



Report PE05.320  
Date 22 June 2005  
File B/06/07/04

Committee Policy, Finance and Strategy  
Author Murray Kennedy Strategy and Asset Manager

## Electricity Tenders for Water Supply and the Regional Council Centre

### 1. Introduction

The current electrical energy contract for the key wholesale water supply sites and the Regional Council Centre expires on 30 September 2005. This was a three year contract that followed an earlier three year contract. Since the electricity market appears to be reasonably stable at present, it was decided to invite tenders for a new four year contract. Network services for the sites are purchased through a separate contract with Vector.

### 2. Exclusion of the public

Grounds for exclusion of the public under section 48(1) of the *Local Government Official Information and Meetings Act 1987* are:

*That the public conduct of the whole or relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, i.e., commercial negotiations.*

### 3. Significance of the decision

The matters in this report do not trigger the significance policy of the Council or otherwise trigger section 76(3)(b) of the Local Government Act 2002.

### 4. Tenders

Four tenders were received, each offering a slightly different degree of risk for Greater Wellington Water (GWW) to assume. Tenders are presented in order of least GWW risk to maximum risk.

<b>1.1 Genesis Energy</b>	Year 1	\$1,407,831
	Year 2	\$1,492,454
	Year 3	\$1,545,366
	Year 4	\$1,577,535
		<hr/>
		\$6,023,186

Monthly charges	Year 1	\$25,920
	Year 2	\$25,920
	Year 3	\$25,920
	Year 4	\$25,920
		<hr/>
		\$103,680

<b>1.2 Contact Energy</b>	Year 1	\$1,436,669
	Year 2	\$1,483,825
	Year 3	\$1,471,899
	Year 4	\$1,498,047
		<hr/>
		\$5,890,440

There is an inconsistency between the spreadsheet and the written tender for the monthly charges. The spreadsheet gives the monthly charge as \$3.44 per site, whereas the written tender gives this as the daily charge. The latter is likely to be correct, estimated at \$30,174 a year.

<b>1.3 Meridian Energy</b>	Year 1	\$1,400,803
	Year 2	\$1,400,803
	Year 3	\$1,411,437
	Year 4	\$1,453,833
		<hr/>
		\$5,666,876

Monthly charges are not fully resolved in the tender. Unit rates are provided.

**1.4 Mercury Energy** Spot electricity prices plus a fee of 0.4 cent/kWh.

## 5. Discussion

### 5.1 Genesis Energy

This company is the current supplier and they have offered a contract that is identical to the present one. That is, fixed unit prices (cents/kWh) and no volume constraints. Since the current contract was let, the Electricity Commission has been established and introduced an industry fee of 0.058 cents/kWh.

Genesis has absorbed this fee in their current contract and indicated the cost is included in their tender rates. The amount is approximately \$11,500 a year.

## 5.2 Contact Energy

Contact Energy's prices are competitive but there are a number of issues that would require resolution before a tender could be accepted..

The tender is based on fixed prices with variable volumes up to a limit. Contact has fixed the prices but only up to 20% over the GWW estimated volume in a 12 month period. Some indication is required from Contact of what changes, if any, there would be in prices once the maximum quantity was reached.

Their metering charge is \$3.44 per site per month on the spreadsheet, but \$3.44 per day in the written document. A daily date of \$3.44 is realistic. On the basis of 24 metered sites, the price would be \$30,134 a year. However, Contact requires an extra fee for any sites with 11kV metering (as opposed to 400V). Te Marua pumping station is in this category and Contact has not stated what the extra fee might be.

Contact requires first right of refusal to match any alternative offer once the contract expires in four years time. This is not acceptable.

Contact has not included the Electricity Commission fee in their unit prices, this will add about \$46,000 over the four year period.

## 5.3 Meridian Energy

This company has been innovative in noting GWW wishes to save power costs by using the different water treatment plants at various times. It has suggested fixed prices and variable volume for some sites, and fixed prices and fixed volumes for others. With the latter, the volume is 105% above an agreed figure. Additional volume (for 12 sites) is then purchased at spot electricity prices, in return the price for up to 105% of volume is less than the fixed price variable volume rates.

The difficulty with the fixed price/fixed volume method is the need to nominate the volume for each four hour time block for each site for every month of the year. At present, GWW is not set up to manage power usage on this basis and the system optimiser was not designed for this.

Discussing this aspect with Meridian has resulted in them agreeing to allow GWW to overstate the required volumes for some times of the year. The contract also would allow the volumes to be reset each year.

The risk period for GWW is over the summer and into March with volatile water usage. This is a time when electricity prices tend to be low and the chances of very high spot prices are also low.

Risks can also be managed by setting up the water supply information system to monitor the power usage at each site on a real time basis and plotting this against the maximum contracted volume for the month.

In the event that spot electricity prices are very high, then the water supply production can be switched to lower energy usage water treatment plants.

Meridian Energy has not allowed for the Electricity Commission charges in its unit rates. This will add about \$46,000 a year over the four year period.

Meridian will pass through the metering charges from the third party provider at cost. This is expected to be about \$30,000 a year.

#### **5.4 Mercury Energy**

Over a long period of time, it could be expected that buying on the spot market +0.4 cents/kWh would work out cheapest. But, the ability to save energy by switching between water treatment plants has its limitations.

Purchasing by this method requires a daily hands-on approach to get the best out of it and could detract staff from water quality and other water supply issues. The electricity budget could be overspent in any one year, which can be moderated by operating an electricity reserve account.

### **6. Analysis**

Which energy supplier to choose comes down to cost versus risk.

Genesis Energy has offered low risk pricing but their first year average contract price presents an 18 percent price increase on the average price for the last year of the current contract.

Mercury Energy passes all the risk over to GWW but with it goes price volatility. The risks are judged to be too high.

Contact Energy's price package is relatively safe and the volume cap of 20 percent over the nominated amount is unlikely to be exceeded. Hence, it is only slightly more risky than the Genesis offer and would be acceptable.

Meridian Energy's proposal, in terms of risk, sits between Contact and Mercury, and offers a potential saving of \$223,000 over the Contact price for the four year contract term.

It then becomes an issue as to whether or not GWW is likely to spend \$233,000 or \$56,000 a year in spot market purchases above the contract prices.

For example, the GWW contract volume included in the tender is 19,843,000 kWh + a 5% margin. Assume another 10% or 200,000 kWh is purchased when the contract price is 6 cents/kWh and the spot price is 9 cents/kWh. The premium for not being on the contract price is then 3 cents/kWh. So the extra cost to GWW is \$6,000. This is well short of the potential \$56,000 annual saving by taking the Meridian offer over the Contact offer.

Staff are confident that they can manage the system so that a Meridian contract will produce lower prices over a four year term than a Contact Energy contract.

## **6.1 Carbon tax**

The Government is to introduce a carbon tax from 1 April 2007. This will affect electricity prices. If it is applied to all prices, then the tax is neutral with regard to supplier choice. If it is applied only to electricity generation that comes from hydrocarbon fuels, then Contact Energy's prices will rise and Meridian Energy's will not be affected or only slightly affected. This is because Meridian's generation is entirely from renewable energy sources. It does occasionally purchase on the spot market.

Possible carbon taxes have not been included in any of the tender prices.

## **6.2 Regional Council Centre**

About 5 percent of the contract volume is for the Regional Council Centre. Pringle House Ltd will be invited to endorse the Council's decision on the energy contract.

## **7. Financial**

The wholesale water supply budget makes allowance each year for the expected energy costs.

## 8. Recommendation

*That the Committee recommends to Council to:*

- (1) **Accept** in principle the Meridian Energy tender.*
- (2) **Delegate** to the Chief Executive for signing off on the contract once negotiations are completed with Meridian.*

Report prepared by:

Report approved by:

**Murray Kennedy**  
Strategy and Asset Manager

**David Benham**  
Divisional Manager  
Utility Services

**Disclosure:** A person associated with the writer holds financial instruments in a company associated with Contact Energy.

Public Excluded