



**APT Allgas Energy
Pty Limited**

Capital Expenditure
Performance Review

For the period
01 July 2006 – 30 June 2011



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1 Purpose

This information paper provides review of major implemented capital expenditure projects and performance for current Access Arrangement periods from 1st July 2006.

1.1 *Background*

1.1.1 Overview

APT Allgas natural gas distribution networks are located in South East Queensland and are grouped in 3 regions as follows:

- Western Region - Oakey and Toowoomba
- Central Region – Brisbane south of Brisbane River
- South Coast Region – Gold Coast and Northern NSW

For period before 1st November 2006 Allgas natural gas distribution network was owned and operated by ENERGEX. After this date APT Allgas network was owned and operated by APA Group.

Current Access Arrangement

Current Access Arrangement period for Allgas networks started on 1st July 2006 with first 4 months Allgas network being owned by ENERGEX and after that by APA Group. In the transition period there were major changes of most supporting systems including Customer Information, Works Management, Financial and Asset Management. As a result of those changes some detailed information are not available in suitable format and can not be easily extracted.

In the Access Arrangement Revision 2006, The Queensland Competition Authority accepted Allgas' proposal for capital expenditure for the regulatory period 2006/2011. The proposed capital expenditure projects, estimated costs and timing are shown in the attachment.

The status of implementation is analysed for each of capital projects proposed as a part of the Access Arrangement Submission 2006. In addition to that there is an analysis of other major capital expenditure projects that were implemented from 1st July 2006 but not included in the Access Arrangement Submission 2006.



2 Capital expenditure projects included in access arrangement 2006 forecast - augmentation

2.1 *South Coast Supply Project Stage 1 (implemented)*

2.1.1 Identified needs

It was identified that the single feeder pipeline DN150 will not have a capacity to support ongoing growth of gas demand in the South Coast Region.

- To maintain the service provider's capacity to meet levels of demand for existing services
- To provide the service provider's capacity to meet projected demand for potential future services
- To maintain integrity of services

2.1.2 Options considered

The feasibility study analysed alternative options to reinforce supply to the South Coast Region including different sizes and routes for a new pipeline, installation of a compressor station and do nothing options.

Based on the outcome of the feasibility study, it was recommended to construct a 36km long 200DN class 600 steel pipeline from the existing Ellen Grove Gate Station to the Yatala Industrial Estate in 3 stages.

Timing of the project implementation stages is directly related to increase in customer demands and network capability to supply peak hourly customer loads.

2.1.3 Justification

This capital expenditure is justified as follows:

- The capital expenditure is necessary to maintain the service provider's capacity to meet levels of demand for existing services
- The capital expenditure is necessary to maintain integrity of services
- The capital expenditure is necessary to provide the service provider's capacity to meet projected demand for potential future services



2.1.4 Implementation status

Stage 1 of this project with the upgrade of the existing Ellen Grove Gate Station and construction of the 12.45km long DN200 class 600 pipeline was approved by the Energex Board in 2004 with a budget cost of \$8.5M and a planned completion by the end of June 2006.

The Queensland Competition Authority accepted this project as a part of the Access Arrangement Revision in 2006. It was assessed that the completed part and the planned future stages of this project would be expected of a prudent network operator acting efficiently, consistent with accepted good industry practice and in accordance with the requirements of the Code.

The Pipeline was commissioned in June 2006 when it was connected to the existing Brisbane to Gold Coast Pipeline. The majority of planned work on the extension of the Ellen Grove Gate Station was completed in 2005/06 Financial Year with the final completion in 2006/07.

Total APA Group costs on this project were \$ 278,181 in 2006/07.

The total cost for the project was \$9,960,036 with \$1,510,700 related to the new gate station and \$8,449,336 related to the pipeline extension. Average unit cost for the pipeline extension was \$679/m.

The total cost was approximately 15% higher than the approved budget, mostly due to related issues as follows:

- Brisbane City Council and Logan City Councils were planning to perform major upgrades of Johnson Road and requested that a new pipeline section in Johnson Road reserve was laid with cover between 1.5m and 3.0m
- Logan Council requested that all work in Browns Plains Road was completed at night with most of the pipeline route under the concrete road surface and additional strict requirements and reinstatement of road surfaces cover and a minimum 2.5m wide strip.

2.2 *Wynnum Augmentation (implemented)*

2.2.1 Identified needs

There was a single DN 100 high-pressure steel main, more than 47 years old, supplying natural gas to old low pressure networks in Wynnum, Manly and Lota. In case of this main failure there was potential to lose supply to more than 3,500 domestic and commercial customers. Existing low pressure network is very old and due for renewal in the next 10 to 15 years.



The identified needs were:

- To maintain and improve the safety of services
- To maintain integrity of services
- To maintain the service provider's capacity to meet levels of demand for existing services

2.2.2 Options considered

- Construct a new 2.2km long, 160mm PE80 SDR11 main in Lindum and Sibley Roads as a second supply to Wynnum West
- Construct a new 4.2km long, 160mm PE80 SDR11 main in Wynnum Road as a second supply to Wynnum West
- Do nothing

2.2.3 Justification

This capital expenditure is justified as follows:

- The capital expenditure is necessary to maintain and improve the safety of services
- The capital expenditure is necessary to maintain integrity of services
- The capital expenditure is necessary to maintain the service provider's capacity to meet levels of demand for existing services

Additional benefit is that second supply main will minimise costs for planned mains renewal.

2.2.4 Implementation status

The Queensland Competition Authority accepted a proposal for this project as a part of the Access Arrangement Revision in 2006. It was assessed that this project would be expected of a prudent network operator acting efficiently, consistent with accepted good industry practice and in accordance with the requirements of the Code.

This project was approved by APA Group in December 2008 with a budget estimated cost of \$702,383. The Project was completed in 2009/10 with a total actual cost of \$852,620 which was 21% above budget. There were difficulties in



finding suitable alignment for section of main located in Sibley Road that resulted in significant increase of related construction costs.

2.3 *Other Augmentation Projects (Implemented)*

History dictates that a small number of ad-hoc augmentation projects will arise from time to time usually in response to poor supply pressures being reported by consumers or by network pressure monitoring equipment. Due to their nature, such projects are naturally unpredictable, but a prudent operator would recognise that such projects will arise and make allowance for such projects.

2.3.1 Identified needs

- To maintain the service provider's capacity to meet levels of demand for existing services
- To provide the service provider's capacity to meet projected demand for potential future services

Inherent risk level: Moderate

Inherent risk score: 8

Budget priority: 3

2.3.2 Options considered

Multiple options were considered using available information including network available capacity, network alternative operation capabilities, identified operational risks and known external and internal drivers. Optimal solution is recommended for implementation.

2.3.3 Justification

This capital expenditure is justified on the grounds that:

- The capital expenditure is necessary to maintain the service provider's capacity to meet levels of demand for existing services



2.3.4 Implementation status

A number of small augmentation projects were implemented with a total actual costs (including forecast for 2010/11) significantly below the approved amount in the Access Arrangement 2006/11.

	2006/07	2007/08	2008/09	2009/10	2010/11	Total
Plan in Access Arrangement 2006/11 (\$ Real 2005/06)	337,884	0	837,600	555,622	78,500	1,809,606
Actual capital expenditure (\$ Nominal)	93,996	412,875	231,248	449,000	50,000	1,187,119



3 Capital expenditure projects included in access arrangement 2006 forecast - renewal

3.1 *Odourisation Renewal (completed)*

3.1.1 Identified needs

Number of existing odourisation units were in poor condition and not reliable resulting in gas on some network extremities being not sufficiently odourised. That was identified internally as regulatory non compliance and potential safety risk for public.

3.1.2 Options considered

- To replace existing odourisation units in poor condition
- To upgrade existing units in poor condition

3.1.3 Justification

This capital expenditure is justified on a ground as follows:

- The capital expenditure is necessary to maintain and improve the safety of services
- The capital expenditure is necessary to comply with regulatory obligation or requirement

3.1.4 Implementation status

This project was approved by Energex in 2003 with budget estimated cost of \$560,000 and completed in 2006 with total actual cost of \$338,141. Replacement of odourisation units at Doboy Gate Station was delayed because plans to relocate or remove tis station. Replacement of odourisation unit at Toowoomba Gate Station is planned for implementation in 2010/11 Financial Year as separate project.

3.2 *Upgrade of Supply to Old District in Brisbane (completed)*

3.2.1 Identified needs

Old low and medium pressure network in Brisbane supplying more than 30,000 domestic and small commercial customers. Those networks have low level of



reliability of supply related to high level of leaks, water ingress, increased customer demands and reduced capacity further to local main insertions.

3.2.2 Options considered

- Replacement or upgrades of existing district regulator stations supplying low and medium pressure networks
- Construction of additional district regulator stations
- Reinforcements of existing networks

3.2.3 Justification

This capital expenditure is justified on a ground as follows:

- The capital expenditure is necessary to maintain integrity of services
- The capital expenditure is necessary to maintain the service provider's capacity to meet levels of demand for existing services

3.2.4 Implementation status

This project was approved by Energex in 2005 with budget estimated cost of \$235,560 and completed in 2006 with total actual cost of \$280,696 what was 19% above approved budget. Most of overspend costs are related to additional reinstatement and traffic control further to strict conditions imposed to contractor by Brisbane City Council.

3.3 Highgate Hill Renewal Project Stage 1 (completed)

3.3.1 Identified needs

Old low and medium pressure networks In Highgate Hill had in past high level of leaks, high maintenance costs and not sufficient capacity to meet connected and potential future customer demands.

3.3.2 Options considered

- To renew approximately 4.5km of old networks with new high pressure polyethylene mains, upgrade services and customer metering stations
- Do nothing



3.3.3 Justification

This capital expenditure is justified on a ground as follows:

- The capital expenditure is necessary to maintain and improve the safety of services
- The capital expenditure is necessary to maintain integrity of services
- The capital expenditure is necessary to maintain the service provider's capacity to meet levels of demand for existing services

3.3.4 Implementation status

Queensland Competition Authority accepted proposal for overall Mains Renewal Program with approximately 210km of old mains to be renewed in Access Arrangement period from July 2006 to June 2011. Remaining 240km was planned for renewal by June 2016. It was assessed that this Mains Renewal Program would be expected of a prudent network operator acting efficiently, consistent with accepted good industry practice and in accordance with the requirements of the Code.

This project was approved by Energex in September 2005 with budget estimated cost of \$926,033. This project was completed in 2006 with total actual cost of \$677,774 what was 27% below approved budget. Near end of this project scope of project was reduced from 4.5km to 4.0km due to sale of Allgas networks.

3.4 Upper Mt Gravatt Stage 1 Renewal Project (completed)

3.4.1 Identified needs

Old medium pressure networks in Upper Mt Gravatt had in past high level of leaks, high maintenance costs and not sufficient capacity to meet connected and potential future customer demands.

3.4.2 Options considered

- To renew approximately 1.5km of old networks with new high pressure polyethylene mains, upgrade services and customer metering stations
- Do nothing

3.4.3 Justification

This capital expenditure is justified on a ground as follows:



- The capital expenditure is necessary to maintain and improve the safety of services
- The capital expenditure is necessary to maintain integrity of services
- The capital expenditure is necessary to maintain the service provider's capacity to meet levels of demand for existing services

3.4.4 Implementation status

Queensland Competition Authority accepted proposal for overall Mains Renewal Program with approximately 210km of old mains to be renewed in Access Arrangement period from July 2006 to June 2011. Remaining 240km was planned for renewal by June 2016. It was assessed that this Mains Renewal Program would be expected of a prudent network operator acting efficiently, consistent with accepted good industry practice and in accordance with the requirements of the Code.

The project was approved by Energex in 2006 with budget estimated cost of \$392,000. This project was completed in 2006 with total actual cost of \$302,849 what was 23% below approved budget.

3.5 Other Renewal Projects (completed - continuous)

3.5.1 Identified needs

- Small sections of distribution mains or customer services require urgent replacement or alterations to mitigate identified high risks related to gas leaks, water ingress etc.
- Parts of gas installations (meters, regulators, filters, valves, odourisation units, electrical and SCADA installations etc.) require urgent replacement or alterations to mitigate identified high risks including safety to public and operational crews, reliability of supply, environmental hazard, regulatory non-conformance etc.

3.5.2 Options considered

All identified safety, financial, integrity of supply, regulatory, operational and maintenance risks were analysed, multiple options considered, Risk Management Plan developed and optimal solution recommended for implementation.

3.5.3 Justification

This capital expenditure is justified on a ground as follows:



- The capital expenditure is necessary to maintain and improve the safety of services
- The capital expenditure is necessary to maintain integrity of services
- The capital expenditure is necessary to comply with regulatory obligation or requirement
- The capital expenditure is necessary to maintain the service provider's capacity to meet levels of demand for existing services

3.5.4 Implementation status

Numbers of small asset renewal projects were implemented when required based on completed risk assessment and capital expenditure approval.

3.6 Pimpama Bridge Crossing Renewal (completed)

3.6.1 Identified needs

Section of Brisbane to Gold Coast DN 150 class 600 Pipeline, crossing Pimpama River supported on bridge, was exposed to high stress levels related to condition of supports, temperature dilatation of exposed section of pipeline and condition of pipeline at transition from aboveground to underground section. There were identified high safety risks for public and safety of supply to large number of customers at Gold Coast and northern NSW.

3.6.2 Options considered

- To replace bridge crossing section with new underground pipeline section under Pimpama River
- To replace existing bridge crossing with new bridge crossing pipeline section that will minimise identified risks

3.6.3 Justification

This capital expenditure is justified on a ground as follows:

- The capital expenditure is necessary to maintain and improve the safety of services
- The capital expenditure is necessary to maintain integrity of services



- The capital expenditure is necessary to comply with regulatory obligation or requirement
- The capital expenditure is necessary to maintain the service provider's capacity to meet levels of demand for existing services

3.6.4 Implementation status

This project was approved by Energex in 2005 with budget estimated cost of \$239,031. Project was completed in 2008 with total actual cost of \$137,463. Delay in implementation of this project was related to transition period issues and other higher priorities. Actual cost was significantly below approved budget because construction crew managed to isolate section of existing main and completed main replacement without using expensive stopple operation on live main. Final cut off and new main connection was completed in only few hours.

3.7 Toowoomba Renewal Project (completed)

3.7.1 Identified needs

Distribution network in Toowoomba had in past old low and medium pressure networks that had high level of leaks, high maintenance costs and not sufficient capacity to meet connected and potential future customer demands.

3.7.2 Options considered

- To renew 18.7km of old networks with new high pressure polyethylene mains, upgrade services and customer metering stations
- Complete only piece main renewal when required

3.7.3 Justification

This capital expenditure is justified as follows:

- The capital expenditure is necessary to maintain and improve the safety of services
- The capital expenditure is necessary to maintain integrity of services
- The capital expenditure is necessary to maintain the service provider's capacity to meet levels of demand for existing services



3.7.4 Implementation status

The Queensland Competition Authority accepted the proposal for the overall Mains Renewal Program with approximately 210km of old mains to be renewed in the Access Arrangement period from July 2006 to June 2011. The remaining 240km was planned for renewal by June 2016. It was assessed that this Mains Renewal Program would be expected of a prudent network operator acting efficiently, consistent with accepted good industry practice and in accordance with the requirements of the Code.

This project was approved by Energex in September 2005 with a budget estimated cost of \$1,828,900 and was completed in 2008/09 with a total actual cost of \$ 1,519,038. The majority of the mains renewal in Toowoomba CBD was completed with assistance from Toowoomba City Council which resulted in significant reinstatement and traffic control cost savings.

3.8 Norman Park and Highgate Hill Stages 2 and 3 Renewal Projects (in progress)

3.8.1 Identified needs

The old low and medium pressure distribution network in Brisbane has a high level of leaks, high maintenance costs and does not have the sufficient capacity to meet connected and potential future customer demands.

3.8.2 Options considered

- To renew all old networks with new high pressure polyethylene mains, upgrade services and customer metering stations
- Do nothing

3.8.3 Justification

This capital expenditure is justified as follows:

- The capital expenditure is necessary to maintain and improve the safety of services
- The capital expenditure is necessary to maintain integrity of services
- The capital expenditure is necessary to maintain the service provider's capacity to meet levels of demand for existing services



3.8.4 Implementation status

The Queensland Competition Authority accepted the proposal for the overall Mains Renewal Program with approximately 210km of old mains to be renewed in the Access Arrangement period from July 2006 to June 2011. The remaining 240km was planned for renewal by June 2016. It was assessed that this Mains Renewal Program would be expected of a prudent network operator acting efficiently, consistent with accepted good industry practice and in accordance with the requirements of the Code.

APA Group approved an \$8M budget for block main replacement projects for 2008/09 and 2009/10 financial years. For this period 31.2km of old mains were renewed with actual capital expenditure of \$ 8,234,635 and an average unit cost of \$264/m.

The high average unit cost for the block main renewal projects is related mostly to the more difficult construction environments including:

- Work is completed in the inner city suburbs with restricted working hours, increased requirements for traffic control, road and footpath reinstatements, noise and dust protection
- Nearly all streets have just a single main with along services
- Approximately 50% of the existing mains are located under the road and most of the remaining mains are located under the footpath pavements with very little open ground



4 Capital expenditure projects included in access arrangement 2006 forecast – new domestic, industrial and commercial customer connections

4.1 *Looping, Sinnathamby Boulevard, Springfield (completed)*

4.1.1 Identified needs

The temporary supply main has to be replaced with permanent main to maintain supply to the large number of domestic and commercial customers in Springfield

4.1.2 Options considered

- Extend a new approximately 3km long 160mm PE80 SDR11 in Sinnathamby Boulevard to maintain supply to the existing distribution network
- Establish new supply from Envestra's distribution network in Bellbird Park

4.1.3 Justification

The capital expenditure is necessary to maintain the service provider's capacity to meet levels of demand for existing services

4.1.4 Implementation status

The project was approved by Energex in 2005 with a budget cost estimate of \$355,000. Implementation was completed in October 2006 with a total cost of \$328,956 which is 7% under the approved budget.

4.2 *Springfield Stage 2, Cobalt Street, Carole Park (completed)*

4.2.1 Identified needs

Approximately 10km long, high pressure polyethylene main supplying a large number of existing domestic and small commercial customers in Springfield and industrial customers in Carole Park without any spare capacity.

4.2.2 Options considered

- Increase capacity of existing district regulator and separate high pressure polyethylene networks that supply industrial customers in Carole Park from



distribution networks supplying domestic and small commercial customers in Springfield

- Reinforce existing 10km long high pressure polyethylene main supplying Springfield
- Do nothing and restrict connection of new customers to existing high pressure polyethylene networks in Carole Park and Springfield

4.2.3 Justification

The capital expenditure is necessary to maintain the service provider's capacity to meet levels of demand for existing services

4.2.4 Implementation status

The project was approved by Energex in 2004 with a budget cost estimate of \$300,000. Implementation was completed in October 2006 with a total cost of \$208,212 which is 30% under the approved budget. Reduced actual costs are related to the relocation of a district regulator station being completed as part of a separate recoverable project.

4.3 Dreamworld, Coomera (completed)

4.3.1 Identified needs

To provide the service provider's capacity to meet projected demand for new customers and potential additional future services

4.3.2 Options considered

A few different routes were considered to extend a new 110mm PE80 SDR11 main, approximately 2km long, to the customer location

4.3.3 Justification

This capital expenditure is justified as follows:

The present value of the expected incremental revenue to be generated as a result of the expenditure exceeds the present value of the capital expenditure

Implementation status



The project was approved by Energex in 2006 with a budget cost estimate of \$324,000. Implementation was completed in August 2006 with a total cost of \$ 196,387 which is 40% under the approved budget. Gold Coast City Council approved a route that did not require any rock excavation and directional boring and resulted in actual costs being significantly less than originally estimate.

4.4 *Visy, Jacobs Well Road, Stapylton (completed)*

4.4.1 Identified needs

To provide the service provider's capacity to meet projected demand for new customers and potential additional future services

4.4.2 Options considered

Multiple options were analysed to extend high pressure steel mains approximately 5km long from the existing high pressure network in Yatala Industrial Estate

4.4.3 Justification

This capital expenditure is justified as follows:

The present value of the expected incremental revenue to be generated as a result of the expenditure exceeds the present value of the capital expenditure

4.4.4 Implementation status

The project was approved by Energex in 2005 with a budget cost estimate of \$2,333,000. Implementation was completed in 2006/07 with a total cost of \$ 2,564,198 which is 10% above the approved budget. Further to planned work on the road widening and related storm water installations Gold Coast City Council specified strict requirements relating to this project with significant changes in the proposed pipeline alignment which together resulted in higher construction costs than originally estimated.

4.5 *Caltex, South Street, Lytton (completed)*

4.5.1 Identified needs

To provide the service provider's capacity to meet projected demand for potential future services



4.5.2 Options considered

- Extend existing DN150 class 150 main by approximately 300m and establish new metering station inside
- Construct a new 7km long DN 100 Class 300 pipeline from existing Dobby Gate Station, upgrade gate station and establish a new customer metering station.

4.5.3 Justification

This capital expenditure is justified as follows:

The present value of the expected incremental revenue to be generated as a result of the expenditure exceeds the present value of the capital expenditure

4.5.4 Implementation status

The project was approved by Energex in November 2005 with a budget cost estimate of \$298,000. Implementation was completed in August 2006 with a total cost of \$ 319,875 which is 7% above the approved budget.

4.6 KR Castlemaine, Mort Street, Toowoomba (completed)

4.6.1 Identified needs

To provide the service provider's capacity to meet projected demand for potential future services

4.6.2 Options considered

Establish new service and metering station for existing customer

4.6.3 Justification

This capital expenditure is justified as follows:

The present value of the expected incremental revenue to be generated as a result of the expenditure exceeds the present value of the capital expenditure

4.6.4 Implementation status

The project was approved by Energex in November 2006 with a budget cost estimate of \$99,000. Implementation was completed in September 2006 with a total cost of \$ 100,606.



*4.7 Commercial and Industrial Customer Connections
(completed - continuous)*

4.7.1 Identified needs

To provide the service provider's capacity to meet projected demand for new commercial and industrial customers and potential additional future services

4.7.2 Options considered

Multiple options were analysed to find an optimal solution to connect new commercial and industrial customers to the existing network including network extensions, augmentations and upgrades, where it was necessary, to be able to maintain the capacity to meet levels of demand for existing customers and projected demand for potential future customers.

4.7.3 Justification

The present value of the expected incremental revenue to be generated as a result of the expenditure exceeds the present value of the capital expenditure.

4.7.4 Implementation status

Total number and total and average costs for new commercial and industrial customers connected per each financial year including forecast for 2010/11 are shown in the table bellow. In the same table there is a comparison with a forecast in the current Access Arrangement.



	2006/07	2007/08	2008/09	2009/10	2010/11	Total
Actual New C&I Customers	297	151	129	161	164	902
Actual Total Cost for new C&I Customer Connections	6,575,564	4,407,846	7,138,739	5,841,578	3,432,764	27,396,492
Actual Average Cost for new C&I Customer Connections	22,140	29,191	55,339	36,283	20,931	30,373
AA Forecast New C&I Customers	227	250	270	270	278	1,259
AA Forecast Total Cost for new C&I Customer Connections	4,419,084	4,675,782	5,388,596	5,736,819	6,105,565	26,325,845
AA Forecast Average Cost for new C&I Customer Connections	19,467	18,703	19,958	21,247	21,962	20,910
Actual / AA Forecast C&I Numbers Variance (%)	131	60	48	60	59	72
Actual / AA Forecast C&I Average Costs Variance (%)	114	156	277	171	95	145

Higher average costs are related to higher costs to connect a few large demand customers including BCC Willawong Bus Depot, Visy Board, Caltex Refinery and FRH Astec. Each customer initiated project was financially justified.



4.8 *Domestic Customer Connections (completed - continuous)*

4.8.1 Identified needs

To provide the service provider's capacity to meet projected demand for new commercial and industrial customers and potential additional future services

4.8.2 Options considered

- Multiple options were analysed to find an optimal solution to connect new domestic customers to the existing network including network extensions, augmentations and upgrades, where it was necessary, to be able to maintain the capacity to meet levels of demand for existing customers and projected demand from potential future customers.

4.8.3 Justification

This capital expenditure is justified on the grounds that the present value of the expected incremental revenue to be generated as a result of the expenditure, exceeds the present value of the capital expenditure.

4.8.4 Implementation status

Total number, total and average costs for new domestic customers connected per each financial year and forecast for 2010/11 Financial Year are shown in the table below. In the same table there is a comparison with a forecast in the current Access Arrangement.

It is estimated that at the end of the current Access Arrangement period there will be 6% more domestic customer connections than it was forecasted in the Access Arrangement Submission.

The average cost for new domestic customer connections is estimated to be 29% lower than it was estimated in the Access Arrangement Submission because the majority of activities being in the further extension of the distribution networks adjacent to existing domestic developments with minimum investment in costly headworks.

This is consistent with APT Allgas' strategy to develop the network in areas within close proximity of existing mains.



	2006/07	2007/08	2008/09	2009/10	2010/11	Total
Actual New Domestic Customers	2,749	3,357	3,174	3,017	3,057	15,354
Actual Total Cost for new Domestic Customer Connections	6,185,162	9,330,330	6,435,232	6,390,056	9,804,500	38,145,280
Actual Average Cost for new Domestic Customer Connections	2,250	2,779	2,027	2,118	3,207	2,484
AA Forecast New Domestic Customers	2,477	2,637	2,860	3,185	3,770	14,929
AA Forecast Total Cost for new Domestic Customer Connections	8,390,916	9,424,218	10,171,404	11,083,181	13,294,435	52,364,155
AA Forecast Average Cost for new Domestic Customer Connections	3,388	3,574	3,556	3,480	3,526	3,508
Actual / AA Forecast Domestic Numbers Variance (%)	111	127	111	95	81	103
Actual / AA Forecast Domestic Average Costs Variance (%)	66	78	57	61	91	71



5 Capital expenditure projects not included in access arrangement 2006 forecast - renewal

5.1 *Meter Change Program (completed - continuous)*

5.1.1 Identified needs

The Queensland Petroleum and Gas (Production and Safety) Act 2004, Section 636, specifies obligations of controller of meter to develop, to maintain and implement Meter Measurement Scheme with specific requirements for meter change for testing. This is necessary to be able to check meter accuracy and its compliance with tolerance requirements specified in Queensland Petroleum and Gas (Production and Safety) Regulation 2004, Section 128.

5.1.2 Options considered

Continue the process of maintaining and implementing the current Meter Measurement Scheme in accordance with the Queensland Petroleum and Gas (Production and Safety) Act and Regulations and requirements for the timely sampling, testing, and assessment of in-service compliance of populations of diaphragm gas meters with maximum flow rate of up to and including 25m³/h used for fiscal measurement specified in AS/NZS4944 Gas meters – In-service compliance testing.

Different options are analysed with target to optimise overall meter change program and related operational and maintenance activities including optimal use of direct labour and contractor resources and improvement of process for meter change with potential savings in corrective maintenance of metering stations.

5.1.3 Justification

This capital expenditure is justified as follows:

- The capital expenditure is necessary to maintain and improve the safety of services
- The capital expenditure is necessary to maintain integrity of services
- The capital expenditure is necessary to comply with regulatory obligation or requirement



- The capital expenditure is necessary to maintain the service provider’s capacity to meet levels of demand for existing services

5.1.4 Implementation status

Number of meters changed as a part of periodic meter change program and related total and unit costs are shown in the table below together with forecast for 2010/11 Financial Year:

	2007/08	2008/09	2009/10	2010/11
PMC – Domestic - Numbers	942	1,184	1,574	2,000
PMC – I&C - Numbers	26	135	250	192
PMC – Domestic – Total cost (\$/year)	180,000	230,359	313,468	424,797
PMC – I&C – Total cost (\$/year)	82,426	714,758	518,552	434,446
PMC – Domestic – Average cost (\$/ea)	191	195	199	212
PMC – I&C – Average cost (\$/ea)	3,170	5,295	2,074	2,263

5.2 *Runcorn Gate Station Renewal (completed)*

5.2.1 Identified needs

Runcorn Gate Station was constructed approximately 40 years ago. The Station was upgraded several times to meet increased customer demands. In late 2008 it was identified that the overall station upgrade was necessary to re build installation that was at the end of their technical life and created a safety risk to surrounding residential developments and the integrity of supply to a large number of customers in Brisbane and the Gold Coast.

5.2.2 Options considered

- Construct a new Runcorn Gate Station on the same location to replace the current installation. Optimise design to meet current and potential future customer demands with two supply options: from Roma to Brisbane Pipeline (back up only) and addition supply from Ellen Grove 2 Gate Station (main supply)
- Establish new gate station on a different location that will provide supply to all customers previously supplied by Runcorn 1 Gate Station
- Remove existing Runcorn Gate Station and establish a new district regulator station that will supply Runcorn 1 distribution network from Ellen Grove 2 Gate Station (no back up supply from Roma to Brisbane Pipeline)



5.2.3 Justification

This capital expenditure is justified as follows:

- The capital expenditure is necessary to maintain and improve the safety of services
- The capital expenditure is necessary to maintain integrity of services
- The capital expenditure is necessary to comply with regulatory requirements
- The capital expenditure is necessary to maintain the service provider's capacity to meet levels of demand for existing services

5.2.4 Implementation status

Upgrade of the Runcorn Gate Station on the same location with two supply options: from Roma to Brisbane Pipeline (back up only) and addition supply from Ellen Grove 2 Gate Station (main supply) was completed in 2008/09 and 2009/10. The total cost for this upgrade was \$602,620.



6 Capital expenditure projects not included in the access arrangement 2006 forecast – domestic, commercial and industrial customer connections

6.1 *FRH Astec, Burnside Road, Ormeau (completed)*

6.1.1 Identified needs

To provide the service provider's capacity to meet projected demand for new industrial customer

6.1.2 Options considered

- Extend the existing DN100 class 300 pipeline by approximately 1,150m and establish a new metering station. This minimum size of steel pipeline is necessary to meet the current customer demand and to provide a spare capacity for future customers in the new industrial development. These customers will use 40% of capacity of the proposed pipeline.
- Construct approximately 1,350m long new 110mm PE80 SDR11 main extension, from existing district regulator, and establish customer metering station. These customers will use all capacity of the proposed main extension.

6.1.3 Justification

This capital expenditure is justified on the grounds that the present value of the expected incremental revenue is to be generated as a result of the expenditure and exceeds the present value of the capital expenditure.

6.1.4 Implementation status

The project was approved by APA Group in 2007 with a budget cost estimate of \$695,500. Implementation was completed in August 2006 with a total cost of \$ 596,418 which is 14% under the approved budget.



6.2 BCC Bus Depot Willawong (completed)

6.2.1 Identified needs

To provide the service provider's capacity to meet projected demand for new industrial customers

6.2.2 Options considered

- Connect to Roma to Brisbane Pipeline and extend 3.3km long DN150 class 300 pipeline, establish new Willawong Gate Station and separate the customer metering station. These customers will use approximately 40% of the capacity of the proposed pipeline.
- Connect to existing DN200 class 600 pipeline in Johnson Road, establish new district regulator station (when required) and extend 8.5km long DN100 class 300 pipeline and establish customer metering station. This customer will use all capacity of the proposed main extension.

6.2.3 Justification

This capital expenditure is justified on the grounds that the present value of the expected incremental revenue to be generated as a result of the expenditure exceeds the present value of the capital expenditure.

6.2.4 Implementation status

The project was approved by APA Group in 2008 with a budget cost estimate of \$2,969,876. Implementation was completed in 2009 with a total cost of \$ 2,900,634.

6.3 Seachange Development, 299 Napper Road, Arundell (in progress)

6.3.1 Identified needs

To provide the service provider's capacity to meet projected demand for new domestic development



6.3.2 Options considered

- Connect to existing DN150 class 600 pipeline, establish a new district regulator and extend 1,200m of 90/63mm PE80 SDR11 main to the development location and install additional 4,250m of 40mm PE80 SDR11 internals mains with 580 customer meter sets.
- Connect to existing 90mm PE80 SDR11 main in Captain Cook Drive and extend 7.5km of 90mm PE80 SDR11 main to the development location and install additional 4,250m of 40mm PE80 SDR11 internals mains with 580 customer meter sets.

6.3.3 Justification

This capital expenditure is justified on the grounds that the present value of the expected incremental revenue to be generated as a result of the expenditure exceeds the present value of the capital expenditure

6.3.4 Implementation status

The project was approved by APA Group in 2007 with a budget cost estimate of \$1,290,000. Implementation is in progress with total actual cost of \$ 425,349 with planned completion in 2011/12.

6.4 Pimpama Headworks, Yawalpah Road, Pimpama (in progress)

6.4.1 Identified needs

To provide the service provider's capacity to meet projected demand for multiple new large domestic developments in Coomera and Pimpama Regions with total of more than 9,000 new customers. There is a need to increase capacity and reliability of supply to a large number of domestic, commercial and industrial customers.

6.4.2 Options considered

- Construct new 160mm PE80 SDR11 high pressure polyethylene main in Yawalpah Road, Pimpama, to reinforce existing network and establish two way supply with sufficient capacity to meet future customer demands
- Construct new 160mm PE80 SDR11 high pressure polyethylene main using several alternative main extension routes



6.4.3 Justification

This capital expenditure is justified on the grounds that the present value of the expected incremental revenue to be generated as a result of the expenditure exceeds the present value of the capital expenditure

6.4.4 Implementation status

The project was approved by APA Group in 2008 with a budget cost estimate of \$1,124,420. Implementation is in progress with an outstanding section at railway crossing. Current total cost is \$ 845,623.



Attachment A – Allgas Access Arrangement

Allgas access arrangement June 2006 capital expenditure plan

ALLGAS ACCESS ARRANGEMENT JUNE 2006 CAPITAL EXPENDITURE PLAN (\$ REAL 05/06)						
No.	Project	2006/07 (\$)	2007/08 (\$)	2008/09 (\$)	2009/10 (\$)	2010/11 (\$)
TOTAL CAPITAL		20,258,806	21,843,963	23,114,785	26,015,632	22,871,604
Augmentation		1,449,746	2,329,500	2,708,404	4,966,428	78,500
1	Other Augmentation Projects	337,884		837,600	555,622	78,500
2	SCSP Stage 1 - Ellen Grove to Browns Plains	50,000				
3	Augmentation Stage 2, Muriel Avenue, Moorooka	322,714				
4	Augmentation, Creek Road, Carina Heights	519,148				
5	SCSP Stage 1 - Intelligent Pigging	200,000				
6	SCSP Stage 2 - Browns Plains to Logan Reserve			1,870,804	4,410,806	
7	Second Supply to Corinda		412,000			
8	Second Supply to Wynnum		340,000			
9	Augmentation, Woolloongaba to Ekibin	20,000	1,577,500			
Renewal		6,344,260	6,164,010	6,071,294	5,970,479	5,870,500
10	Other Renewal Projects (Central and South Regions)	300,000	649,010	556,294	463,579	360,000
11	Pimpama Bridge Crossing Renewal	50,000				
12	BM Gate Stations Odourisation	37,860				
13	Regulator/valve Pit Upgrade, Bradman St, Acacia Ridge	50,000				
14	Toowoomba Renewal Project	480,000				
15	Old District Upgrade	90,000				
16	Highgate Hill Renewal Project, Stage 1	424,000				
17	Highgate Hill Renewal Project, Stage 2	4,480,000				
18	Upper MtGravatt Renewal Project, Stage 1	292,000				
19	Norman Park Renewal Project	140,400	3,000,000			
20	Bulimba - Balmoral Renewal Project		2,515,000	330,000		
21	Morningside Renewal Project			2,900,000		
22	Woolloongabba Renewal Project			2,285,000	180,000	
23	Yeronga Renewal Project				2,686,500	
24	Yeerongpilly Renewal Project				2,640,400	492,000
25	Sherwood M/P Renewal Project					3,132,000
26	Wynnum Renewal Project					1,886,500
CUSTOMER INITIATED		12,464,800	13,350,453	14,335,087	15,078,725	16,922,604
Commercial and Industrial		4,300,000	4,427,220	4,964,395	5,142,920	5,325,879
27	Customer Requested Construction C&I	1,199,000	4,427,220	4,964,395	5,142,920	5,325,879
28	Looping, Sinnathamby Boulevard, Springfield	80,000				
29	Springfield Stage 2, Cobalt Street, Carole Park	200,000				
30	Visy, Jacobs Well Road, Stapylton	2,100,000				
31	Dreamworld, Coomera	324,000				
32	Caltex, South Street, Lytton	298,000				
33	KR Castlemaine, Mort Street, Toowoomba	99,000				
Domestic		8,164,800	8,923,233	9,370,692	9,935,805	11,596,725
34	Customer Requested Construction Domestic	8,164,800	8,923,233	9,370,692	9,935,805	11,596,725