

APT Petroleum Pipelines Pty Limited  
Roma Brisbane Pipeline  
Access Arrangement Revisions 2012-17



**AER Public Forum**

**30 November 2011**

**Brisbane**

# Introductions

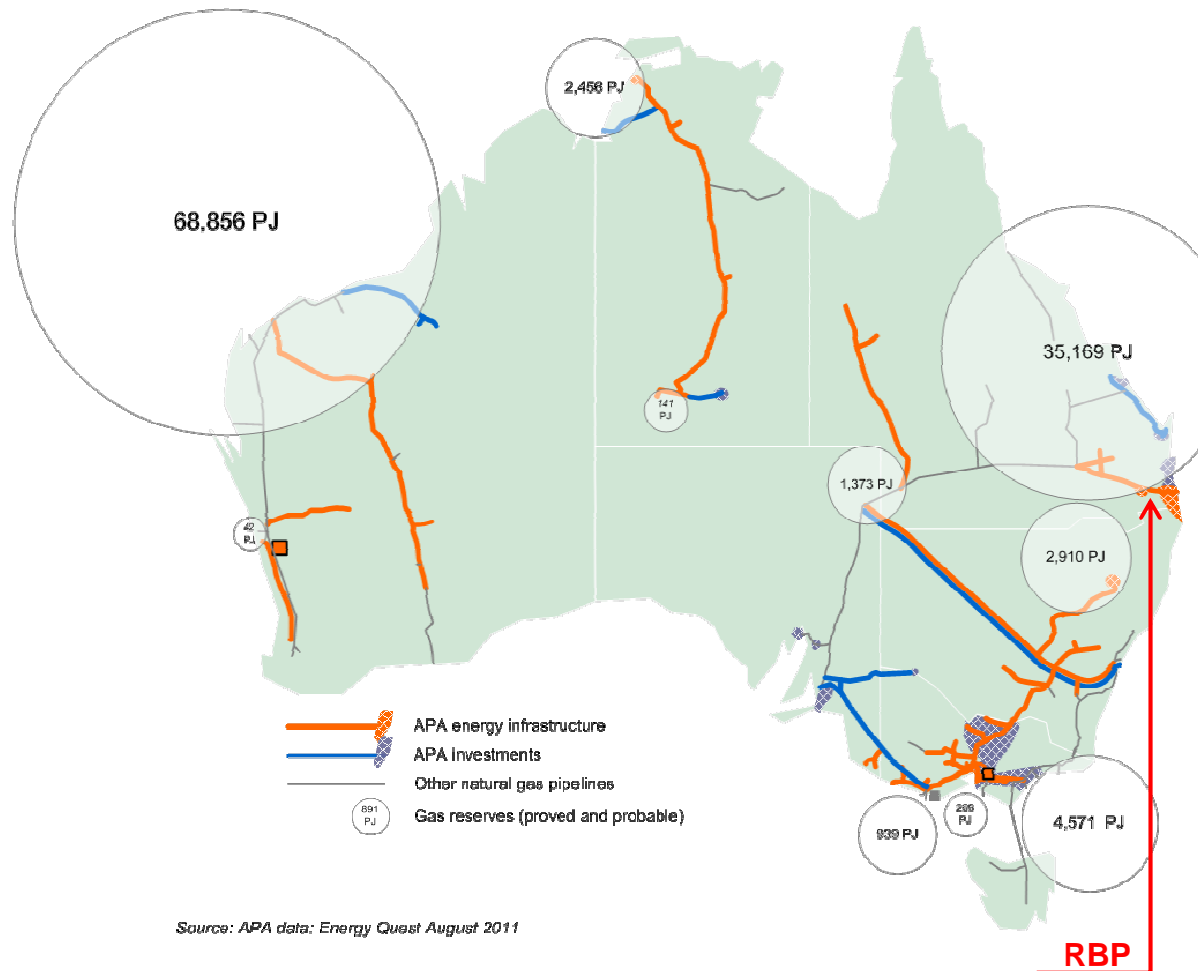
- Sashie Naidoo
  - Acting General Manager Transmission
- Rod Johannessen
  - National Head of Contract Management and Commercial Operations
- Matt Newton
  - Senior Commercial Specialist
- John Jamieson
  - Senior Commercial Manager
- Peter Bolding
  - General Manager Strategy and Regulatory
- Scott Young
  - Regulatory Manager

# Outline

- About APA Group
- About the Roma Brisbane Pipeline
- Performance against ACCC 2007 Access Arrangement
- Building Block forecasts for 2012-2017
  - Load forecast
  - Capex
  - Opex
  - Depreciation
  - Tax
  - WACC
  - Total Revenue Requirement
  - Tariff movements

# About APA Group

- APA is a major ASX-listed infrastructure owner and operator of Australian regulated gas transmission and distribution infrastructure
  
- APA has pipelines in all mainland states
  - > 50% of natural gas used in Australia is transported by APA
  - > 70% of natural gas in eastern states is transported by APA



**The majority of APA's activity is gas transmission and distribution**



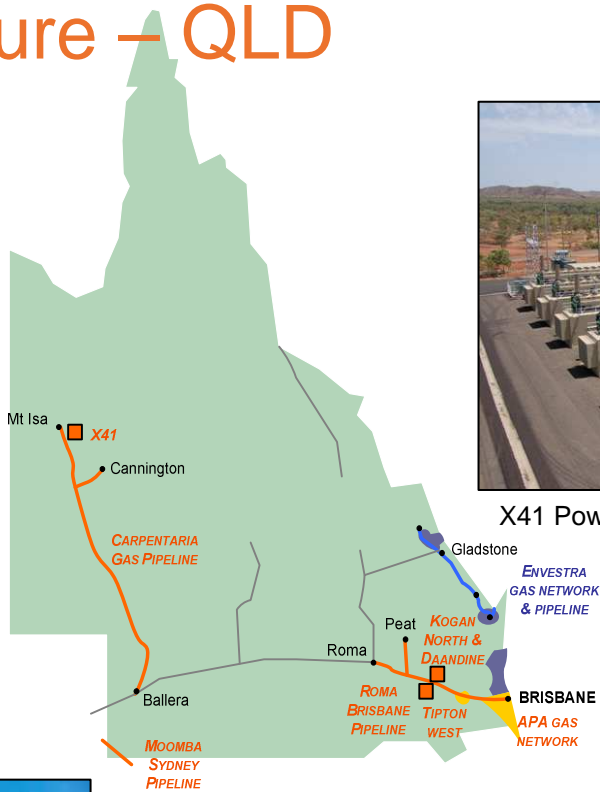
# APA Group Overview

- APA's principal activities are:
  - Gas transmission:  
owns or has an interest in over 12,700km of regulated gas pipeline infrastructure and gas storage facilities, transporting more than 50% of natural gas used domestically in Australia
  - Gas distribution:  
owns or has an interest in 23,000km of regulated gas distribution networks, with 1.1 million connections
  - Asset Management:  
provides a range of asset management, operating and maintenance services to a number of related parties, including Envestra Limited, the Ethane Pipeline Income Fund, Energy Infrastructure Investments and SEA Gas Pipeline
- APA has an internalised management structure with direct operational control over its assets and investments
  - no fee leakage or conflicts that arise with external management model
- APA employs over 1,200 skilled and experienced people who perform all commercial, regulatory, government and stakeholder-related functions, as well as engineering and the day-to-day operations and maintenance of APA assets and investments

# Energy Infrastructure – QLD



Morney Tank Compressor Station



X41 Power Station, Mt Isa - EII



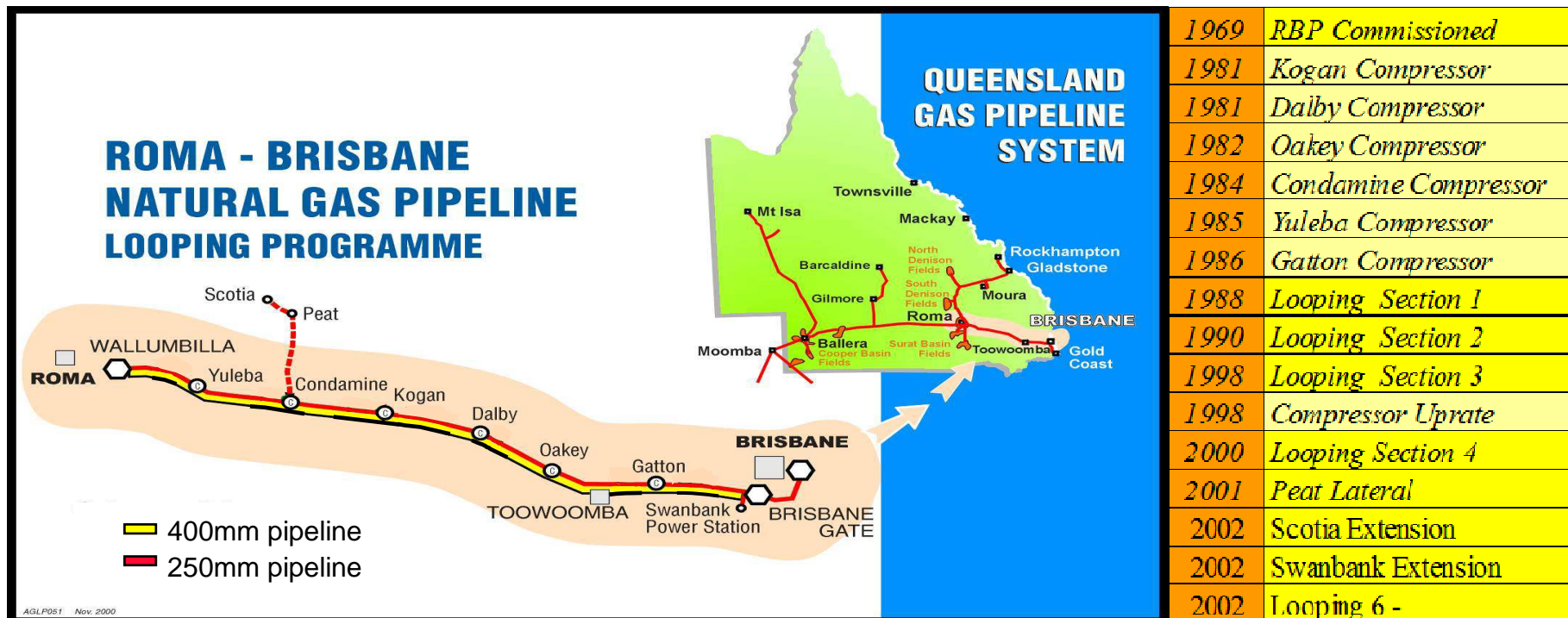
Ellengrove Gate Station – gas from Roma Brisbane Pipeline enters APT Allgas Network



APT Allgas Network – steel main construction

# The Roma Brisbane Pipeline

- Constructed from 1969 ( 400km DN250)
- Six compressors added 1981-1986
- Progressively looped (DN400) 1988-2002
- Peat lateral constructed 1991
- Next capacity upgrade completed July 12



# The RBP Access Arrangement

- The Access Arrangement is a key element to the Third Party Access framework
  - Governs the arrangements under which a shipper can transport gas to its end users
  - Operates in parallel with existing bilateral contracts
  
- APTPPL does not own the gas and does not participate in its purchase or sale
  
- Access Arrangement is reviewed and approved by the AER
  
- Access Arrangement governs price, terms and conditions, etc
  - Provides a “stake in the sand” for negotiaion
  
- Subject to a scheduled review process
  - Current AA runs from 12 April 2007 – 11 April 2012
  - Forecast AA runs from 12 April 2012 – 30 June 2017
  
- This Access Arrangement is governed by the National Gas Law and the National Gas Rules
  - Previously under the National Gas Access Code



# Key features of RBP Access Arrangement

- Reference Services Policy
  - Firm forward haul for any injection or delivery points
    - Standard Terms and Conditions specified in Access Arrangement
  - Negotiated Services available to meet other requirements
  
- Capacity trading allowed
  - Consistent with previous Access Arrangement
  
- Depreciation
  - No changes to depreciation policy or useful lives

# Key features of RBP Access Arrangement

## ■ Queuing Policy

- Public auction consistent with Rule 103
- Two processes, consistent with previous ACCC-approved AA
  
- Existing Capacity
  - Capacity not requiring any capex to develop
  - NPV prioritised auction process
  
- Developable Capacity
  - Goal is capacity development coordination
  - Expression of interest
  - APTPPL will prepare development proposal
  - NPV prioritised auction determines amount of capacity developed

## Historical forecast vs Actual capex

*Table 4.1: Forecast vs outturn capital expenditure by driver*

(\$m nominal)	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12F	Total
ACCC Forecast (\$2006) <sup>21</sup>	4.14	2.09	1.62	1.98	1.23	2.59 <sup>22</sup>	13.75
ACCC Forecast (\$nominal)	4.24	2.23	1.77	2.23	1.43	3.20	15.11
Actual - SIB	2.57	2.58	2.72	4.13	2.58	3.75	18.34
PMA Contract		30.07					30.07
<b>Variance - SIB</b>	<b>(1.67)</b>	<b>30.42</b>	<b>0.95</b>	<b>1.90</b>	<b>1.15</b>	<b>0.55</b>	<b>33.30</b>
ACCC Forecast Growth	0	0	0	0	0	0	0
Actual - Growth	0	0.15	0.34	6.86	7.47	45.95	60.77
<b>Variance - Growth</b>	<b>0</b>	<b>0.15</b>	<b>0.34</b>	<b>6.86</b>	<b>7.47</b>	<b>45.95</b>	<b>60.77</b>
<b>Total Variance</b>	<b>(1.67)</b>	<b>30.57</b>	<b>1.29</b>	<b>8.76</b>	<b>8.62</b>	<b>46.50</b>	<b>94.07</b>

# The Capital Base

*Table 5.3: Capital base roll forward*

<b>\$m nominal</b>	<b>2006/07</b>	<b>2007/08</b>	<b>2008/09</b>	<b>2009/10</b>	<b>2010/11</b>	<b>2011/12</b>
Opening capital base	296.35	300.22	340.88	345.66	359.98	374.80
Plus capex	2.67	34.39	3.18	11.45	10.50	51.68
Plus speculative capex						
Plus reused redundant assets						
Less depreciation	-6.02	-6.46	-6.81	-7.12	-7.68	-8.15
Plus indexation	7.22	12.73	8.41	9.98	12.00	9.37
Less redundant assets						
Less disposals						
<b>Closing capital base</b>	<b>300.22</b>	<b>340.88</b>	<b>345.66</b>	<b>359.98</b>	<b>374.80</b>	<b>427.70</b>

# Pipeline demand, capacity and investment

- Electricity is a fuel of necessity
  - Electricity transmission and distribution networks serve the entire population
  - Load and demand growth tends to follow growth in economic activity of the population
  - Steady state capex tends to follow economy-wide economic activity and population growth
- Gas is a fuel of choice
  - Gas transmission pipelines primarily serve large industrial customers
  - Very low penetration to the population at large through distribution networks
    - Queensland has very low domestic penetration (and very low domestic usage!)
    - Domestic and small commercial load accounts for only 7% of total RBP load
- Load and demand is dominated by a small number of very large users
  - Demand increments of large users tends to be lumpy
    - New factory, etc. Very little organic growth
  - Pipeline capacity increments tend to be lumpy
    - Compressor, looping, etc
- Lumpy capacity increments tend to be driven by lumpy demand increments
  - Underwritten by long term bilateral contracts
  - Reflect sharing of risks of long term investment

# RBP Access Arrangement demand forecast

## ■ RBP serves three key markets

- APT Allgas and Envestra distribution networks
  - Demand forecast based on capacity reservation of retailers
  - Throughput forecast based on AER-approved AAs for APT Allgas and Envestra
  
- Major industrial users
  - Lumpy demand increases have long planning horizons
  - Gas supply negotiation, environmental assessments, local government and zoning approvals
  - Currently no requests for large industrial demand in proposed AA planning horizon
  - Would require additional investment above “existing capacity” – does not affect AA
  
- Gas-fired power generation (GPG)
  - Planning process even longer than for major industrial increments
  - No requests for GPG gas transportation services within proposed AA planning horizon
  - Would require additional investment above “existing capacity” – does not affect AA

# Summary demand forecast

Table 3.3: Historical reserved capacity

(TJ/day)	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12F
Reference Service:						
GPG	c-in-c	c-in-c	c-in-c	c-in-c	c-in-c	c-in-c
Non GPG	c-in-c	c-in-c	c-in-c	c-in-c	c-in-c	c-in-c
<b>Total</b>	<b>197</b>	<b>203</b>	<b>203</b>	<b>203</b>	<b>203</b>	<b>203</b>
Negotiated Service:	0	0	5	16	16	16
<b>Total</b>	<b>197</b>	<b>203</b>	<b>208</b>	<b>219</b>	<b>219</b>	<b>219</b>

95% of revenues are derived through demand charges

This information provided to AER

Existing Capacity

RBP 8 expansion in service 01 July 2012

Table 3.5: Forecast RBP demand

(TJ/day)	2012/13	2013/14	2014/15	2015/16	2016/17
Reference Service:					
GPG	c-in-c	c-in-c	c-in-c	c-in-c	c-in-c
Non-GPG	c-in-c	c-in-c	c-in-c	c-in-c	c-in-c
<b>Total</b>	<b>203</b>	<b>203</b>	<b>203</b>	<b>203</b>	<b>187</b>
Negotiated Service:	29	29	29	29	29
<b>Total</b>	<b>232</b>	<b>232</b>	<b>232</b>	<b>232</b>	<b>216</b>

This information provided to AER

Existing Capacity

# Summary throughput forecast

Table 3.4: Historical volumes

(TJ)	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12F
Reference Service:						
GPG	c-in-c	c-in-c	c-in-c	c-in-c	c-in-c	c-in-c
Non GPG	c-in-c	c-in-c	c-in-c	c-in-c	c-in-c	c-in-c
Total	61,658	61,377	62,028	57,342	57,667	58,431
Negotiated Service:	0	0	1,489	4,345	4,316	4,402
Total	61,658	61,377	63,516	61,688	61,982	62,833

*5% of revenues are derived through throughput charges*

} This information provided to AER

Table 3.6: Forecast RBP throughput

(TJ)	2012/13	2013/14	2014/15	2015/16	2016/17
Reference Service:					
GPG	c-in-c	c-in-c	c-in-c	c-in-c	c-in-c
Non-GPG	c-in-c	c-in-c	c-in-c	c-in-c	c-in-c
Total	60,979	61,490	61,623	62,463	57,681
Negotiated Service:	9,395	9,412	9,429	9,446	9,452
Total	70,375	70,903	71,052	71,909	67,133

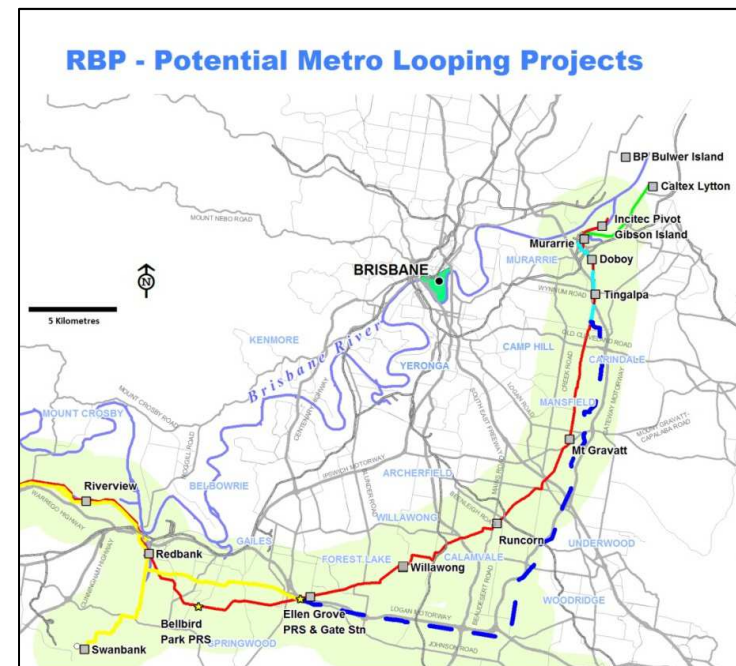
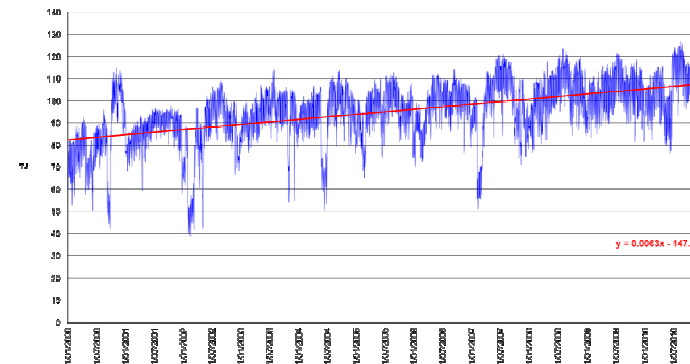
} This information provided to AER



# The RBP Metro section

- The RBP was built in 1969 through urban fringe farmland
  - Brisbane has continued to grow
- There is now significant urban encroachment on the RBP right of way.
- Implications:
  - Operating pressure of metro section limited for safety
  - No space in existing right of way to construct looping
  - RBP is capacity constrained on the metro section
- Significant investment will be required to expand metro section capacity
  - But probably not in this Access Arrangement period
- APTPPL provides this information as advice to the market
  - But is not proposing this capital expenditure in the 2012-17 Access Arrangement period.

RBP Metro Daily Deliveries (2008 - 2010)



# Forecast capex

- Capital expenditure
  - No expansion capex forecast
    - Lumpy capex driven by lumpy demand
    - No forecast demand increments

*Table 4.3: Forecast capex by driver*

(\$m) 2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	Total
Expansion	0	0	0	0	0	0
Replacement	0	0	0	0	0	0
Stay In Business	3.99	4.46	3.33	3.54	2.98	18.31
<b>Total</b>	<b>3.99</b>	<b>4.46</b>	<b>3.33</b>	<b>3.54</b>	<b>2.98</b>	<b>18.31</b>

## Forecast Capital Base

*Table 5.4: Forecast capital base roll forward*

<b>\$m nominal</b>	<b>2012/13</b>	<b>2013/14</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2016/17</b>
Opening capital base	427.70	426.47	424.52	419.92	415.54
Plus capex	4.24	4.86	3.72	4.06	3.51
Plus speculative capex					
Plus reused redundant assets					
Less depreciation	(16.67)	(17.98)	(19.44)	(19.44)	(18.80)
Plus indexation	11.21	11.17	11.12	11.00	10.89
Less redundant assets					
Less disposals					
<b>Closing capital base</b>	<b>426.47</b>	<b>424.52</b>	<b>419.92</b>	<b>415.54</b>	<b>411.14</b>

## Historical forecast vs Actual opex

Table 8.1: ACCC Approved Expenditure 2007-12 AA Period

(\$'000 nominal)	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
Wages & Salaries	848	906	947	977	1,012	1,040
APT Other Corporate Costs	1,192	1,243	1,274	1,310	1,354	1,388
Operations and Maintenance, Insurance, License Fees and Security	6,473	6,689	6,795	6,931	7,100	7,215
<b>Total</b>	<b>8,513</b>	<b>8,838</b>	<b>9,015</b>	<b>9,218</b>	<b>9,467</b>	<b>9,644</b>

Table 8.2: APTPPL Actual operating Costs 2007-12 AA Period

(\$'000 nominal)	2006/07 <sup>61</sup>	2007/08	2008/09	2009/10	2010/11	2011/12 <sup>F</sup>
Wages & Salaries	-	2,316	4,201	4,323	5,234	5,473
APT Other Corporate Costs	2,093	2,117	2,306	3,016	3,393	3,603
Operations and Maintenance, Insurance, License Fees and Security	7,601	3,320	2,393	2,317	5,575 <sup>62</sup>	2,789
<b>Total</b>	<b>9,694</b>	<b>7,752</b>	<b>8,900</b>	<b>9,657</b>	<b>14,202</b>	<b>11,865</b>

Brisbane flood cost impact  
Removed from base year

# Forecast opex

- Operating & Maintenance largely in line with history
  - Outsourced operating margin removed

*Table 8.10: Total forecast expenditure in the access arrangement period*

<b>\$000 (2011/12)</b>	<b>2012/13</b>	<b>2013/14</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2016/17</b>
Labour	5,819	6,002	6,190	6,483	7,008
Contractors – O&M	878	935	989	1,014	1,019
Other Operating Costs	1,137	1,211	1,282	1,394	1,320
<b>Operating Costs</b>	<b>7,834</b>	<b>8,148</b>	<b>8,461</b>	<b>8,891</b>	<b>9,347</b>
Asset Licences and Insurance	634	634	634	634	634
Regulatory Costs	-	-	-	-	767
Debt Raising Costs	248	241	233	225	217
Corporate Costs	3,732	3,851	3,990	4,277	4,564
<b>Total Operating Expenditure</b>	<b>12,447</b>	<b>12,874</b>	<b>13,318</b>	<b>14,027</b>	<b>15,528</b>

# Tax

- Based on ACCC Tax Asset Base calculation

*Table 7.2: Forecast TAB Roll forward*

<b>\$m (nominal)</b>	<b>2012/13</b>	<b>2013/14</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2011/12</b>
Opening TAB	134.72	121.25	113.58	103.87	94.73
Capital expenditure	4.10	4.70	3.60	3.93	3.40
Tax depreciation	17.56	12.37	13.31	13.07	12.51
<b>Total</b>	<b>121.25</b>	<b>113.58</b>	<b>103.87</b>	<b>94.73</b>	<b>85.62</b>

*Table 7.3: Corporate income tax building block 2012/13 to 2016/17*

<b>\$m (\$2011/12 real)</b>	<b>2012/13</b>	<b>2013/14</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2016/17</b>
Tax Payable	2.70	5.01	5.06	4.98	4.80
Less Value of Imputation Credits	-0.67	-1.25	-1.26	-1.24	-1.20
<b>Tax allowance</b>	<b>2.02</b>	<b>3.76</b>	<b>3.79</b>	<b>3.73</b>	<b>3.60</b>

# Cost of Capital

- Financial markets continue to exhibit a “flight to quality” arising from the GFC
  - Yields on Government funds are falling
  - Cost of corporate debt and equity are rising
- We are currently seeing a disconnect between the WACC arising from the AER’s approach and what is being observed in the marketplace
  - eg QCA June 2010 decision on Gladstone Water Board
  - Cost of debt higher than the cost of equity!
- APTPPL has adopted a “sensible outcomes” approach
  - Within the current parameter ranges

- Parameter Estimates:

Risk-free rate	4.25%
Forecast inflation	2.62%
Debt to value	60%
Debt margin	4.31%
Market Risk Premium	7.0%
Gamma	0.25
Equity beta	1.0
Corporate tax rate	30%
Cost of equity	11.25%
Cost of debt	8.56%
Post tax nominal vanilla WACC	9.63%

Averaging period to be determined between draft and Final decisions

## 2012-2017 Total Revenue Requirement

*Table 9.1: Total revenue requirement*

<b>\$m (2012 real)</b>	<b>2012/13</b>	<b>2013/14</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2016/17</b>
Return on capital	40.15	39.02	37.85	36.48	35.18
Regulatory depreciation	5.33	6.46	7.70	7.61	6.95
Tax allowance	2.02	3.76	3.79	3.73	3.60
Incentive mechanisms	0	0	0	0	0
Operating expenditure	12.45	12.87	13.32	14.03	15.53
<b>Total revenue requirement</b>	<b>59.95</b>	<b>62.11</b>	<b>62.66</b>	<b>61.85</b>	<b>61.26</b>



# 2012-2017 Reference Tariff movements

- Revenues deferred relative to Revenue Requirement to manage price impacts

*Table 9.3: Total Reference Service revenue requirement*

\$m (2012 real)	2012/13	2013/14	2014/15	2015/16	2016/17
Reference Service revenue requirement	53.06	55.28	55.89	55.14	54.61

*Table 9.4: Forecast revenue*

\$m (2012 real)	2012/13	2013/14	2014/15	2015/16	2016/17
Forecast Reference Service revenue	43.67	49.37	55.79	63.09	65.67

- CPI – X regime
- Negative X → price increase

*Table 9.2: Proposed X factors*

Effective 01 July	2012/13	2013/14	2014/15	2015/16	2016/17
Proposed X Factor	-17.8%	-13.0%	-13.0%	-13.0%	-13.0%

- Bilateral contracts not affected



**Delivering Australia's energy**