	Pine Creek 132/66 kV TS	48 days?	Tue 25/08/09	0%	Sun 11/10/09																		
101	RAMP Plan	6 days?	Tue 25/08/09	0%	Sun 30/08/09																		
102	Actual/Revised Plan	28 days?	Mon 14/09/09	0%	Sun 11/10/09																		
103	OCB	1 day?	Mon 14/09/09	0%	Mon 14/09/09																		
104	CT	1 day?	Mon 14/09/09	0%	Mon 14/09/09																		
105	VT	1 day?	Mon 14/09/09	0%	Mon 14/09/09																		
106	Austin Knuckey 11 kV Sw St	54 days?	Tue 01/09/09	100%	Sat 24/10/09																		
107	RAMP Plan	13 days?	Tue 01/09/09	100%	Sun 13/09/09																		
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110	Pine Creek 66/22 kV PS	87 days?	Fri 14/08/09	0%	Sun 08/11/09																		
111	RAMP Plan	15 days?	Fri 14/08/09	0%	Fri 28/08/09																		
112	Actual/Revised Plan	28 days?	Mon 12/10/09	0%	Sun 08/11/09																		
113	OCB	1 day?	Mon 12/10/09	0%	Mon 12/10/09																		
114	CT	1 day?	Mon 12/10/09	0%	Mon 12/10/09																		
115	VT	1 day?	Mon 12/10/09	0%	Mon 12/10/09																		
116	Mott St 11 kV Sw St	41 days?	Mon 17/08/09	100%	Sat 26/09/09																		
117	RAMP Plan	13 days?	Mon 14/09/09	100%	Sat 26/09/09																		
118	Actual/Revised Plan	28 days?	Mon 17/08/09	100%	Sun 13/09/09																		
119	OCB	1 day?	Mon 17/08/09	100%	Mon 17/08/09																		
120	Brocks Creek 66/11 kV SS	169 days?	Sun 30/08/09	0%	Sun 14/02/10																		
121	RAMP Plan	6 days?	Sun 30/08/09	0%	Fri 04/09/09																		
122	Actual/Revised Plan	28 days?	Mon 18/01/10	0%	Sun 14/02/10																		
123	OCB	1 day?	Mon 18/01/10	0%	Mon 18/01/10																		
124	CT	1 day?	Mon 18/01/10	0%	Mon 18/01/10																		
125	VT	1 day?	Mon 18/01/10	0%	Mon 18/01/10																		
126	Cosmo Howley 66/11 kV SS	191 days?	Sat 05/09/09	0%	Sun 14/03/10																		
127	RAMP Plan	6 days?	Sat 05/09/09	0%	Thu 10/09/09																		
128	Actual/Revised Plan	28 days?	Mon 15/02/10	0%	Sun 14/03/10																		
129	OCB	1 day?	Mon 15/02/10	0%	Mon 15/02/10																		
130	CT	1 day?	Mon 15/02/10	0%	Mon 15/02/10																		
131	VT	1 day?	Mon 15/02/10	0%	Mon 15/02/10																		
132	Casuarina 66/11 kV SS	42 days?	Sun 20/09/09	63%	Sat 31/10/09																		
133	RAMP Plan	32 days?	Wed 30/09/09	53%	Sat 31/10/09																		
134	Actual/Revised Plan	42 days?	Sun 20/09/09	70%	Sat 31/10/09																		
135	OCB	1 day?	Sat 31/10/09	70%	Sat 31/10/09																		
136	CT	1 day?	Sat 31/10/09	80%	Sat 31/10/09																		
137	VT	1 day?	Fri 30/10/09	80%	Fri 30/10/09																		



Project: RAMP Plan - 1stdraft
Date: Mon 05/10/09

Task		Progress		Summary		External Tasks		Deadline	
Split		Milestone		Project Summary		External Milestone			