
REVISED REGULATORY EXPENDITURE FORECASTS

26 SEPTEMBER 2006

SUPPORTING INFORMATION

IMPORTANT NOTE: All expenditures quoted in this document are expressed in nominal \$ terms to enable direct comparison with detailed information provided in Appendix 6 of Western Power's revised proposed Access Arrangement Information dated 19 May 2006.

Introduction

Western Power proposes some variations (both increases and decreases) to its forecast expenditures in the Revised Proposed Access Arrangement (RPAA) submitted to the Economic Regulation Authority (ERA) on 19 May 2006.

The purpose of this document is to provide detailed supporting information to explain the need for these variations and to enable the ERA to assess the reasonableness of the revised forecasts.

Background

Western Power's RPAA was based on a "moderated" works program, whereby expenditure in most regulatory categories was constrained to lower levels than the forecast expenditure deemed to be required to meet all of Western Power's business objectives.

The reasons for moderation were:

1. Western Power's owner's preference was for Western Power to seek additional funding for expenditure in categories that were supported by the Investment Adjustment Mechanism (IAM) provision in the RPAA when the requirements were more certain.
2. The owner's preference was for Western Power to make separate applications for funding if additional safety and reliability projects were required due to new regulations or legislation, noting that these categories are not within the provisions of the IAM, and
3. Western Power was uncertain, at the time, about the capacity of the market to deliver more than the work represented in the RPAA.

However, a number of significant changes have occurred since May 2006:

- (i) A large number of projects that were not 100% certain of proceeding have either become certain or are very close to that position;
- (ii) The capability of the market to assist with delivery of extra work has been assessed with more certainty;
- (iii) More information concerning the condition of the wood pole population has been received and analysed;
- (iv) A number of new regulatory compliance obligations are certain, or very close to being certain;
- (v) Acceleration of the Independent Market Operator's load growth forecast;
- (vi) Sustained growth in new customer connections; and
- (vii) Significant increases in market-driven unit costs, particularly materials and construction (tender) prices.

Proposal Summary

Western Power has identified probable increases in customer and demand driven capex, but believes these increases can be managed through the Investment Adjustment Mechanism (IAM) and Capital Contributions Adjustment Mechanism (CCAM) provisions of the RPAA, without any adjustment to the forecasts for the related expenditure categories.

However, Western Power considers it prudent to make adjustments to other ('non-IAM') expenditure categories, to ensure that performance outcomes are achieved and to ensure appropriate recovery of costs.

Proposed Variations to Capital Expenditure

Table 1: Summary of changes to the proposed capital expenditure (\$M nominal)

Category	Revised Proposed Access Arrangement 18/5/06			Proposed Variations to RPAA September 06			Change			
	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	Total change
Distribution Capex										
Asset Replacement	10.3	10.0	19.0	17.6	30.0	31.1	7.3	20.0	12.1	39.4
Reliability	7.7	12.0	21.4	9.5	19.8	13.6	1.8	7.8	-7.8	1.8
Safety, Environmental & Statutory	30.2	41.7	44.7	27.7	46.0	46.6	-2.5	4.3	1.9	3.7
IT&T	25.7	18.3	15.6	19.2	17.0	15.4	-6.5	-1.3	-0.2	-8.1
Support	3.2	3.5	3.8	12.6	14.9	9.0	9.4	11.4	5.2	26.0
TOTAL	77.1	85.5	104.5	86.6	127.7	115.7	9.6	42.2	11.2	63.0
Transmission Capex										
Asset Replacement	9.9	13.5	18.0	14.2	14.9	19.9	4.3	1.4	1.9	7.6
Reliability	1.8	1.8	1.8	1.5	0.3	-	-0.3	-1.5	-1.8	-3.5
Safety, Environmental & Statutory	5.4	8.1	8.1	8.2	14.3	15.1	2.8	6.2	7.0	16.1
SCADA & Comms	3.2	1.5	3.4	5.7	1.5	3.4	2.6	-	-	2.6
IT&T	5.9	4.2	4.8	2.2	3.0	2.7	-3.7	-1.2	-2.1	-6.9
Support	4.5	4.1	4.1	5.3	4.5	2.9	0.8	0.5	-1.2	-
Generation Tariff Meters	4.0	5.3	-	-	-	-	-4.0	-5.3	-	-9.3
Wholesale Market	0.1	3.7	1.9	-	-	-	-0.1	-3.7	-1.9	-5.7
TOTAL	34.8	42.2	42.1	37.1	38.5	44.0	2.4	-3.7	1.9	0.7

The reasons for the increases are detailed for each expenditure category below:

DISTRIBUTION

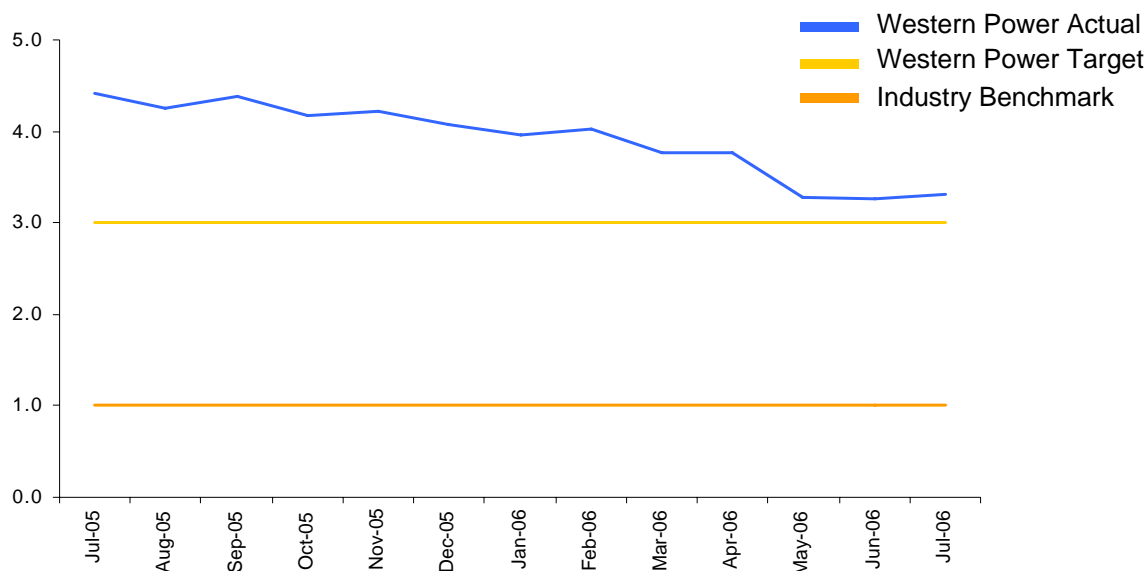
Asset Replacement:

The proposed expenditure increases are for additional wood pole replacement and reinforcement work.

Drivers for Change

1. **Pole Condition:** WP's pole integrity is considerably below that of most other Australian utilities, with about 230 unassisted pole failures in the last financial year. This position is confirmed in the draft Energy Safety audit report into wood pole management¹ which indicates that most other Australian utilities were performing significantly better than Western Power in terms of unassisted pole failures. Figure 1 shows pole integrity performance over the last 12 months. Whilst there has been improvement in the trend as a focused effort to reduce some of the condemned pole backlog was instigated, the weather was relatively mild over this period.

Figure 1: Pole Integrity Index



Notes: 1. "Pole Integrity Index" = $\frac{\text{Number of pole failures} \times 10,000}{\text{Pole population}}$

2. The "Western Power Target" represents the expected performance given the 2005/06 levels of expenditure.

To achieve a pole failure rate closer to the industry average of 1.0, an additional 5700 poles (at least) need to be replaced and an additional 7000 poles (at least) must be reinforced, as shown in Figures 2 and 3, at an additional cost of \$39.4M over the 3 year period.

¹ Received on 28 August 2006 for review

Figure 2: Proposed Distribution Pole Replacement Numbers

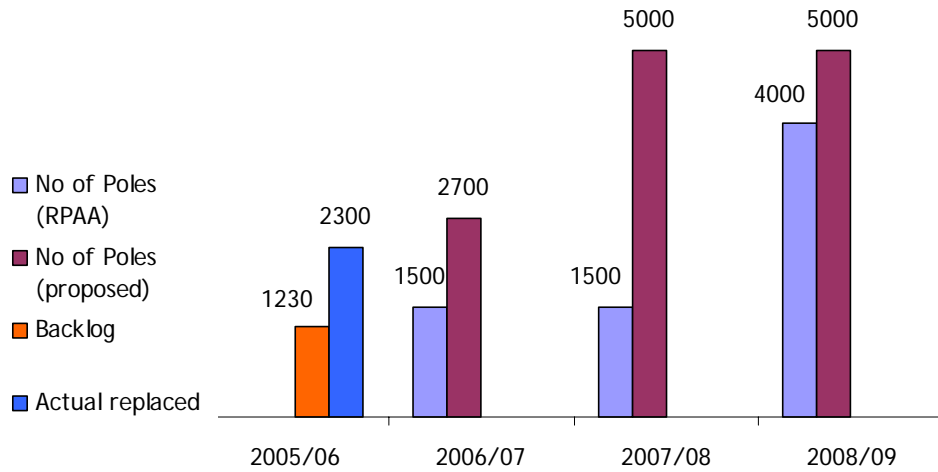
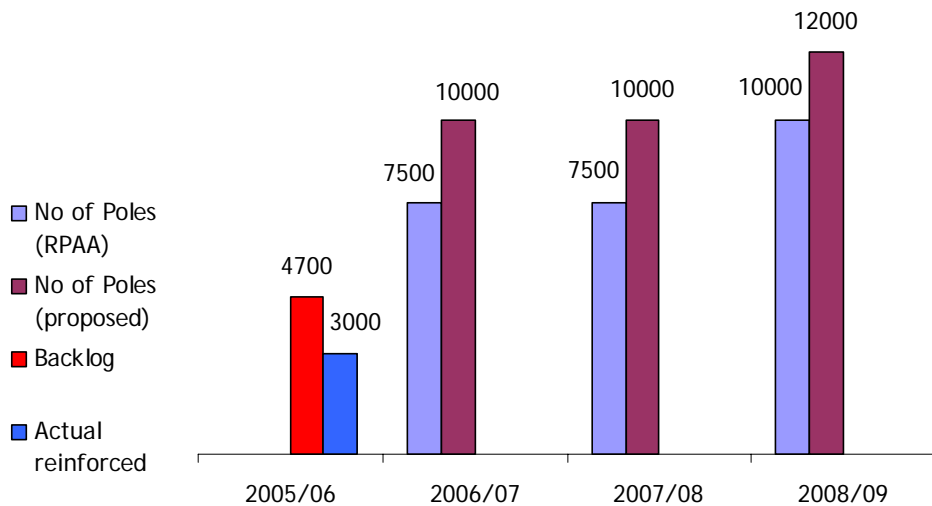


Figure 3: Proposed Distribution Pole Reinforcement Numbers



Reliability:

Significant expenditure for reliability improvement is provided in the RPAA to meet the target of a 25% improvement in reliability performance. However, the bulk of the expenditure was profiled towards the third year of the regulatory period because of the assessed resource capability.

Drivers for Change

WP has committed to a 25% improvement in reliability by the end of the regulatory period. Given that the reliability measures, SAIDI & SAIFI, are lag indicators, it is preferable that as much work as possible is done in the first two years of the regulatory period. WP's reassessment of industry resource availability now allows bringing forward \$7.8M of expenditure from year 3 into year 2.

Additionally, \$1.8M has been added to the year 1 forecast for uncompleted work "carried over" from 2005/06, plus cost uplift (market rates) on some projects.

Safety, Environmental & Statutory:

This work program aims to meet safety and compliance requirements, particularly with respect to public safety, environmental management and power quality (PQ) codes.

Drivers for Change

Power quality backlog: There is a corporate performance target to reduce the power quality (PQ) related project backlog. Additionally, WP has Technical Rules and PQ code requirements to proactively monitor the network PQ performance. Once monitoring equipment is installed this year, a step increase in the amount of remedial work required will be generated, compounding the current backlog problem. If the required PQ performance is to be achieved, an additional \$5.7M will be required over the regulatory period to undertake the necessary remedial work.

Note: To assist with resourcing this work, \$2M worth of projects has been deferred from 06/07 to 07/08.

IT&T:

The proposed expenditure reductions result from the latest reassessment of the cost and timing of the proposed projects, as follows:

Project	Project Description	Project duration and expenditure (\$ 000)		
		2006/2007	2007/2008	2008/2009
Outage Management System (TCMS)	New IT system to replace current Trouble Call (fault) Management System	\$ 1,855	\$ 3,000	\$ 610
Feeder & Transformer Forecasting Tool	New IT tool for load monitoring & planning of quality of supply initiatives	\$ 148	\$ 100	\$ 103
Reliability Program	System enhancements for reliability data recording, analysis & reporting	\$ 375	\$ 638	\$ 638
Workforce Management	Establish Work Management System	\$ 1,238	\$ 3,300	\$ 348
System / Data access for others	Establish access to network data by retailers, generators & stakeholders	\$ 10	\$ 172	\$ 28
GIS Replacement	Replacement of current "DFIS" geographic information system	\$ -	\$ 128	\$ 4,335
Asset Systems Rationalisation	Enhancement of current asset management systems (various)	\$ 920	\$ 560	\$ 40
Disaster Recovery Project	Implementation of IT disaster recovery plan	\$ 311	\$ 521	\$ 326
Customer Information Systems	Establish a Networks Customer Information System	\$ 360	\$ 1,967	\$ 4,050
Interfaces to Interim Market	Establish IT interfaces with IMO to provide operational data as required	\$ 1,024	\$ 880	\$ 624
IVR	ACD/IVR Replacement	\$ 1,540	\$ -	\$ -
Compliance Reporting	Establish/modify systems to support new compliance reporting processes & EIS Sys	\$ 1,350	\$ 1,130	\$ 926
Hardware Purchases	Various minor hardware purchases	\$ 706	\$ 589	\$ 589
IT&T Systems Maintenance	IT&T Systems Maintenance (ongoing)	\$ 2,566	\$ 1,454	\$ 2,768
HiReps	High Level Resource and Work Planning Tool	\$ 1,750	\$ 650	\$ -
Advanced CMS	Advanced Contract Management System	\$ 330	\$ -	\$ -
VSF	Vendor Shop Facility	\$ -	\$ 100	\$ -
PSSE	PSSE Replacement (Engineering Software)	\$ 270	\$ -	\$ -
Metron	Metering Business System	\$ 2,018	\$ 865	\$ -
MV90/91	Metering Systems for Commercial, Industrial & Domestic	\$ 438	\$ -	\$ -
ENMAC	ENMAC SCADA systems	\$ 525	\$ -	\$ -
DUSA	Customer Systems Online Applications	\$ 160	\$ -	\$ -
WT	Web Based Tendering	\$ -	\$ 250	\$ -
Logistics Systems	Business Case & Requirements analysis	\$ 220	\$ -	\$ -
Electronic Catalog	Electronic Catalog	\$ -	\$ 280	\$ -
MDF	Materials DM Forecasting	\$ -	\$ 220	\$ -
RFID	Viability Review of Asset tagging	\$ -	\$ 50	\$ -
IMS Warehouse	On Demand Access to IMS Data	\$ 150	\$ -	\$ -
DMT Tools	Data Management Team Tools for data analysis	\$ 182	\$ 217	\$ 50
		\$ 18,445	\$ 17,069	\$ 15,435

Additionally, \$0.8M has been added to the year 1 forecast for uncompleted work "carried over" from 2005/06, plus cost uplift (market rates) on some projects.

Support:

This expenditure category covers the capital costs, including buildings, site facilities and minor plant for management of the 27 operational depots. The expenditure comprises two main components:

1. Depot accommodation and site facilities; and
2. Recurrent expenditure to sustain field construction and maintenance operational needs.

The RPAA understated the forecast distribution support expenditure significantly – this was simply an inexplicable error in WP's preparation of the RPAA forecasts.

Drivers for Change

1. Depots:

- 1) Accommodation: Numerous accommodation refurbishments are required to ease the problem of sub-standard temporary accommodation and ongoing deferment of upgrade work on permanent infrastructure, much of which was constructed in the 1960s and 1970s, with minimal ongoing maintenance.

This is now exacerbated by additional new staff numbers required to resource the higher capital and operating expenditures and considerable investment is required to provide staff accommodation of an acceptable standard.

- 2) Site Facilities: This includes expenditure items related to safety and environmental management, including hardstand re-surfacing, site services upgrades, security, asbestos roof replacements and wash-down facilities.
2. Minor Plant: This includes all minor capital equipment purchases (<\$1000 item value), including tools, equipment and personal protective equipment (PPE) to equip the field workforce to operate safely and effectively in the work environment, while meeting all technological and regulatory requirements. The higher forecasts are predominantly due to the increase in staff numbers required to deliver the larger work program.

The new related forecast expenditures are:

Distribution	06/07	07/08	08/09
Accommodation	4.1	7.0	1.8
Site facilities	3.2	1.8	0.9
Minor plant	5.3	6.1	6.3
Total (\$M nominal)	12.6	14.9	9.0

TRANSMISSION

Asset Replacement:

The proposed expenditures are increased by an amount of \$3.5M over the 3 year period due to a reallocation from the “reliability” category, being more reflective of the true nature of the corresponding work which comprises replacement of crossarms and other pole-top hardware.

Additionally, \$4.0M has been added to the year 1 forecast for uncompleted work “carried over” from 2005/06, plus cost uplift (market rates) on some projects.

Safety, Environmental & Statutory:

The proposed expenditure increases are for the following additional projects:

- (i) Upgraded transformer bunding: Controlled waste legislation requires upgraded transformer bunding at a number of substations at a cost of \$3.9M over the regulatory period. Due to the complexity of the Regulations and disaggregation, WP is presently achieving only partial compliance. The development and implementation of a funded Controlled Waste Compliance Program is required to address these issues and to bring Western Power into full compliance.
- (ii) Substation security: This is a new safety requirement. The release within 2 months of a new industry standard for preventing unauthorized access to substations will result in significant additional work in upgrading WP’s fencing and security systems, estimated to cost \$9M over the regulatory period. WP has numerous break-ins into these sites every year and despite ongoing security patrols, theft and vandalism continue.
- (iii) Additionally, \$2.3M has been added to the year 1 forecast for uncompleted work “carried over” from 2005/06, plus cost uplift (market rates) on some projects.

Reliability:

As shown in Table 1, the proposed expenditures are reduced by \$3.5M over the 3 year period, with the forecasts being moved to the “asset replacement” category, being more reflective of the true nature of the corresponding work which comprises replacement of crossarms and other pole-top hardware.

SCADA & Communications

- (iv) \$2.6M has been added to the year 1 forecast for uncompleted work “carried over” from 2005/06, plus cost uplift (market rates) on some projects.

IT&T:

The proposed expenditure reductions result from the latest reassessment of the cost and timing of the proposed projects, as follows:

Project	Project Description	Project duration and expenditure (\$ 000)		
		2006/2007	2007/2008	2008/2009
System / Data access for others	Establish access to network data by retailers, generators & stakeholders	\$ 7	\$ 114	\$ 18
Hardware Purchases	Various minor hardware purchases	\$ 78	\$ 65	\$ 65
Disaster Recovery Project	Implementation of IT disaster recovery plan	\$ 104	\$ 174	\$ 109
Asset Systems Rationalisation	Enhancement of current asset management systems (various)	\$ 230	\$ 140	\$ 10
Compliance Reporting	Establish/modify systems to support new compliance reporting processes	\$ 150	\$ 126	\$ 103
Customer Information Systems	Establish a Networks Customer Information System	\$ 40	\$ 319	\$ 450
Reliability Program	System enhancements for reliability data recording, analysis & reporting	\$ 125	\$ 213	\$ 213
IT&T Systems Maintenance & Support	IT&T Systems Maintenance & Support (ongoing)	\$ 453	\$ 257	\$ 489
Workforce Management	Establish Work Management System	\$ 413	\$ 1,100	\$ 116
Interfaces to Interim Market	Establish IT interfaces with IMO to provide operational data as required	\$ 576	\$ 495	\$ 351
GIS Replacement	Replacement of current geographic information system	\$ -	\$ 23	\$ 765
		\$ 2,175	\$ 3,024	\$ 2,689

Support:

The proposed timing of expenditures has been adjusted slightly, but there is no change to the forecast aggregate expenditure over the 3 year term.

Transmission	06/07	07/08	08/09
Accommodation	1.7	2.1	0.6
Site facilities	1.3	0.5	0.3
Minor plant	2.2	1.8	2.1
Total (\$M nominal)	5.3	4.5	2.9

Generation Meters:

The expenditure in this category has now been moved into the Customer Driven – Generation category.

Wholesale Market:

In response to the ERA's Section 51 notice dated 5 July 2006, WP stated that the Wholesale Market (Reform Transfer Budget) capital expenditure category had been reviewed and it is now agreed that these costs will be recovered from market participants via the Independent Market Operator instead, and removed from the Access Arrangement.

Proposed Variations to Operating Expenditure

Table 2: Summary of changes to the proposed operating expenditure (\$M nominal)

Category	Revised Proposed Access Arrangement 18/5/06			Proposed Variations to RPAA September 06			Change			
	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	Total change
Distribution Opex										
Maintenance Strategy	6.3	6.3	6.3	6.3	7.1	7.1	-	0.8	0.9	1.7
Preventative Routine Maintenance	30.3	30.9	31.8	30.3	31.3	32.1	-	0.4	0.3	0.7
Maintenance Subtotal	36.6	37.2	38.1	36.6	38.4	39.2	-	1.2	1.2	2.4
Reliability	4.5	4.5	4.5	3.1	3.1	3.1	-1.4	-1.4	-1.4	-4.2
Reliability Penalty Payments	-	-	-	1.4	1.4	1.4	1.4	1.4	1.4	4.2
TOTAL	41.1	41.7	42.6	41.1	42.9	43.7	-	1.2	1.2	2.4
Transmission Opex										
Maintenance Strategy	4.0	4.1	4.2	4.2	4.1	4.2	0.2	-	-	0.2
Preventative Condition Maintenance	6.1	6.2	6.4	7.1	7.3	7.4	1.0	1.0	1.0	3.1
Preventative Routine Maintenance	8.4	8.6	8.8	8.4	9.5	10.1	0.1	0.9	1.3	2.2
Corrective Deferred Maintenance	2.3	2.1	2.0	4.6	4.0	4.4	2.3	1.9	2.4	6.6
Maintenance Subtotal	20.8	21.0	21.4	24.3	24.9	26.1	3.6	3.8	4.7	12.2
Misc Network Services	4.2	4.4	4.5	4.3	4.5	4.6	0.1	0.2	0.2	0.4
Energy Safety Levy	-	-	-	2.8	2.9	3.0	2.8	2.9	3.0	8.7
TOTAL	25.0	25.4	25.9	31.4	32.3	33.7	6.5	6.9	7.9	21.3

The reasons for the increases are detailed for each expenditure category below:

DISTRIBUTION

An additional \$2.4M distribution operating expenditure is proposed over the AA period.

Drivers for Change

- (i) Mandatory Safety Case: The Energy Safety Directorate is in the process of legislating to make a Safety Case management framework mandatory for network operators, as is the case currently with gas. The Safety Case is a risk based management framework designed to achieve agreed public and work safety outcomes. It is estimated that this will cost \$1.7M over the second and third years of the regulatory period to develop, to be included in the Maintenance Strategy expenditure category.
- (ii) Capex Program Increases: With significant additional capital expenditure, there will be a notable increase in the number of assets that will require maintenance. It is estimated that this additional Preventative Routine Maintenance expenditure requirement will be \$0.7M over the last 2 years of the regulatory period.
- (iii) Reliability Penalty Payments: This item has been removed from “Reliability” and established as a separate expenditure category for clarity (no nett change).

TRANSMISSION

An additional \$21.3M transmission opex expenditure is proposed over the AA period.

Drivers for Change

- (i) Land Settlement: Subsequent to formal disaggregation of Western Power Corporation, formal separation of some titles to land (previously held as joint sites, such as power stations and switchyards) has yet to be effected. The associated forecast cost of \$0.2M in the first year has been included in the “Maintenance Strategy” category.
- (ii) Vegetation Management: Based on the latest re-assessment of vegetation management needs, an additional \$1.0M per year has been included in the “Preventive Condition Maintenance” category.
- (iii) Capex Program Increases: With significant additional capital expenditure, there will be a notable increase in the number of assets that will require maintenance, including several specific major investments. It is estimated that this additional “Preventative Routine Maintenance” expenditure requirement will be \$2.2M over the regulatory period.
- (iv) Environmental Compliance: Due to the complexity of the Controlled Waste Regulations and disaggregation, WP is presently achieving only partial compliance. The development and implementation of a Controlled Waste Compliance Program is required to address these issues and to bring WP into full compliance.

In addition there are significant additional costs associated with new contaminated sites legislation.

Failure to comply with these new requirements will result in possible prosecution, fines and negative impact on corporate reputation. An additional provision of \$6.6M (over 3 years) is necessary in the “Corrective Deferred Maintenance” category.

(v) Miscellaneous Network Services: The forecasts for this expenditure category have been increased marginally based on higher actual demand for these services in 2005/06.

(vi) Energy Safety Levy: On 30 June 2006, the Energy Safety Levy Notice 2006 was published in the Government Gazette. This notice places a liability on WP (and other industry parties) to make payments towards the Energy Safety Levy.

A provision for this item was not included in the RPAA because, at the time, the related legislation had not been established and the magnitude of WP's contribution to the levy was unknown.

Inclusion of the required annual payments in the transmission opex enables WP to recover this cost from all users connected to both the transmission and distribution networks.

ENDS