



**FULL RETAIL COMPETITION  
COST PASS-THROUGH APPLICATION**

**February 2007**

**ENERGEN Limited  
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Attachments A, C, D and E are **COMMERCIAL IN CONFIDENCE** and are not available to the public.

**ATTACHMENT A – DETAILED FRC COSTS**

**ATTACHMENT B – LEGISLATIVE FRAMEWORK**

**ATTACHMENT C – TRAINING STRATEGY**

**ATTACHMENT D – SPARQ COSTS**

**ATTACHMENT E – RESOURCE MODEL**

## EXECUTIVE SUMMARY

On 28 September 2005, the Queensland Government announced that Full Retail Competition (FRC) for electricity would be implemented in Queensland in July 2007 allowing customers consuming less than 100 MWh per annum to choose their electricity retailer.

ENERGEX, as the holder of the Electricity Distribution Authority for south-east Queensland provides services to 1.2 million customers and is obligated to ensure that all systems and processes are compliant with a significant number of new legislative and market obligations prior to market opening in July 2007.

ENERGEX's legal and operating environment will change dramatically as a result of FRC. An important element of the effectiveness of the opening of the market will be ENERGEX's FRC-readiness. To illustrate, ENERGEX's FRC Project Team has identified 112 existing business processes and procedures that need to be amended, and a further 118 new business processes and procedures that need to be developed to ensure that ENERGEX is FRC compliant. This change management program was required to be completed within a much shorter timeframe than other jurisdictions.

Further, the ongoing effectiveness of the introduction of FRC will in part be determined by how well ENERGEX performs in delivering ongoing services to facilitate the FRC market. ENERGEX's performance can only be assured by making the appropriate investments in:

- systems, including the implementation of internal policies and processes that will effectively manage the increased activity from FRC;
- adequate staff levels in terms of increased numbers required to manage the increased workload, and the appropriate mix of skills and experience; and
- appropriate training for both existing and additional staff.

The opening up of the market will change roles and responsibilities across the ENERGEX business and its service providers, including Service Essentials Pty Ltd (SEPL) and SPARQ. Similarly, there will be additional SPARQ Maintenance and Support charges for services relating to the new and amended ICT systems being implemented to ensure ongoing compliance.

The Queensland Competition Authority's (the Authority's) April 2005 Final Determination included a general cost pass-through mechanism to allow pass-through of costs associated with major and exogenous events outside of the control of the distributor. In correspondence from the Authority, ENERGEX has been advised that FRC is an eligible unforeseen event. ENERGEX's FRC Application now looks to substantiate the materiality of its FRC costs, and to propose a method for passing through these costs.

ENERGEX has estimated that the total incremental cost of FRC in the current regulatory period is \$117.1 million, comprising \$35.3 million in FRC Project Implementation Costs and \$81.8 million in ongoing FRC Operational Costs. This expenditure represents approximately 3.0% of regulated revenue over the current regulatory period.

ENERGEX submits to the Authority that the FRC costs presented in this Application are reasonable on the basis of:

- the short timeframe to be FRC ready;
- the churn rates in the Queensland FRC market are expected to be significantly higher than southern jurisdictions, requiring greater system automation in the start-up period of the FRC market; and

- ENERGENX's FRC costs being similar to the experience of southern jurisdictions.

Moreover, it is important from ENERGENX's perspective that customers see costs associated with the FRC implementation reflected in prices at the time of market opening. This ensures that there is price signalling within the FRC market, which complies with ENERGENX's Network Pricing Principles Statement (NPPS), driving rational behaviour in downstream markets. Consequently ENERGENX is proposing a method for passing through the costs which includes some recognition of costs in the 2007/08 prices.

Given the need for an expedient decision to allow ENERGENX to recover some FRC Costs in the 2007/08 prescribed DUOS and non-DUOS prices, ENERGENX has limited its Application for cost recovery and revenue adjustment for costs incurred up to including the financial year 2007/08, which amounts to \$48.9 million.

ENERGENX has an obligation to be ready and compliant by 2 July 2007 and seeks from the Authority recognition of these legitimate costs for inclusion in ENERGENX's 2007/08 revenue cap.

# 1 INTRODUCTION

## 1.1 Background

On 28 September 2005, the Queensland Government announced that Full Retail Competition (FRC) for electricity would be implemented in Queensland in July 2007.<sup>1</sup> This will allow customers consuming less than 100 MWh per annum to choose their electricity retailer.

The then Minister for Energy appointed an independent body, the Energy Competition Commission (ECC), to oversee the implementation of the FRC arrangements. ENERGEX has been working with the ECC on a significant body of legal, regulatory and operational issues.

ENERGEX, as the holder of the Electricity Distribution Authority for the south-east Queensland area, is obligated to ensure that all systems and processes are compliant with a significant number of new legislative and market obligations prior to market opening commencing on 2 July 2007. ENERGEX has a short lead time to be ready for FRC, which contrasts to the experience of other Australian jurisdictions where gradual market opening occurred through a relatively stable timetable of introduction.

The Queensland Competition Authority (the Authority) released its Final Determination on *Regulation of Electricity Distribution* in April 2005 – well before the introduction of FRC was announced. Accordingly, the Final Determination did not include an allowance for any FRC-related costs.

## 1.2 Purpose of this application

The purpose of this submission is to seek the Authority's approval for:

- pass-through of costs that have been incurred from an unforeseen exogenous event; and
- ENERGEX's proposed method for revenue recovery of the additional costs under a revised revenue cap.

## 1.3 Outline of this application

This application is structured as follows:

- Chapter 2 sets out the impact of FRC on ENERGEX's operations, including the incremental operating costs expected to be incurred as a result of FRC;
- Chapter 3 summarises the regulatory framework, the Authority's conditions for a general cost pass-through and demonstrates how the FRC Costs meet the Authority's cost pass-through conditions;
- Chapter 4 presents ENERGEX's proposed pass-through methodology; and
- Chapter 5 summarises this Application.

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<sup>1</sup> Queensland Government, *Choice Comes to Queensland Electricity Consumers*, Ministerial Media Statements, 28 September 2005.

The Glossary defines the key technical terms and abbreviations used throughout this Application and the supporting Attachments.

To assist the Authority in its assessment of this pass-through application, ENERGENX has provided additional supporting information in five attachments. Attachments A, C, D, and E contain confidential information and are provided to the Authority on a commercial-in-confidence basis. The Attachments to the Application include:

- Attachment A – FRC Costs, which sets out in detail the FRC Project Implementation Costs and expected ongoing FRC Operational Costs;
- Attachment B – Legislative Framework, which maps the FRC-related changes being implemented in ENERGENX against the policy and legislative instruments that form the basis for those changes;
- Attachment C – Training Strategy, which details the training strategy being implemented in ENERGENX to educate staff about FRC-related obligations and changes to processes and policies;
- Attachment D – SPARQ Costs, which provides further information about the FRC-related Information and Communications Technology (ICT) costs including an outline of the governance arrangements between ENERGENX and SPARQ; and
- Attachment E – Resource Model, which details the processes within ENERGENX that will change and ENERGENX's estimates of the incremental staff resources required as a result of the commencement of FRC.

## 2 IMPACT OF FRC ON ENERGEX

### 2.1 Overview

FRC means that, from Monday 2 July 2007, households and small businesses in Queensland consuming less than 100 MWh per annum will be able to choose their electricity retailer. Currently, these households and small businesses must purchase their electricity from the host retailers, Origin Energy (formerly Sun Retail) and PowerDirect Australia Pty Ltd. These customers are on regulated retail prices, which are currently set by the Queensland Government.

ENERGEX's legal and operating environment will change dramatically as a result of FRC. An important element of the effectiveness of the opening of the market will be ENERGEX's FRC-readiness. Further, the ongoing effectiveness of the introduction of FRC will, in part, be determined by how well ENERGEX performs in servicing the FRC market. ENERGEX's performance can only be assured by making the appropriate investments in:

- systems including the implementation of internal policies and processes that will effectively manage the increased activities from FRC;
- adequate staff levels in terms of numbers required to manage the increased workload, and the appropriate mix of skills and experience;
- training for both existing and additional staff; and
- the provision of prescribed non-DUOS services which will be priced and charged to end users for their retailer of choice from July 2007.

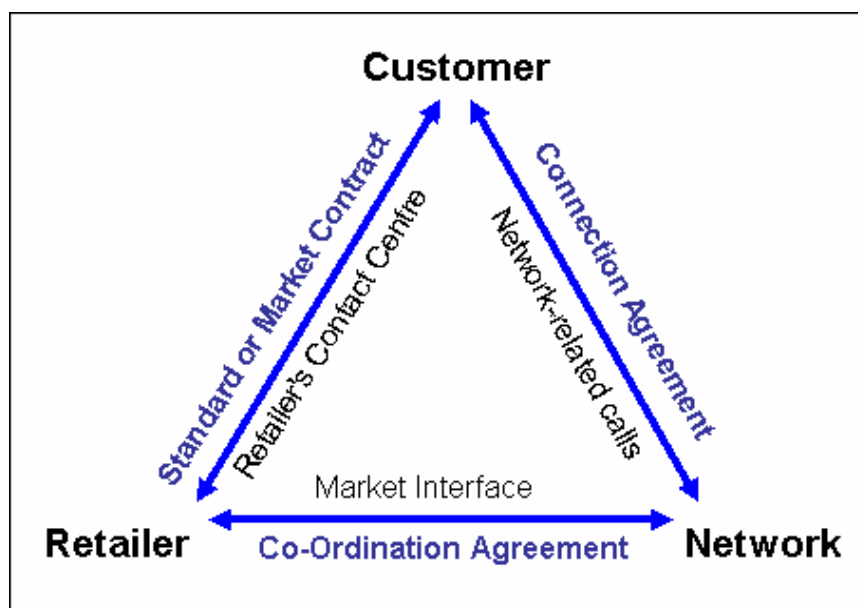
More importantly, ENERGEX's performance is likely to come under considerable scrutiny by retailers now well experienced in interstate FRC markets.

The opening up of the market will change roles and responsibilities across the ENERGEX business including its service providers. In particular, operating in a fully contestable market has significant implications for Service Essentials Pty Ltd (SEPL) and SPARQ.

A significant change for ENERGEX is the increase in transaction volumes resulting from expected customer churn, and the complexities of interacting with multiple retailers. An important driver of forecast transaction volumes is an expectation that retailers now experienced in FRC will be far more aggressive in their competitive offerings in Queensland.

Further, the introduction of FRC raises the importance of the triangular relationship between ENERGEX, the customer and the retailer (see Figure 1 below). There will now be Co-ordination Agreements between ENERGEX and multiple retailers, and a more detailed comprehensive Connection Agreement with all customers as a direct consequence of FRC. The level of detail and scope will increase the scrutiny of these agreements thus increasing ENERGEX's monitoring and compliance requirements.

**Figure 1. Relationship between the Customer, Retailer and the Distributor under FRC**



## 2.2 ENERGEX's FRC Project

ENERGEX established an FRC Project to manage and facilitate the introduction of FRC for south-east Queensland.

### 2.2.1 Project objectives

The overarching objective of the FRC Project is to ensure that ENERGEX is capable of meeting its obligations under FRC. To achieve this objective, the FRC Project is currently working to enhance existing ICT systems, implement new systems, review associated processes and establish new processes across ENERGEX. A number of new processes relating to metering, particularly Metering Data Provider (MDP) and Metering Provider (MPB) functions, will need to be accredited by the National Electricity Market Management Company (NEMMCO).

### 2.2.2 FRC strategy

ENERGEX's FRC strategy aims to maximise the probability of success by:

- Managing the scope of FRC requirements on a minimum compliance basis;
- Taking an incremental approach to systems development;
- Working closely with Ergon Energy where appropriate;
- Establishing prudent governance arrangements;
- Taking into account the experience of other jurisdictions; and
- Actively working with key stakeholders to ensure expectations and dependencies are properly managed.

### 2.2.3 Key areas of impact

The introduction of FRC will impact internal processes and staff across the ENERGEX business. The key impacts are categorised as follows:

- Communication with retailers and customers – the method of communicating with retailers and customers will be different to existing arrangements. Retailers will communicate with ENERGEX via standard service orders through NEMMCO's business to business (B2B) procedures in accordance with the National Electricity Rules (NER).
- Agreements – ENERGEX will have comprehensive Connection Agreements with customers and Co-ordination Agreements with retailers outlining the rights and obligations of the respective parties.
- Data, systems and business processes – data, systems and business processes will be changed to operate in an FRC environment, ie complete management of National Meter Identifier (NMI).
- Field work – field workers' communication with customers will have to change as a result of our changing relationship with retailers.
- Metrology – there will be increased responsibilities for metering data integrity and maintaining accreditation standards for metering service provision in the market.

## 2.2.4 Key areas of compliance

ENERGEX, as the distribution authority holder for south-east Queensland and operating in the National Electricity Market (NEM), must comply with:

- National Electricity Rules;
- Electricity Act and Regulations;
- Queensland Electricity Industry Code;
- NEMMCO procedures governing the use of market systems, including Market Settlement and Transfer Solution (MSATS), Consumer Administration and Transfer Solutions (CATS), Metering Data Management (MDM) and B2B Procedures;
- NEMMCO Accreditation for MPB and MDP functions, and Service Level Requirements for metering;
- Authority guidelines, such as the Ring-Fencing Guidelines; and
- National Metrology Procedures.<sup>2</sup>

At the time the Queensland Government announced the introduction of FRC, it also announced that *"an implementation team would be established to guide the introduction and ensure the transition was as seamless as possible"*.<sup>3</sup> The ECC was subsequently established and given the tasks of, amongst other things, scoping the requirements for FRC and developing the policy framework and legislative changes required for FRC.<sup>4</sup> Since then, ENERGEX has been working with the ECC on a significant body of legal, regulatory and operational issues, which has subsequently resulted in substantial amendments made to the Queensland specific legal instruments with which ENERGEX must now comply.

The following table summarises the key areas of legislative compliance under FRC.

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<sup>2</sup> The National Metrology Procedures are still in draft.

<sup>3</sup> Premier and Treasurer, *Choice Comes to Queensland Consumers*, Ministerial Media Statement, Queensland Government, 28 September 2005.

<sup>4</sup> Queensland Government, *Energy Competition Committee (ECC) Raison D'Etire (Statement of Reason)*, Available at: [http://www.energy.qld.gov.au/zone\\_files/ECC/statement\\_of\\_reason.pdf](http://www.energy.qld.gov.au/zone_files/ECC/statement_of_reason.pdf), Accessed 6 November 2006.

**Table 1. FRC Compliance**

Function	Obligation
NMI Discovery / Standing Data	Comply with market regulations for the provision of National Meter Identifier (NMI) Standing Data and support NMI Discovery processes as an LNSP, MDP and MPB.
Transfer Management	Comply with market obligations for the provision of a Customer Transfer solution to be maintained by the LNSP / MDP to manage and report on all transfer-related market transactions.
Service Orders / B2B	Establish a Service Order capability to meet LNSP obligations (as specified by NEMMCO's B2B Specifications and ENERGEX Coordination Agreement) to manage B2B Service Order requests and related enquiries from retailers, network related requests from customers, and Service Orders raised from the field.
Energy Data Management	Establish systems and processes that comply with NEMMCO Service Level Requirements to deliver timely and accurate data for billing and market settlement. Establish a solution framework that supports retailer Provide Meter Data requests, Verify Meter Data requests, transfers and the provision of Meter Data and Meter Data Management activities to the market within the required timeframes.
Network Billing	Comply with market regulations and Coordination Agreements for the provision of a capability to receive aggregated consumption data and process into a Network Bill at the NMI level on a timely and accurate basis.
Trouble Call	Comply with the requirements of a Connection Agreement (between ENERGEX and a customer), which will formalise existing procedures for handling network emergencies and trouble calls. Establish a solution framework to support the process for handling trouble calls which must be changed to accommodate many retailers. An essential part of the evaluation process relies upon up-to-date customer details and network data such as meter details, pole number, and meter reading walking order to establish the Network Attachment Point for Service Requests.
Ring Fencing	Ensure the new and amended ENERGEX data, systems and processes continue to comply with the Authority's ring fencing guidelines.
Agreements	Prepare Standard Connection and Coordination Agreements that comply with Government policy and regulatory requirements.
ICT Systems	Establish ICT Systems and processes to support the above operations required for the fully competitive market.
Metering	Ensure ENERGEX's responsibilities to implement Queensland metering requirements are carried out in accordance with the established timeframe.
Compliance	Ensure ENERGEX has effective processes in place to monitor its compliance with new obligations imposed under FRC.

Attachment B provides further information on the specific legislative changes resulting from FRC. It maps the changes being made within ENERGEX to comply with the relevant policy and legislative instruments.

## 2.2.5 Governance arrangements

A three-tiered governance structure is in place within ENERGEX to support the delivery of the FRC project's objectives and to enable direct and open communication for issue resolution and rapid decision-making:

- Strategic Direction is provided by the FRC Steering Committee;
- Project Control is provided by the FRC Project Director; and
- Project Management is provided by the FRC Project Manager.

ENERGEX's governance structure includes regular reports to the ENERGENX Board and the ECC.

## 2.3 Financial costs / impacts

ENERGEX's FRC costs were identified on an incremental basis through the use of an activity based costing (ABC) approach. This methodology was used to determine the incremental costs to deliver the additional services and internal activities required to ensure compliance with FRC requirements. ENERGENX used the ABC approach because it links on a causality basis the new FRC legal and market obligations, and the new activities implemented or planned for compliance, and the incremental cost of delivery.

ENERGEX's ABC method is detailed in section 3.4.

### 2.3.1 Types of costs

There are two categories of FRC costs:

- **FRC Project Implementation Costs**, which are the costs that ENERGENX will incur in preparing the business for the commencement of FRC. These costs relate to the development and implementation of the systems, procedures, and processes required to support FRC, communication of those changes to stakeholders and training of staff. In terms of regulatory accounts these costs are operating costs on account of:
  - internal operating costs; and
  - payments to SPARQ for ICT systems development and associated supports services.

Under the agreement between ENERGENX and SPARQ, ENERGENX will pay SPARQ for its services as an annuity over five years from the date the assets become operational. Hence, the SPARQ ICT charges continue beyond the FRC commencement date. Attachment D provides greater detail on SPARQ's role, the legal arrangements with ENERGENX, and the total costs to be incurred from SPARQ to support ENERGENX to be FRC ready.

- **FRC Operational (Ongoing) Costs**, which are the operating costs that ENERGENX will incur on an ongoing basis as a result of the introduction of FRC. These costs relate to the additional resources and systems required to manage the new and expanded processes under FRC, and ensure that ENERGENX can deliver network services to the FRC market.

### 2.3.2 Cost impacts

ENERGEX estimates that the total FRC costs during this regulatory period will be \$117.1 million, comprising \$35.3 million in FRC Project Implementation Costs and \$81.8 million in ongoing FRC Operational Costs. The following table summarises the estimated FRC costs.

**Table 2. Total FRC Costs (\$000 nominal)**

	2005/06	2006/07	2007/08	2008/09	2009/10	Total
<b>FRC Project Implementation Costs</b>						
Labour – Internal	245	1,987	224	0	0	2,456
Labour – External	260	782	219	0	0	1,261
Corporate Communications	0	500	80	0	0	580
SPARQ (ICT)	770	1,719	9,295	9,671	9,241	30,697
CVU-IVR	0	289	0	0	0	289
<b>Total FRC Project Implementation Costs</b>	<b>1,275</b>	<b>5,276</b>	<b>9,818</b>	<b>9,671</b>	<b>9,241</b>	<b>35,282</b>
<b>FRC Operational Costs</b>						
Labour – Internal	0	3,750	10,665	9,875	10,784	35,074
SPARQ (Operating)	0	1,713	3,746	3,809	3,817	13,085
SEPL	0	194	1,200	1,254	1,310	3,958
Metering Dynamics	0	679	2,140	2,232	2,328	7,380
<b>Total FRC Operational Costs</b>	<b>0</b>	<b>6,336</b>	<b>17,751</b>	<b>17,171</b>	<b>18,239</b>	<b>59,497</b>
New FRC non-DUOS Service (Re-en and de-en Costs)	0	0	7,240	7,440	7,645	22,325
<b>Total FRC Costs</b>	<b>1,275</b>	<b>11,612</b>	<b>34,809</b>	<b>34,281</b>	<b>35,126</b>	<b>117,103</b>

All dollars in this Application are in nominal values. ENERGEN's FRC costs are detailed in Attachment A.

### 2.3.3 Reasonable Costs – Regulatory Benchmarks

ENERGEX has forecast that the total cost impost of FRC to be \$117.1 million within the current regulatory period, incorporating \$35.3 million for FRC Project Implementation Costs, ongoing FRC Operational Costs of \$59.5 million, and new FRC non-DUOS services of \$22.3 million. ENERGEN considers that these incremental costs are reasonable, and represent an efficient level of expenditure that ENERGEN must incur to ensure FRC compliance.

The regulation of electricity distributors through incentive-based pricing arrangements has adopted the extensive use of benchmarking in the setting of 'efficient' costs within the building blocks approach to revenue setting. Despite this, there has been no standard model developed to analyse network cost performance. Instead, benchmarking of regulated businesses often consists of partial indicators focused on specific cost components, i.e. operating costs per customer or capital costs per kilometre of line.

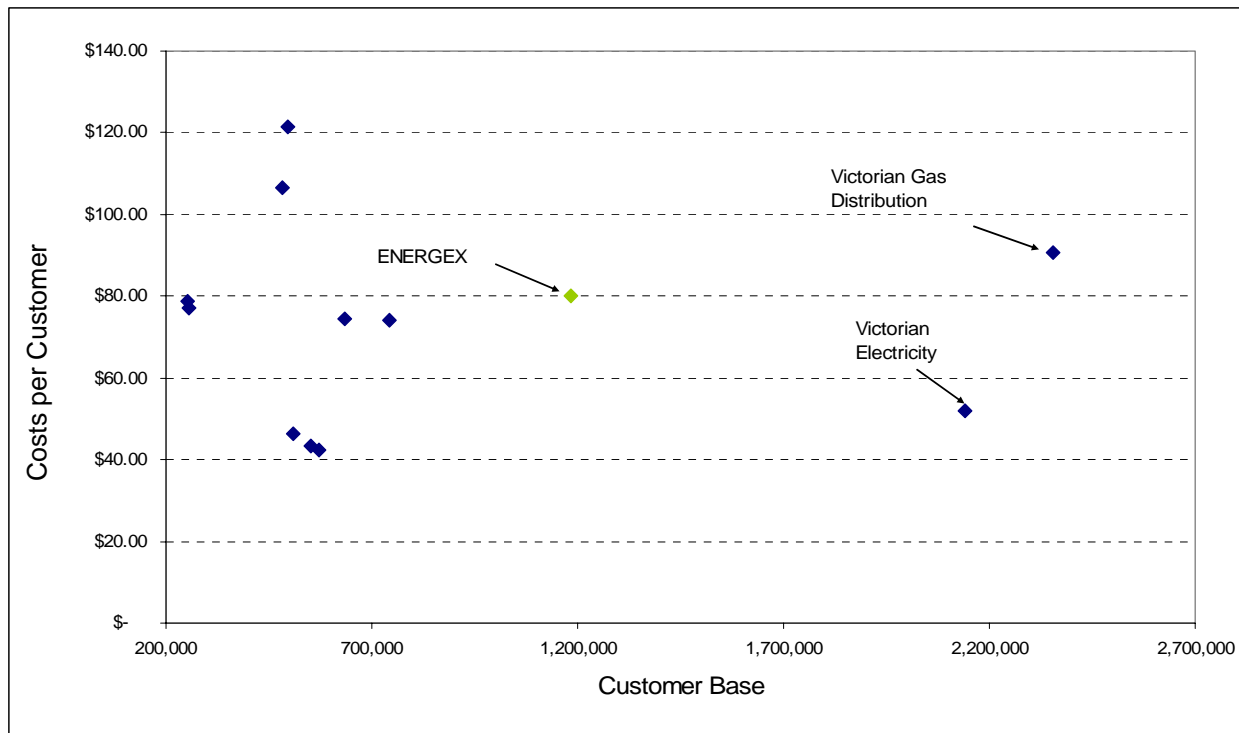
ENERGEX’s forecast FRC costs were compared against the FRC costs approved by other jurisdictional regulators for energy businesses to implement FRC. On a per customer basis the minimum cost, in current dollars, was \$42.33 for a Victorian electricity distributor, and the maximum was \$121.40 for a Victorian gas distributor.

Figure 2 shows the range of historic FRC cost benchmarks for energy businesses on a per customer basis. The benchmarking study illustrates that there is substantial disparity across the entities and the jurisdictions, and it is difficult to draw definitive conclusions from the results.

The data implies that costs may be dependent on a number of local factors such as the:

- jurisdictional regulations for FRC;
- historical practices of the business;
- FRC implementation timeframe; and
- labour market conditions at the time.

**Figure 2. FRC Cost Benchmarks<sup>5</sup>**



Albeit, ENERGEX’s specific FRC costs on a per customer basis are \$80.12, which is towards the middle range of the benchmarking data. In regards to ENERGEX’s costs it is important to make the following points:

- Queensland has had a compressed timeframe for FRC readiness compared to other jurisdictions;
- the introduction of FRC in Queensland was staggered, unlike other jurisdictions where the timetable was known well in advance and provided greater certainty for planned outcomes;

<sup>5</sup> ENERGEX has benchmarked its FRC Costs without the costs associated with the new FRC non-DUOS Service as the other comparable energy businesses would have these costs included in their total costs base.

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- market evidence suggests that the churn rates in Queensland will be higher than earlier market openings in other jurisdictions, requiring greater up-front investment to have ENERGENX's systems fully automated and capable of handling the expected market activity; and
  - ENERGENX's preparation time has coincided with a tight labour market.

## 3 MEETING THE COST PASS-THROUGH TESTS

### 3.1 Overview

In April 2005, the Authority released its Final Determination for ENERGEX and Ergon Energy, which sets out the revenue requirements for the electricity distributors over the five year regulatory period commencing 1 July 2005. In principle, ENERGEX's annual revenues are fixed for the regulatory period, but can be adjusted within period for material unforeseen exogenous events, which allow for ENERGEX to claim the costs associated with any material event that was not anticipated at the time of the Authority's Final Determination.

For the purposes of the Final Determination, the Authority defined a pass-through event "as a *major exogenous and unforeseen event outside the control of the DNSPs*".<sup>6</sup> This represents the first two tests for a cost pass-through:

- The event which causes the cost increase/decrease is beyond the control of the business; and
- The event was unforeseen, i.e. the business did not know of the impending change at the time of the Authority's Final Determination.

The event must also meet a materiality threshold of "1 per cent of actual annual regulated revenue per event, based on the regulated revenue in the year of the event".<sup>7</sup>

Other conditions applied by the Authority:

- The costs must be agreed by the Authority;
- The distributor must demonstrate that the costs have not already been incorporated in the cost building blocks used to calculate the DNSPs' regulated revenue; and
- Forecast costs will only be accepted where:
  - The costs are known with reasonable certainty; and
  - It is known with absolute certainty that the costs will be incurred in the forecast year.<sup>8</sup>

This section of the Application summarises how ENERGEX meets the Authority's cost pass-through conditions. Additional supporting information is provided in subsequent chapters and the Attachments.

### 3.2 FRC is an exogenous and unforeseen event

On 28 September 2005, the Queensland Government issued a press release announcing the decision to implement FRC in Queensland from July 2007.<sup>9</sup> This decision was made by the Queensland Government following an independent report<sup>10</sup> that found that the benefits of FRC would outweigh the costs. While ENERGEX contributed to the review through the consultation process, the decision to introduce FRC was that of the Government, i.e. it was exogenous to, and outside of the control of, ENERGEX.

<sup>6</sup> Queensland Competition Authority, *Regulation of Electricity Distribution*, Final Determination, April 2005, p.49.

<sup>7</sup> Queensland Competition Authority, *Regulation of Electricity Distribution*, Final Determination, April 2005, p.50.

<sup>8</sup> Queensland Competition Authority, *Regulation of Electricity Distribution*, Final Determination, April 2005, p.50.

<sup>9</sup> Premier and Treasurer, *Choice Comes to Queensland Consumers*, Ministerial Media Statement, Queensland Government, 28 September 2005.

<sup>10</sup> GHD, *Full Retail Competition – Cost Benefit Analysis*, Report to Queensland Treasury, May 2005.

The Authority, in correspondence to ENERGEX dated 2 May 2006, confirmed that the Government's announcement would meet the requirement for a pass through event to be "...a major exogenous and unforeseen event outside of the control of the Distribution Network Service Provider".

### 3.3 FRC costs have a material impact on revenue

The Authority has committed that it will consider any cost impacts that are greater than 1% of actual annual regulated revenue per event, based on the regulated revenue in the year of the event. As FRC commences on 2 July 2007, the year of the event is 2007/08 and ENERGEX considers that the appropriate materiality test to identify FRC costs is \$7.8 million.

ENERGEX estimates that the total FRC costs during this regulatory period will be \$117.1 million. The revenue impact of this expenditure represents approximately 3.0% of regulated revenue over the current regulatory period. This is summarised in the following table.

**Table 3. FRC Revenue Impact (\$ million)**

	2005/06	2006/07	2007/08	2008/09	2009/10	Total
FRC Revenue Impact <sup>1</sup>	1.27	11.61	34.81	34.28	35.13	117.10
Approved Revised Smoothed AARR <sup>2</sup>	626.80	699.20	779.93	870.00	916.30	3,892.23
% of AARR	0.2%	1.7%	4.5%	3.9%	3.8%	3.0%

1. The FRC Revenue Impact equals the total FRC-related costs, as all these costs are operating expenditure.

2. The Annual Aggregate Revenue Requirement (AARR), excluding any FRC Revenue Impact. Final Determination (p.172 and 177) and Authority correspondence to ENERGEX 23 March 2006.

### 3.4 FRC costs are not included in the building block costs

Given that FRC had not been announced at the time of the Final Determination, ENERGEX did not include any FRC-related costs in its proposals to the Authority.

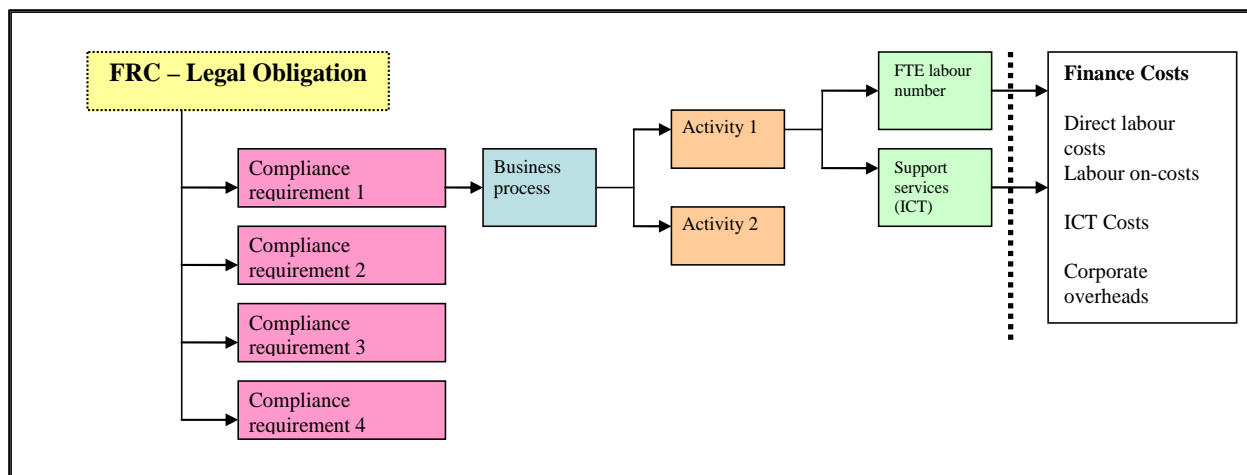
The costs presented in this Application have been determined on a bottom-up activity based costing method for the incremental activities ENERGEX will undertake as a result of FRC. For example, for the business procedures, ENERGEX reviewed each existing procedure to determine how it would change under FRC. ENERGEX also reviewed the FRC-readiness requirements (i.e. regulatory and legislative instruments) to determine whether any new procedures would be required. For each new and amended procedure, ENERGEX then determined the incremental time and the systems required to undertake each procedure. Only the incremental time over and above the time taken for the existing procedure was included in the forecast costs in this Application.

ENERGEX considers that the use of the ABC approach to determine the costs incurred as a result of FRC is a sound method to assess incremental costs caused by FRC. Importantly, the academic research in the area has highlighted that the ABC approach, when appropriately applied, is a sound and reasonable basis for identifying incremental costs compared to other cost attribution approaches.<sup>11</sup>

<sup>11</sup> Please see, Bromwich, Michael & Cheolkyu Hong (1999), "Activity-based costing systems and incremental costs" *Management Accounting Research*, 1999, 10, page 39-60, Ioannou, G & W. G. Sullivan (1999), "Use of activity-based costing and economic value analysis for the justification of capital investments in automated material handling systems", *International Journal of Production Research*, Vol.37, No.9 pages 2109-2134.

In addition, ENERGEX’s approach of determining incremental FRC costs by using an ABC method is consistent with the approach adopted by the Victorian gas distributors when determining the incremental costs incurred as a result of the introduction of FRC in the Victorian retail gas market (2002).<sup>12</sup> Figure 3 illustrates the conceptual building blocks that underpin ENERGEX’s ABC method of estimating the incremental costs incurred as a result of FRC.

**Figure 3. Conceptual Structure of ENERGEX’s ABC Method**



Accordingly, the costs presented in this Application are incremental to any operating expenditure included in the Final Determination.

### 3.4.1 New prescribed non-DUOS Service – de-ens & re-ens

From July 2007, ENERGEX will be providing to multiple retailers de-energisation and re-energisation services, which will occur as per the NEMMCO B2B service order requirements. The de-energisation and re-energisation processes will be a critical service to support customer churn, hence retailer competition, within the FRC market. Prior to FRC, and as per previous correspondence between ENERGEX and the Authority, de-energisation and re-energisation was provided by ENERGEX Retail, and the price for re-energisation was regulated by the technical regulator, the Department of Mines and Energy, at the time.

As a result of FRC this business arrangement could not be sustained within an FRC market. ENERGEX has costed the de-energisation and re-energisation services, and will present these prices to the Authority for approval as part of ENERGEX’s proposed prices for 2007/08.

At the time of the Authority’s Final Determination (April 2005) no announcement of FRC had been made. Accordingly, ENERGEX did not include the costs of providing these services within its operating and maintenance cost building block on the basis of the existing business arrangement. In the interest of ensuring that ENERGEX’s revenues are adjusted to take account of the full cost of delivering the complete range of services to the FRC market ENERGEX is seeking recognition of these costs, which in 2007/08 are \$7.24 million.

ENERGEX’s arrangement with its fully owned retailer, ENERGEX Retail Pty Ltd, was feasible under the franchise model, but for a range of reasons would be unsustainable for ENERGEX, as the LNSP, in an FRC market. The main reasons are:

<sup>12</sup> Essential Services Commission (30 August 2002) “Gas Full Retail Competition – Recoverable Expenditure, Operations and Maintenance Expenditure and Setting of Prices, Fees and Charges – Final Determinations Multinet Gas, Envestra and TXU Networks”.

- ENERGEX has legal obligations under FRC to deliver these services, and from an operational perspective requests for such services will come directly to the network via the B2B automated process (NEMMCO requirement);
- a host retailer, fully owned by the LNSP, that continued to provide these services in an FRC market would have created significant competition issues; and
- in a deregulated franchise market the LNSP is obliged to maintain the confidentiality of customers on behalf of all retailers. Competing retailers would have raised concerns that ENERGEX, as the LNSP, and the owner of the host retailer, would have difficulty in maintaining confidential information.

ENERGEX considers that the previous business arrangement with ENERGEX Retail is unsustainable under FRC. For reasons outlined above a host retailer fully owned by an LNSP could not continue to offer these services in a fully deregulated market.

In the Authority's 2005 Final Determination there was no allowance included in the approved operating and maintenance cost allowance to 2009/10 for the delivery of these services. Accordingly, ENERGEX requests that the Authority recognise these services as a prescribed non DUOS service for FRC (to be submitted to the Authority as part of ENERGEX's Price Submission 2007/08) and allow the identified costs to be passed through.

Importantly, the recognition of these costs in the allowed revenue cap will not impact on DUOS prices as the revenue recovery is proposed to be affected through prices for prescribed non-DUOS services.

### 3.5 Certainty of costs and timing

The costs submitted represent:

- actuals for 2005/06 and year to date for 2006/07;
- forecast balance of 2006/07; and
- forecast for remaining years to 2009/10.

The basis for the costs are summarised in Table 4. This Application is for costs up to and including 2007/08 as the forecasts for these FRC costs can be relied upon with reasonable certainty in terms of quantum and that the timing for the costs is as forecast.

**Table 4. Basis for Cost Estimates**

Cost Group	Cost Sub-group	Basis and Certainty of Costs
<b>FRC Project (Implementation) Costs</b>	Labour – Internal	Actual costs incurred in 2005/06 and year-to-date 2006/07 are known with certainty. Forecasts for subsequent years are based on estimates of resources required.
	Labour – External	Actual costs incurred in 2005/06 and year-to-date 2006/07 are known with certainty. Forecasts for subsequent years are based on estimates of resources required.
	Corporate Communications	Estimates for 2006/07 and 2007/08, based on an assessment of the medium (eg TV, radio, newspapers) and quantity of external communications required. Timing of the cost is certain as timing of communications coincides with introduction of FRC, which is fixed.

Cost Group	Cost Sub-group	Basis and Certainty of Costs
	SPARQ (ICT)	Actual costs incurred in 2005/06 and year-to-date 2006/07 are known with certainty. Arrangements between ENERGEX, SPARQ and hardware / software suppliers. Quantity and timing of costs are certain, as they will occur in accordance with the arrangements contract between ENERGEX and SPARQ. Some costs in 2007/08 are estimates based on discussions with suppliers.
	CVU-IVR	2006/07 costs are estimates based on discussions with suppliers.
<b>FRC Operational Costs</b>	Labour – Internal	All costs are based on forecasts. Timing of costs is certain as the timing of FRC commencement is fixed. The quantity of costs are known with relative certainty, as it is based on detailed reviews of activity, process and resource requirements.
	SPARQ (Operating)	These costs and their timing are known with certainty, as they have been provided by ENERGEX's ICT supplier, SPARQ.
	SEPL	All costs are based on forecasts. Timing of costs is certain as the timing of FRC commencement is fixed. The quantity of costs are known with relative certainty, as it is based on detailed reviews of activity, process and resource requirements.
	Metering Dynamics	Costs for communications equipment on sample meters and their timing are known with certainty, as they have been provided by Metering Dynamics. Timing of costs for MDP function is certain as the timing of FRC commencement is fixed. The quantity of costs are known with relative certainty, as it is based on detailed reviews of activity, process and resource requirements.
	New FRC non-DUOS service	The cost of delivering de-energisation and re-energisation previously undertaken by ENERGEX Retail Ltd.

The forecast FRC Operational Costs are dependent on a number of assumptions, such as the churn rate, the number and duration of incremental transactions and tasks, and the resources. The actual FRC Operational Costs will depend, in part, on the activity generated in the FRC market. However, ENERGEX has developed these assumptions based on an extensive review of the impact of FRC on ENERGEX's operations (see Attachments A and B).

## 4 PROPOSED PASS-THROUGH METHOD

In this section ENERGENX sets out the proposed approach for passing through FRC costs to customers. Broadly, ENERGENX's approach is to pass through:

- FRC Project Implementation Costs on a DUOS cents per kWh basis;
- ongoing FRC Operational Costs in relation to the service orders through user pay fees; and
- remaining ongoing FRC Operational Costs on a DUOS cents per kWh basis.

The proposed prices for the non-DUOS services will be included within the ENERGENX's Pricing Submission for 2007/08.

ENERGENX's proposed approach to passing through FRC costs has been driven by the following:

- compliance with the Authority's Final Determination of April 2005, notably the setting of the AARR based on an inclusive definition of prescribed distribution services;
- ensuring that the timing of costs and recovery of revenue are aligned wherever possible;
- simplicity and transparency of the arrangement;
- application, where possible, of the user pay principle to the recovery of FRC costs; and
- compliance with ENERGENX's Pricing Principles Statement, in particular, that prices are:
  - cost reflective; and
  - free of cross-subsidisation.

In addition, as ENERGENX is seeking cost pass through of FRC Costs, which partially depend on forecast costs, there is recognition that there will need to be a reconciliation between the Authority's approved FRC cost allowance, and the actual FRC expenditure incurred for the same period.

The remainder of this section sets out:

- the impact that ENERGENX's Application will have on its approved revenue cap for 2007/08; and
- the proposed pass-through mechanism for 2007/08.

### 4.1 Recovery of FRC Costs to 2007/08

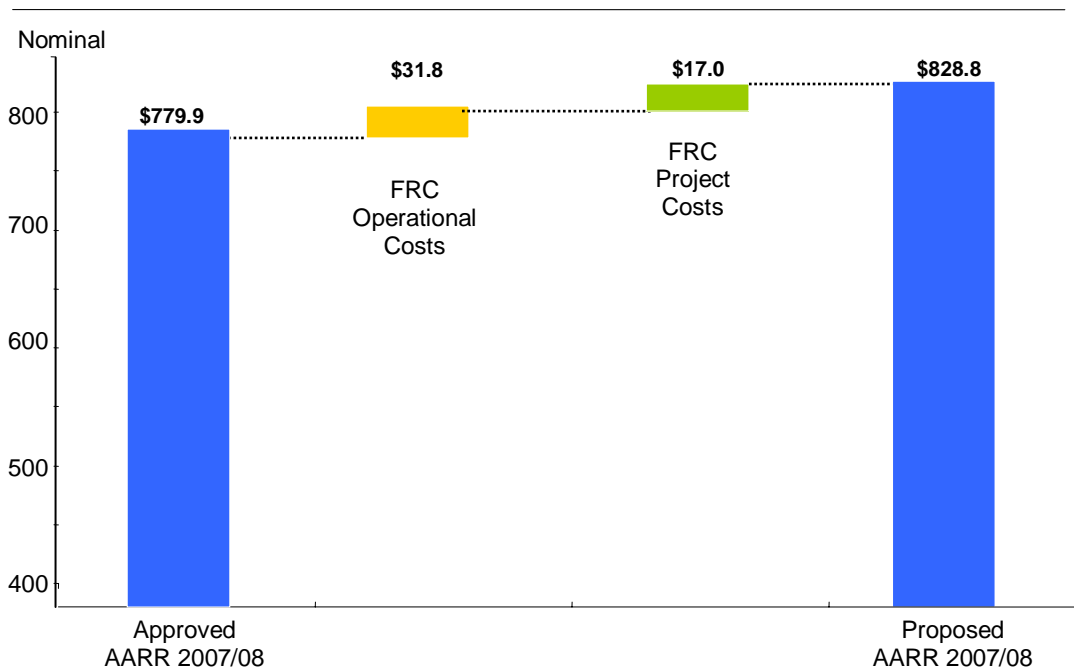
For the 2007/08 financial year, Table 5 sets out ENERGENX 's pass-through of FRC costs.

**Table 5. ENERGEN's 2007/08 FRC Cost Application**

Category	Value from Table 2 (\$m)	Indexation by WACC (\$m)	2007/08 Application (\$m)
FRC Project Implementation Costs 2005/06	1.275	0.226	1.501
FRC Project Implementation Costs 2006/07	5.276	0.448	5.725
FRC Project Implementation Costs 2007/08	9.818	-	9.818
<b>Total FRC Project Implementation Costs Applied for 2007/08</b>	<b>16.369</b>	<b>0.674</b>	<b>17.044</b>
FRC Operational Costs 2006/07	6.336	0.527	6.874
FRC Operational Costs 2007/08	24.991	-	24.991
<b>Total FRC Operational Costs Applied for 2007/08</b>	<b>31.327</b>	<b>0.539</b>	<b>31.865</b>
<b>Total FRC Costs Applied for 2007/08</b>	<b>47.696</b>	<b>1.213</b>	<b>48.909</b>

Figure 4 illustrates ENERGEN proposed increase to the AARR for pass-through of FRC costs in 2007/08.

**Figure 4. 2007/08 ENERGEN's Proposed AARR after FRC Costs are Included**



ENERGEN proposes that the revenue recovery of the \$48.9 million for 2007/08 occurs as per Table 6 below.

**Table 6. ENERGEN's 2007/08 Revenue Recovery**

<b>Category</b>	<b>Value from Table 5 (\$m)</b>
<b>DUOS</b>	
FRC Project Implementation Costs to 2007/08	17.04
FRC Operational Costs to 2007/08	18.59 <sup>#</sup>
<b>DUOS Recovery for 2007/08</b>	<b>35.63</b>
<b>NON-DUOS</b>	
FRC Operational Costs 2007/08	6.04
New FRC Non-DUOS Services 2007/08	7.24
<b>NON-DUOS Recovery for 2007/08</b>	<b>13.28</b>
<b>TOTAL REVENUE RECOVERY FOR FRC for 2007/08</b>	<b>48.91</b>
<sup>#</sup> - Consists of: 2006/07 FRC Operational Costs of \$6.87 m and \$11.72m of FRC Operational Costs for 2007/08.	

#### 4.1.1 DUOS Price Pass Through

ENERGEN proposes to pass through the following FRC Costs through DUOS prices on a cents per kWh basis:

- the FRC Project Implementation Costs to 2007/08 of \$17.04 million; and
- the FRC Operational Costs to 2007/08 of \$18.59 million, which cannot be recovered through non-DUOS prices.

ENERGEN believes that the proposed approach for the pass-through of the FRC Costs:

- complies with the Authority's Final Determination;
- aligns the payment of costs with revenue recovery;
- is simple and transparent;
- is forecast to have an immaterial impact on DUOS prices; and
- sends appropriate price signals to the market.

#### 4.1.2 Non-DUOS Price Pass Through

For the balance of the ongoing FRC Costs, ENERGEN will pass through these costs by setting cost reflective prices for a range of non-DUOS services to send appropriate price signals to the predominate users i.e. the retailers. A significant proportion of prescribed non-DUOS services relate to the services provided by ENERGEN to retailers, acting on behalf of customers or in their own right. These services will normally be requested and delivered through business-to-business (B2B) service order requests.

The types of prescribed non-DUOS services covered by this B2B Procedure are:

- re-energisation;
- de-energisation;
- special meter reads;
- additions and alterations to customer connections;
- meter reconfigurations;
- meter investigations;
- supply abolishments; and
- miscellaneous services.

To set prices for these prescribed non-DUOS services ENERGENX had to complete the following sequential steps:

- (a) determine the full costs of the prescribed non-DUOS services, which forms the basis for the setting of specific prices for each of the prescribed non-DUOS services (i.e. cost reflectivity and avoidance of cross-subsidisation);
- (b) identify the amount of costs to deliver the prescribed non-DUOS services within the current or approved operating and maintenance cost allowance, i.e. built into the DUOS recovery;
- (c) determine the difference between the full costs of delivering the prescribed non-DUOS services and the level of operating and maintenance costs already incurred within ENERGENX's approved operating and maintenance allowance, which forms the incremental cost of delivering the prescribed non-DUOS services as a result of FRC; and
- (d) cross-check the incremental cost identified in (c) against the incremental costs identified by the ABC method from the resource model used to determine the cost of delivering the incremental prescribed non-DUOS services as a result of FRC.

ENERGENX proposes to set prices for prescribed non-DUOS services to recover those ongoing FRC Operational Costs related to the delivery of the prescribed non-DUOS services as it:

- complies with the Authority's regulatory regime;
- aligns costs, revenues, and benefits;
- improves transparency in terms of disclosing the cost to deliver these services;
- improves transparency in terms of ensuring that ENERGENX recovers its costs of service provision for non-DUOS services in a more transparent manner; and
- is consistent with the pricing principles of cost reflectivity and the avoidance of cross-subsidies.

For 2007/08 ENERGENX is forecasting revenue recovery of \$13.3 million for costs associated with the new non-DUOS service of de-energisation and re-energisation, and the incremental operating costs associated with the delivery of increased service order volumes in the FRC market through existing prescribed non-DUOS services.

## 4.2 Timing of cost recovery for remainder of regulatory period

This Application outlines the total cost impact of FRC on ENERGENX to 2009/10. As such, the Application incorporates actual FRC costs incurred to date, costs driven by specific legal liabilities of ENERGENX, and forecast ongoing FRC Operational Costs. From ENERGENX's perspective it is critical that the revenue recovery allowed by the Authority aligns with the timing of when ENERGENX expects to incur these costs. Such an alignment ensures that customers actually face the true cost of electricity delivery.

Accordingly, ENERGENX proposes that the costs of FRC be passed through to customers in network and user-pays charges from 1 July 2007, to coincide with the commencement of FRC. ENERGENX proposes that the FRC Project Implementation and Operating Costs to be incurred in 2008/09 and 2009/10 will be considered for revenue recovery at a later date.

## 5 SUMMARY

The Authority's April 2005 Final Determination did not include any costs associated with FRC as the Queensland Government announced the introduction of FRC in Queensland in September 2005. However, the Authority did include a mechanism for passing-through the costs of major unforeseen and exogenous events.

As outlined in this application, the introduction of FRC has significant implications for ENERGEX and its service providers. To meet its FRC obligations, ENERGEX is making substantial changes to its systems, policies and processes. Further, ENERGEX is investing in additional staff and training.

ENERGEX submits to the Authority an estimation of its total FRC expenditure of \$117.1 million consisting of \$35.3 million to be spent on FRC Project Implementation Costs, and \$81.8 million on ongoing FRC Operational Costs.

To allow ENERGEX to commence recovery of some of these costs, and to provide price signals at the commencement of FRC, ENERGEX seeks from the Authority an adjustment to ENERGEX's allowed revenue for 2007/08 of \$48.9 million which represents costs incurred to date and forecast for the remainder of 2006/07 and for 2007/08.

## GLOSSARY

Authority	Queensland Competition Authority – economic regulator for the electricity distribution network.
B2B	Business-to-business – a generic term used to refer to defined business-to-business interactions between Market Participants. It excludes interactions between a Market Participant and market systems such as MSATS.
BMS	Business Management System – system used to document policies, procedures and guidelines for business processes.
CATS	Consumer Administration and Transfer solution – the mechanism of advising Market Participants of changes to NMI data (e.g. change of retailer).
Contract NMI	These are the NMIs that move off their current tariff arrangement and on to a market contract with either their current retailer or a new retailer. These NMIs will be managed in PEACE.
Coordination Agreement	The agreement that is in place between ENERGEX and retailers who operate in the Queensland market. This agreement governs the way the entities interact.
ECC	Energy Competition Committee – established by the Queensland Government to facilitate the introduction of FRC and tasked with defining the market rules for FRC in Queensland.
FACOM	ENERGEX mainframe computer system which supports billing, customer services, credit control and other customer and premise systems. FACOM is to be phased out, but both PEACE and FACOM will be used during a transitional period.
Force	FACOM network billing system, which will contain data for consumption and service orders extracted from FACOM, which will be summarised for invoicing to Retailers.
FRC	Full Retail Competition – which means that all customers (irrespective of their level of consumption) may purchase electricity from their electricity retailer of choice. Currently, only customers with consumption greater than 100 MW.h per annum may choose their retailer. From 2 July 2007, all electricity customers in Queensland will have this option.
FRMP	Financially Responsible Market Participant – an MSATS Role, usually the Retailer.
ICT	Information and Communications Technology
LNSP	Local Network Service Provider – ENERGEX is the LNSP for South East Queensland (broadly). Used interchangeably with Network, distribution network and distributor.
Market Participants	MSATS defines specific roles, e.g. LNSP, LR, FRMP, RP, ROLR, MDP, MPA, MPB, MPC

Market Rules	The framework of rules that defines how the FRC market works. For example, it defines the process for customers transferring between retailers, metering requirements and customer protection rules.
MDM	<p>Meter Data Management – the MDM system forms part of MSATS and is used the following purposes:</p> <ul style="list-style-type: none"> <li>• Management and definition of profiling areas;</li> <li>• Creation of profiling shapes;</li> <li>• Application of profiles to basic meter data; and</li> <li>• Compilation of energy data for distribution to NEMMCO's settlement system (MSATS).</li> </ul>
MDP	Meter Data Provider – the party responsible for the collection, processing and transfer of energy data from meter types 5 – 7 to NEMMCO.
MPA	Meter Provider (A) – an accreditation provided by NEMMCO for meter installation only.
MPB	Meter Provider (B) – an accreditation provided by NEMMCO for providing, installing and maintaining metering equipment and installations.
MPC	Meter Provider (C) – an accreditation provided by NEMMCO for providing data pertaining to the meter.
MSATS	Market Settlements and Transfer Solution – a database management by NEMMCO. It supports the settlement of the wholesale NEM according to the rules set out in the NER, relevant legislative and regulatory instruments, and industry codes of practice.
NEM	National Electricity Market – the environment in which MSATS roles interact.
NEMMCO	National Electricity Market Management Company Limited – the company which operates and administers the National Electricity Market in accordance with the National Electricity Rules.
NER	National Electricity Rules – rules made under the National Electricity Law (which is applied as a law of Queensland), and have the force of law. The rules govern the obligations of all NEM MSATS Roles at an operational level of detail.
NMI	National Meter Identifier – a NMI identifies a connection point with the market.
NMI Discovery	The process where a retailer can find a customer's premise and metering details in MSATS. The NMI is required before the Retailer can initiate a transfer request with the LNSP.
NSLP	Net System Load Profile – a profile shape calculated from interval data for metered inputs (e.g. TNI data) less interval data (metered or derived) outputs, to derive an average load shape for the remaining energy in the profile area. It is the residual of the total system load after the Net Off and the Peel Off. The Net Off consists of all of the interval meters. The Peel Off consists of profiles that have been applied to other basic meters, as defined by the jurisdictional rules.
PEACE	The billing and premise management application system which supports the ENERGEX on-contract and reverted customer billing and network billing functions.

PEACE CIS	PEACE Customer Information System – database component within the PEACE network instance which received customer data from FACOM trickle feed.
PEACE Market Solution	Database component within PEACE network instance which sends / receives B2Bs from other MSATS Roles.
PEACE NMR	PEACE NMI Master Repository – database component within the PEACE network instance which contains NMI Standing Data as defined by MSATS.
Peel Off	The process in which an electricity load that belongs to a particular customer / customer class can be “peeled off” from the accumulated electricity load (otherwise known as net surplus load profile (NSLP)) and becomes a separate profile of its own. This would allow, for example, a load that provides demand management to have its own profile which is distinguishable from the electricity load.
Profile / Profiling	Use of an algorithm to allocate basic meter readings to each half hour trading intervals during the meter reading period.
Profile Area	A geographical area comprising a group of one or more TNIs for which a single LNSP shall be calculated.
Retailer	The party from which a customer has contracted to purchase electricity.
ROLR	Retailer of Last Resort – The party required to assume the obligations under the NER (including the obligation to pay trading amounts and other amounts due) of a Retailer that has defaulted in the performance of its obligations.
RP	Responsible Person – an MSATS Role who has the ultimate responsibility to ensure that meter provision, installation and maintenance is performed by accredited parties.
SEPL	Service Essentials Pty Ltd
Standing Data	Standing data refers to the 49 mandatory fields that must be published to MSATS for each NMI in the LNSP area to enable NMI discovery. This provides the minimum set of data that is required for market interaction.
Standard NMI	These are the NMIs that remain on the Standard Uniform Tariff with their current retailer. These NMIs will be managed in FACOM.
Trouble Call	An inbound call to ENERGEX in relation to any problem affecting the network such as supply issues, cold water complaint and wires down.
TNI	Transmission Node Identifier – identifies a transmission network connection point.
TOHT	System utilised for the collation of information in order to compile a meter’s standing data and subsequent publication to the market (MSATS) of standing data and associated meter readings.
Transfer	The process of moving from one retailer to another retailer.