

Board Paper

October 2013

Title: Electricity Retailing Pilot Project - update

This paper updates the Board on the proposal to run an electricity retailing pilot as a lead up to the finish of our current three year Power Purchase Agreement (PPA) with Trustpower in October 2014. This proposal was the subject of a previous Paper at the July Board Meeting, where approval was given to move ahead with the pilot. However, at the August meeting, further clarification was sought in light of the projected expenditure of approximately \$54k which had not been specifically budgeted for.

This paper provides further clarification on the purpose and benefit of the pilot and updates on some preliminary preparatory work I approved prior going on leave.

A separate paper been prepared regarding the revised budget outlook and proposes that the retail pilot be included in the work programme for this year.

Background

The July Board Paper is attached for background and reference.

In simple terms, the scope of the pilot is to develop and implement the systems required to sell electricity to our irrigators and to gain the experience of managing these systems to confirm that it is feasible for us to move to a full retail model at the end of our current PPA.

Since we are fully contracted to TrustPower via the PPA at present, we actually need to engage another electricity supplier for the pilot and it is proposed that we engage with Pioneer Generation for this purpose. Pioneer have been very active over the last two years in extending their generation business into direct wholesale and retail supply and are seen as a suitable long term partner with OWL to provide additional services (typically generation support and/or hedge contracts) if we do adopt an electricity retail model.

Simply Energy would provide overall management of the pilot project as well as the electricity market services required for OWL to operate in the market such as monthly reconciliation of meter data, information for billing our customers and also settlement with Pioneer.

Discussion

Strategic benefits

Electricity prices in the wholesale market are at historically low levels, and are anticipated to remain there for the foreseeable future. Current analysis suggests that there is 25% over-capacity across the country (when comparing demand levels to generation capabilities), which will be difficult to correct in the next few years. Although periods of high prices will still occur, market analysts do not anticipate the same risk of a sustained period with high prices.

The result of low wholesale prices for OWL, such as we have seen from this winter when we have been on Spot Prices (less margin), and the pessimistic market

outlook, is that we would not anticipate an off-take agreement reaching the same price as our current agreement. On that basis, I believe the pilot will provide OWL with a genuine alternative to a straight off-take agreement that will assist with preserving some of the value of our generation.

This pilot should be justified against the preservation of our circa \$2m per annum of generation value.

As part of this pilot, there will also be the opportunity to explore potential strategic benefits from a closer relationship with Pioneer Generation. It is proposed that we enter into an agreement with Pioneer for this pilot and part of the experience we are seeking through the pilot is to establish the potential fit between our organisations. Looking beyond our current PPA, TrustPower remain as a likely partner for OWL however our commercial arrangements may not be as all-encompassing as they are at present and we may be only seeking support contracts (physical and/or financial) instead of our current 100% off-take. It is considered prudent to use the opportunity of the pilot to investigate alternative options to TrustPower to provide us with options and choice when we are negotiating these future contracts.

Value proposition

To reiterate the potential value proposition, Simply Energy's proposal from 30th May (presented in the July paper) quantified the potential value from a self-retailing model from a range of \$90-\$270k per annum, depending on the uptake from our farmer shareholders. This pilot will give us an opportunity to explore the value further. This value proposition is a function of three key factors:

1. The uptake rate we can expect from our farmer shareholders
2. The fixed margin we can expect to make from retailing to those customer (ie the difference between the load following hedge price and the tariff price that is offered to the customer)
3. Any value add opportunities we can explore – smart metering, network value etc.

In my view the best way to quantify these areas is by undertaking a pilot, such as we are proposing.

Current Situation

Since I was unable to commit to Simply Energy for the full pilot prior to my leave period, I did instruct them to proceed with some preparatory work in reviewing electricity accounts from a sample of our farmers, to hold initial discussions with Pioneer Generation regarding a hedge contract for this period on the basis on that review, and also to do some preliminary planning on systems design and documentation that will be utilised through the pilot. This work was to be carried out on a time and materials basis with a not-to-exceed budget of \$9,000.

Simply Energy have undertaken this preliminary work and I have scheduled a meeting at Pleasant Point with them to get feedback from them, pending approval to move ahead with the pilot.

This pilot project was not included specifically in this year's budget however there is a general budget provision of \$40k for Management & Strategic Projects which has traditionally been allocated for projects such as these relating to our generation business. There are some savings arising from our decision in June to pay our annual insurance premium in one upfront payment. This has reduced our forecast interest costs for this year by \$15k. It is proposed that these budgeted sums (\$40k + \$15k) be allocated to the electricity pilot project.

The cost estimate from Simply Energy for the pilot has a total net cost of \$54k. The pilot will run through to September 2014 so some of the monthly fixed and variable costs will be incurred in the 2014/15 financial year. The estimated cost for this financial year is \$47k.

Note that there are some 'prudential' requirements in settling in the New Zealand Electricity Market that may require OWL to maintain a certain cash fund/deposit within the NZEM. This is anticipated to typically be \$20k on average. Worst case suggests up to \$70k. We will maintain sufficient cashflow to fund this prudential requirement.

Recommendations

It is recommended that the Board:

1. Endorse the resolution of the July meeting to move implement the electricity pilot project in conjunction with Simply Energy Ltd.



Tony McCormick
Chief Executive
25th October 2013

Attachments:

1. Previous Board Paper on the Electricity Pilot Project

Board Paper

July 2013

Title: **Electricity Retail Pilot**

Purpose

This paper presents a proposal to undertake a pilot programme for electricity retailing to our shareholders and seeks Board approval to move ahead with the pilot. The main objective is to establish the systems necessary to be able to retail electricity and to gain experience via the pilot before committing to a full scale roll out. The low volume pilot programme will incur a net cost (estimated at \$53k) because it involves establishment and setup costs that are not covered by the revenue from the modest electricity volumes. The setup costs are potentially an investment in the full rollout.

Background

We have recently been working with Simply Energy Limited (SEL) on a potential opportunity of developing a self-retailing electricity model which utilises the generation from the hydro generator to supply to our shareholder base. In 2011, we looked a similar opportunity in partnership with MainPower, which did not proceed due to MainPower having a change in strategic priorities.

The in-depth analysis completed in 2011 showed a total estimated load for our shareholder base of 24GWh per annum and a generation volume from Opuha Power Station of 17-30GWh. The estimated gross margin from this analysis showed upwards of 5c/kWh margin from a self-retail strategy, or \$1.2m of gross margin across the 24GWh of shareholder load.

Currently, there is an off-take agreement in place with Trustpower for all electricity generated from the power station and a separate operations and maintenance contract, both of which end in September 2014. There is a clear expectation of both parties that the O&M Contract will be renewed/extended however this is not the same for the off-take contract where the possibility of OWL self-retailing has been clearly flagged.

SEL is a service provider in the NZ Electricity Market and holds registrations as a generator, retailer and reconciliation participant. These registrations enable them to provide solutions for selling generation into the market, as they did for us during 2011, retailing electricity to retail customers as well as market compliance and reconciliation services, which is the most complicated part of the process. They allow their customers to leverage off their existing agreements and relationships to provide low cost retail opportunities. In addition, they have access to market participants who may have complimentary strategic objectives.

Proposal

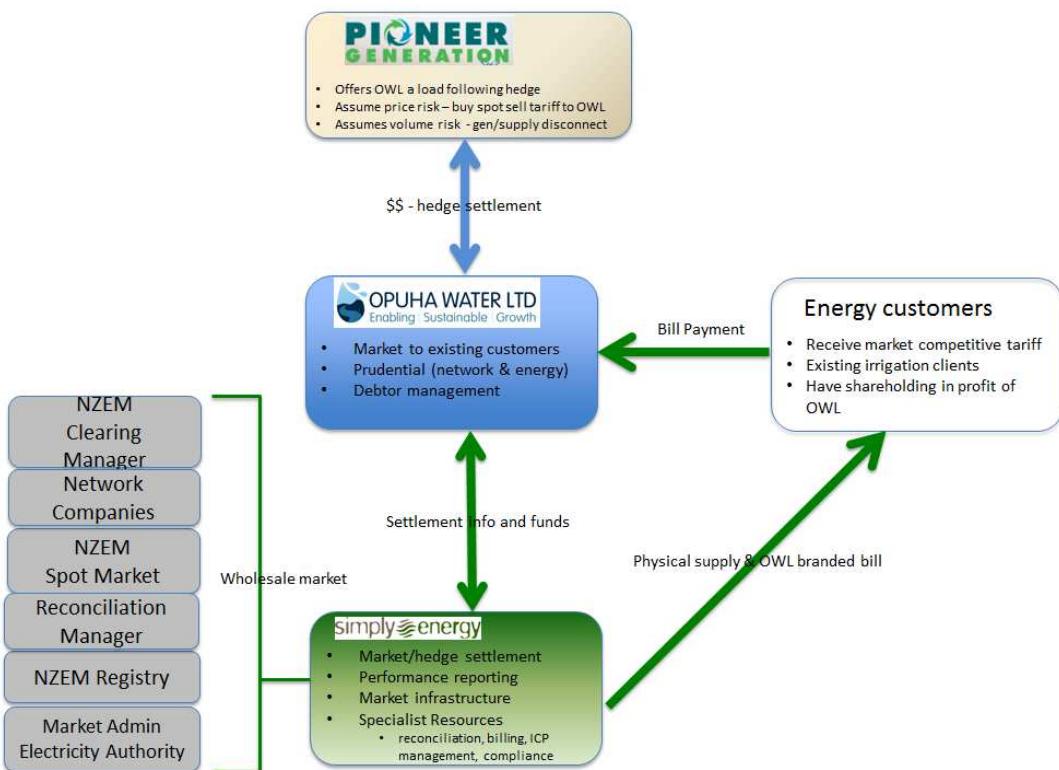
SEL have proposed a low-risk retail pilot is undertaken by Opuha Water to allow us to further understand the value proposition. This pilot would involve a sample of typical customers from our shareholder base who would switch supply from their

existing electricity provider to Simply Energy who would be the retailer on behalf of Opua Water.

Pioneer Generation Limited (PGL), who are a trust owned generation company with a portfolio of generation assets and retail customers mainly in the South Island, have expressed a willingness in principle to provide a Load Following hedge contract to Opua Water. These types of contracts mean they effectively guarantee the supply of electricity to our customers at a fixed cost, and they assume price/market risk.

Opua Water would be required to manage the prudential requirements for retail supply and manage the debtors for the electricity and network charges to our customers. SEL would provide all other services for the pilot including customer billing on a Opua branded invoice, wholesale purchasing/settlement, reconciliation/market compliance, reporting and the ability to leverage off existing contracts for third party services.

Summary of proposed structure:



The proposed structure supports a low risk opportunity for OWL to enter the retail market, on a trial basis, utilising our existing client base with limited operational requirements initially. It is intended that this trial would run for a 12 month period to coincide with the expiry of our existing off-take agreement with Trustpower.

Discussion

Market price risk

The major risk of a retail electricity strategy is the market price risk resulting from the wholesale market price being so dependent on the hydrology during the year. In the current proposal this has been managed through the load following hedge from PGL. If the pilot was expanded into a wider retail strategy when the Trustpower agreement expires, this risk could be managed using a combination of Opuha's own generation capacity and market hedges where appropriate.

Operational requirements

OWL's operational requirements for the initial pilot would be low. SEL offer a fully managed solution with our only requirements being providing debtor management and some capital for the prudential requirements of the market. The SEL service provides performance reporting and management reporting to ensure the pilot performance will be easily evaluated.

Market rationale

Over the last few years there has been a general downward trend in the wholesale market prices. This is due to an excess supply of new generation without seeing an increase in the demand across the country. This has been further impacted by the risk of the aluminum smelter removing its demand from the system. Our business is exposed to this weak outlook of wholesale electricity prices and the self-retailing path does provide the opportunity to increase the value of our power generation business in a risk managed way.

Economic evaluation

Value proposition:

Based on the total shareholder load estimate of 24GWh and a net margin estimate of 1.5c/kWh the following table shows the potential margin from a wider retail strategy:

Projected additional margin (c/kWh)	Volume supplied (MWh)	Value – net margin after SEL fees (\$)
1.5 c/kWh	6,000 (25% uptake)	\$90,000
1.5 c/kWh	12,000 (50% uptake)	\$180,000
1.5 c/kWh	18,000 (75% uptake)	\$270,000

In the 2011 analysis we showed a potential gross margin in the region of 5c/kWh, however for the pilot we have estimated that we will achieve a gross margin of 2c/kWh reflecting a hedge premium paid to PGL, no value from the generation offtake currently under contract with Trustpower and a conservative approach to the pilot. After retail costs the net margin is estimated to be 1.5c/kWh.

It is important to note when considering the value proposition above that the current proposal is different to the 2011 analysis because it is a lower risk structure with PGL assuming the market risk. Whilst this does provide more certainty in the margin for Opuha it also reduces the potential upside.

Pilot costs:

Assuming 20 connection points participate in the initial pilot, the proposed fee structure would see a net cost estimate of the pilot of \$53k for the 12 month period. If the margin from retailing is higher than the 1.5c/kWh modeled or there were more connection points included this cost would decrease. This net cost includes all SEL fees and related costs but does not include a provision for internal OWL costs, which we have assumed to be minimal during the pilot.

The breakdown of this cost is:

Cost Component	\$
Fixed costs - Simply Energy	\$49,250
Variable costs - Simply Energy	\$14,369
Less pilot gross profit from sales (assuming 1.5c margin)	(\$10,176)
TOTAL COST	\$53,443

Fixed costs include the setup fee, monthly retainer, hedge settlement fees and some provision for visits by SEL during the setup phase.

Variable costs include daily account and variable fees from SEL and a provision for product development.

Additional value

SEL have identified other opportunities that, if we were to adopt a wider retail strategy, may capture additional value for Opuha. These include:

- Advanced metering solution – there is potential to capture profit from optimisation of the way line network charges are calculated – particularly in the Alpine Energy Network
- Irrigation control product – there is potential to look at offering the farmers the ability to modify their irrigation activity, and related energy cost, based on the market power price
- Strategic relationship with PGL – by developing a strategic partnership with a market participant it could provide a more competitive process for negotiating an off-take agreement as the pilot will quantify the value of the relationship to PGL.

Conclusion and Recommendation

The analysis from 2011 and the current proposal do indicate that there is value for Opuha Water in investing in a self-retail electricity model. The SEL structure is of particular appeal because it is a fully managed solution and allows us to undertake an initial pilot, with minimal investment, to further evaluate the ongoing opportunity. The load following hedge provides protection from any market risk, which is a key component of any retail market strategy, and basically allow us to make a fixed margin on our supplied volumes. An initial commitment of 12 months for the pilot period also provides Opuha with exit strategies should they decide not to proceed with a wider strategy.

From a financial perspective the gross profit numbers can start becoming quite material if we had 50% of our shareholders on board with 3c/kWh margin. In additional, our target customers are people we have an existing credit relationship with so there is not a material increase in our credit risk.

In terms of the market, this opportunity could provide us with an ongoing strategic partner, at worst it will provide some useful intelligence into the industry which can only have a positive impact in the future.

On the basis that this proposal is to proceed, approval for a budget of \$60k is sought from the Board to move to the implementation phase of this project with SEL. The commercial terms and some requirements still need to be agreed with SEL prior to final commitment on the budget.

It is recommended that the Board approve the initiation of a pilot electricity retailing programme with Simply Energy Ltd with a budget commitment of up to \$60k.



Tony McCormick
Chief Executive
25th July 2013