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Committee Policy, Finance and Strategy Committee  
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## **Puketiro wind farm development: report on tenders received for development, ownership and operation**

### **1. Purpose**

To provide the Committee with the results of tenders received for the Puketiro wind farm development; to seek approval to confirm "Preferred Tenderer" status and proceed to finalise a development contract.

### **2. Significance of the decision**

The matters for decision 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.

The decision relates solely to the confirmation of "Preferred Tenderer" status and actions to enter into a development contract. The decision to approve the offering of a 50 year easement over Greater Wellington land at Puketiro for a wind energy development was made by the Council on 15 December 2005. In reaching its decision in 2005, Greater Wellington undertook consultation which was closely aligned to the special consultative procedure outlined in the Local Government Act 2002. The consultation showed a very high level of support for the development of a wind farm site at Puketiro.

### **3. Exclusion of the public**

Grounds for exclusion of the public and officers 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 exists ( i.e. to enable the Council to carry on contract negotiations without prejudice or disadvantage, and to protect information where the making available of that information would be likely unreasonably to prejudice the commercial position of the person who supplied the information or who is the object of the information).*

## 4. Background

Report 05.651 of 7 December 2005 to the Policy, Finance and Strategy Committee provided a detailed background into the feasibility of a wind farm at the Puketiro site and received committee approval to proceed with the process of finding a suitable wind energy developer. Report PE06.167 of 2 May 2006 to the Landcare Committee advised that, following a registration of interest, tender documents for the development of a wind farm at Puketiro would be issued to seven companies.

The tender documents were issued to the seven companies and closed on 19 September 2006. This report covers the evaluation of those tenders and recommends the preferred tenderer and second preferred tenderer selected to proceed with the negotiation of a wind farm development contract at Puketiro.

## 5. Statutory considerations

In 2005, the Council promoted the Wellington Regional Council (Water Board Functions) Act. At the Select Committee hearing on the Bill, the Select Committee was given an assurance that the Council would consult the public about wind farms on water catchment land. Extensive consultation was carried out as set out in the Local Government Act. The results of the consultation were reported separately to the Council (paper 05.611 of 3 November 2005).

Clause 4(3) of the Wellington Regional Council (Water Board Functions) 2005 allows the Council to enter into leases and such other arrangements that it believes appropriate for the generation of renewable energy on water catchment land. The contract for the Puketiro development complies with the Act.

Clause 4(4) of the Act requires the Council to be satisfied that any wind farm development will not impede the prime purpose for the Council holding the land, namely future water collection. Attachment 1 sets out an analysis of how the wind farm development may impact on the use of the area as a future water catchment and how these issues will be managed. It is concluded that the development will not impede the use as a future water catchment.

## 6. Preliminary investigations and public consultation

The Wind Energy Subcommittee provided its report to the Policy, Finance and Strategy Committee (report 05.611 of 3 November 2005) on the results of the public consultation carried out on making the land at Puketiro available for wind energy development. The Committee endorsed the report and gave approval at the meeting to proceed with finding a suitable developer.

Report PE06.167 of 2 May 2006 to the Landcare Committee identified the progress made in discussions with private landowners for involvement in a larger wind farm development and private access to the Puketiro site and with Transit NZ for land access. In addition consultants were commissioned to advise on access options (both on Council and private land) and wind data at the Puketiro site continued to be collated.

This information was made available to all tenderers.

## **7. Tenders received**

Of the seven tenderers invited to submit a proposal, only five tenders were received - being Meridian Energy, Genesis Energy, Mighty River Power (MRP), Contact Energy and Renewable Energy Systems Holdings (RES)). The tender from Contact Energy was openly non-conforming.

The standard of tender documentation ranged from adequate (RES) to excellent (MRP, Meridian, Genesis), illustrating the quantum of work necessary on the range of issues involved to develop a feasible tender. A number of tenderers commented that the pre-tender work and consultation carried out by GWRC was very valuable in scoping the project to enable the tender to be put together.

## **8. Tender evaluation**

All tenderers were required to submit a price per megawatt (MW) they would pay the Council for each of 5 ranges of installed generating capacity. The “construction payment” (payable by the Developer to GWRC partially on beginning construction and the remainder on its completion) is calculated by multiplying the actual installed MW generating capacity by the tendered price per MW for the relevant range.

In addition, the Developer will pay the Council a one-off \$85,000 on signing the development contract plus ongoing royalties as a percentage of the revenue earned from the electricity generated (1.5% to year 10 and 2% thereafter).

### **Probability Weighted Evaluation Methodology**

To allow all tenderers to be directly compared over different generating capacities a probability weighted evaluation of the price per MW was adopted. This methodology also discouraged tenderers from submitting tenders with a high price per MW only for high generating capacity and a low payment to the Council if a smaller wind farm eventuated.

Probability weightings were determined by a small Council team prior to the tender closing date based on Council’s wind turbine layout plan provided with the tender documents. The probability of each turbine site being developed was assessed within 5 categories (from very unlikely to almost certain), taking into account the predicted wind velocity at the location, access to the site and physical limitations, other site specific factors and an estimate of its consentability. An overall probability weighting for each category was then obtained and applied to each of the five generating capacity ranges.

The table of these probability weightings for tender evaluation was provided to the Chief Financial Officer prior to any tender being opened.

The probability weighted tender price for each capacity range was calculated by multiplying the probability weighting for the range by a representative generating capacity (generally the mid-point of each range) and by the tender price for the range. The sum of all probability weighted tender prices forms the comparative tender sum.

The result of the evaluation of all tenders received is shown in Attachment 2.

## Tenderer responses

Contact Energy did not provide a price per MW for any range in their non-conforming tender but proposed royalty payments only. Mighty River Power (MRP) provided a price consisting of both fixed and estimated components. When MRP were advised that a total fixed price was required, we were surprised to receive an increased price confirmed for all capacity ranges. Attachment 2 includes the calculation for both MRP's original and confirmed prices.

Since all tenders included different alternatives, some uncertainties and tags, it was necessary to achieve a common baseline to allow the tenders to be evaluated. Discussion, clarification and confirmation of the issues was therefore carried out with each tenderer as necessary.

## 9. Preferred tenderer

We recommend **Renewable Energy Systems Holdings Ltd (RES)** as the preferred tenderer.

RES has the highest probability weighted tender sum by a large margin and a pricing structure that will yield an initial payment between approx. \$1.6M and \$2.4M depending on the generating capacity actually installed (expected to be above 40MW). Under the tendered pricing structure RES has a financial incentive to achieve an installed generating capacity above 80MW and up to 100MW (which we also assessed as the most probable range).

Their preliminary turbine layout plan has the lowest number of turbines of all tenderers, particularly on the southern ridge closer to Moonshine Road, which is on private land. This demonstrates a pragmatic approach to what is expected to be consentable and achievable. Almost 75% of these turbines are planned to be on GWRC land, resulting in higher royalty payments for the Council from the energy revenue than from some of the other tenderers.

RES's development programme provides for early construction and completion by December 2010. Provided this is achieved the initial payment and royalty payments would be received earlier than with most of the other tenderers.

The Net Present Value of all payments to the Council over the initial 25 year contract term, based on the tendered development by RES of a 123MW wind farm with 90MW on Council land, is a maximum of \$5.5M. The annual royalty would commence at approx. \$312,000 in 2011. This estimate is based on realistic generating rates and a 2% annual increase in electricity pricing above the rate of inflation. There is also a right of renewal for a further 25 years, but the payments from this second period have not been included in the analysis.

In addition to the royalty payments RES agrees to pay to the Council 50% of the value of any carbon credits received from operation of wind turbines on Council land.

## Summary of payments

Signing fee	\$80,000
Purchase of wind mast	\$5,000
Construction payment	between \$1.6M and \$2.46M
Annual royalty payment	\$312,000 (est. 1 <sup>st</sup> payment in 2011)
50% value of Carbon credits	\$ unknown
NPV of total sum (25 years)	between \$4.1 and \$5.5M
Est. actual payments (25 years)	between \$10.15M and \$13.3M

RES's tender has been reviewed by Bell Gully Barristers & Solicitors and found to contain no material issues that would prevent a Development Contract being successfully negotiated and agreed. RES's tender contained the least number of contract tags of all tenderers, and includes an alternative royalty option that appears to provide more certainty and would be considered as a part of the negotiation.

## Second preferred tenderer

We recommend **Mighty River Power Ltd (MRP)** as the second preferred tenderer.

MRP provided the second highest probability weighted tender sum approx. \$217,000 behind RES; but substantially ahead of the other tenderers, even if only the fixed component of their original price is considered. Their tender provides an initial payment between \$1.6M and \$2M for the most probable range of installed generating capacity, but reducing substantially at lower generating levels (in contrast with RES).

The MRP tender also provides for payment to Council of 50% of the value of any carbon credits received from operation of wind turbines on Council land.

MRP's preliminary development plan covers a longer period before resource consent application and completion of construction in December 2012 (two years later than RES). Their tender also includes provisions for not proceeding with development if specific targets are not achieved (i.e. wind speed and land availability). In contrast, RES has stated a willingness to proceed only on GWRC land if agreement cannot be reached with private landowners.

MRP's tender has been reviewed by Bell Gully and found to contain a number of issues that would require careful discussion and consideration to allow a Development Contract to be successfully negotiated and agreed. With the exception of RES, this is similar to the other tenderers.

MRP's tender price and conditions are clearly inferior to RES but ahead of the other tenderers. We propose to only proceed to negotiate a Development Contract with MRP if material issues arise that prevented a contract being successfully negotiated with RES.

## 10. About the preferred tenderers

### Renewable Energy Systems Holdings – 1st preferred tenderer

Renewable Energy Systems Holdings Ltd (RES) is a wholly owned subsidiary of the Sir Robert McAlpine group of companies, a privately owned British construction and engineering company with a 130 year history.

RES was formed in 1981 and is totally focussed on the development, construction and operation of renewable wind energy. It is one of the larger wind energy companies in the world, with over 1100MW of wind energy capacity already constructed and several hundred MW under development in the UK, Europe, North America and Australia. The company is based in the UK and also has offices in France, Sweden, USA, Canada and Australia. The RES group employs more than 215 people.

At this time, RES has no wind farm operation or development underway in New Zealand. If successful with this tender RES intend to open a local office in New Zealand but would manage preliminary activities using staff from the Sydney office and involve experienced senior UK staff in the construction.

RES has also nominated a number of New Zealand consultants and contractors that would be involved in the project if they are successful. The resources and experience of these parties is similar to those proposed by the other tenderers.

### Mighty River Power – 2nd preferred tenderer

Mighty River Power (MRP) is a state owned electricity-generating company with the majority of its 1300MW approx. generating capacity currently in hydro, geothermal and coal energy. The company is however planning to diversify into wind energy and is currently looking at 6 potential wind farm sites in New Zealand. Their energy retail arm is Mercury Energy.

At this point, MRP have not developed a wind farm but are actively engaged in seeking approval for the Palmerston North City Council owned Turitea site in the Manawatu. MRP would evaluate the economic benefits of the Puketiro site relative to their other potential wind farm sites to determine whether to proceed and its timing.

MRP have engaged staff with experience in wind farm development and operation in New Zealand and overseas. Their tender identified experienced consultants and contractors for the development (largely New Zealand based).

MRP has carried out a reasonably detailed technical assessment of the Puketiro site prior to tender and carried out discussions with adjacent private landowners. As a result they were able to submit a very comprehensive tender.

## 11. Risk analysis

There are several risks for the Council associated with this project. General risks, such as a major downturn in the economy, are not evaluated in this section; rather it concentrates on specific project risks.

Issue	Comment
Resource consents	It would seem likely that resource consents would be granted for at least half of the wind farm, unless there were some serious issues during the construction phase, for example, access to the site that caused the whole project to be declined. While RES has indicated a maximum of 123 megawatts for the site (including turbines on private land), they have indicated that they would proceed with as little as 40 megawatts on the Council land.
Cost escalation	Following the initial investigations, over about the first 18 months by RES, it is possible that the world price of wind turbines could increase and the NZ dollar depreciates to a point where the project is not economic. This risk is largely with RES as they are funding the investigations. The same set of circumstances though would apply to all tenderers. If such circumstances did eventuate, then the project could be deferred until such time as it was economic.
Construction not completed	<p>RES has indicated that it will finance the project through a special purpose company that will be 70% debt funded from a bank and 30% equity funded. The other tenderers are proposing to raise debt financing through the balance sheet of the whole company rather than the specific project. The advantage to GWRC of a special purpose company being adopted is that the bank will appoint independent wind farm engineers to fully assess the project before it signs off on the funding.</p> <p>During the construction phase, the parent company of RES, namely Sir Robert McAlpine Enterprises Ltd, will guarantee that RES will carry out its obligations to investigate and, if economic and consented, to build the project. So far, the RES Group has successfully completed over 1100 megawatts of wind farm developments spread over 40 projects worldwide. They currently have another 500 megawatts under construction. The RES Group has never failed to complete a project it has started.</p>
Power Sales Contract	Because the competitors to RES for this project are also the same companies that would be approached to sign a contract for the sale of power from the Puketiro development, RES at this point has not been able to conclude a power sales contract. RES would not start construction until a Power Sales Contract has been

	concluded; the risk of not concluding one is seen to be very slight.
Royalty payments	Royalty payments to the Council have been estimated but may vary by month and by year. The value of royalty payments to the Council is determined by the quantity of electricity generated by turbines on Council land and the sale price of the electricity. The capacity of turbines on Council land will not be assured until installed; electricity generation is affected by climatic conditions, and the sale price may vary by the ½ hour according to supply and demand.
GWRC delays RES	Creating an undue delay to RES by GWRC potentially puts at risk some of the money that RES will pay to GWRC. It is intended that GWRC will appoint a part-time project co-ordinator to form the liaison between RES and GWRC to minimise the possibility of the Council causing a delay.

## 12. Communication

No public statement on the preferred or successful tenderer will be made until the development contract has been finalised. Contract prices will remain confidential.



## 13. Recommendations

*That the Committee:*

1. ***Receives*** the report.
2. ***Notes*** its contents.
3. ***Notes*** that the pre-tender activities carried out by the Council relating to consultation, collection of wind data, preliminary investigations, and discussion with adjoining landowners, was welcomed by tenderers and has been very valuable in achieving competitive tenders.
4. ***Agrees*** that the Puketiro wind farm development will not impede the area also being used as a future water catchment.
5. ***Approves*** the confirmation of **Renewable Energy Systems Holdings Ltd** as the preferred tenderer and **Mighty River Power Ltd** as 2<sup>nd</sup> preferred tenderer.
6. ***Instructs*** officers to enter into negotiation with the preferred tenderer to conclude the Puketiro wind farm development contract, and if the development contract cannot be agreed, to then carry out similar negotiations with the 2nd preferred tenderer.
7. ***Delegates*** the signing of the development contract to the Chief Executive when successfully negotiated.
8. ***Approves*** the issuing of a media release once a contract has been concluded.

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### Attachments

- Attachment 1: Puketiro wind farm site – water catchment issues: Certification to Council
- Attachment 2: Pricing schedule and probability weighted evaluation