

Genesis Power Limited (Genesis) and Amendments to Treasury Report:

the Risk Sharing Agreement for e3p

Date:	12 August 2004	Treasury Priority:	High
Security Level:	Commercial Sensitive	Report No:	T2004/1465

# **Action Sought**

	Action Sought	Deadline
Minister of Finance	Sign and initial two copies of the attached Deed.	12 August 2004
•	Sign two copies of the attached schedule to the Deed	
	Sign the attached letter to Genesis.	
Minister of Energy	Sign and initial two copies of the attached Deed.	12 August 2004
	Sign two copies of the attached schedule to the Deed	
	Sign the attached letter to Genesis.	
Associate Minister of Finance (Hon Trevor Mallard)	Note	None
Associate Minister of Finance (Hon David Cunliffe)	Note	None
Minister for State-Owned Enterprises	Note	None

Contact for Telephone Discussion (if required)

Name	Position	Telephone	1 <sup>st</sup> _ Contact
David Taylor	Manager, Commercial Investments		<b>✓</b>
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Enclosure:

Yes

12 August 2004 SE-2-7-1

**Treasury Report:** Genesis Power Limited (Genesis) and Amendments to the Risk Sharing Agreement for **e3p** 

# Executive Summary and Purpose of Report

On 19 July 2004 Cabinet authorised shareholding Ministers, in consultation with the Minister of Energy, to negotiate with Genesis to enter into a risk sharing arrangement that will allow e3p¹ to be built by December 2006. On 9 August 2004 the delegated authority was changed to the Ministers of Finance and Energy to reflect that the orientation of the policy was taking a wider energy perspective regarding certainty of investment in a period of transition to new gas sources. However, in both instances this was conditional on the risks associated with the arrangement being appropriately shared between the Crown and Genesis (CAB Min (04) 23/12 and CAB (04) 26/21 refer).

In the attached letter of 3 August 2004 Genesis has written to shareholding Ministers proposing amendments to the risk sharing arrangement to be executed by 15 August 2004 so that Genesis can contract with Mitsubishi on schedule. The revised proposal follows discussions between Genesis and officials? prompted by shareholding Ministers letter of 19 July 2004 (T2004/1274 refers). The letter sought to amend Genesis' initial proposal to enhance incentives for Genesis to resolve potential gas supply problems, and to avoid industry concerns arising from the arrangement, which could deter investment in generation by other market participants.

Subsequent to 3 August 2004, officials and Genesis have further refined the proposal in drafting of the attached "Deed Relating to Risk Sharing Arrangements for Huntly **e3p** 385 MW Power Station" (the Deed).

This report examines the rationale for the Crown entering into the Deed to ensure **e3p** can be built on schedule, considers key features of it, outlines changes to the proposal since 19 July 2004, and comments on whether the Deed achieves Ministers' aims.

There is a general expectation that **e3p** is the next most logical significant generation project, and if it is delayed or cancelled it would be an unwelcome surprise with adverse implications for the capability of the industry to build generation in a timely way to meet growing electricity demand over the medium term. From an energy policy perspective officials consider that **e3p** proceeding is desirable (but not essential from a security of supply perspective) because there are presently few other generation options with **e3p**'s certainty and timeliness and none as substantial as **e3p**. It also has positive impacts on grid security delaying the need for transmission investment in the upper North Island.

There is still enough uncertainty around **e3p**'s fuel supply that the Genesis Board regard a risk sharing arrangement as a prerequisite to progressing **e3p** at this time, irrespective of financing. If the Government was unwilling to commit to a risk sharing arrangement, **e3p** would be jeopardised and may not be commissioned before 2009.

Energy Efficiency Enhancement (e3p) project - a 385 MW Combined Cycle Gas Turbine at Huntly.

Comprising the Treasury, the Crown Company Monitoring Advisory Unit (CCMAU), the Ministry of Economic Development (MED), and a consultant commercial legal advisor.

The principle purpose of the Deed is to secure the construction of **e3p** by committing the Crown and Genesis to partially share the financial risk of gas shortfalls. To maintain strong incentives on Genesis to obtain sufficient gas, and to self manage risks to **e3p**'s performance, the Deed excludes from gas shortfalls a number of contingencies that could arise that are in Genesis' control or unrelated to non-delivery from gas fields. The effect of the Deed is to require the Crown to make payments directly to Genesis for gas shortfalls, instead of bearing the risk indirectly through its equity ownership of Genesis.

The key changes to Genesis' proposal since 19 July 2004 contained in the Deed include (See Annex 2 for a detailed analysis):

- New Principles and Miscellaneous Changes the Deed has been refocused to reflect energy policy underpinnings. Principles to this effect have been included in the Deed to reinforce any later interpretation. A number of miscellaneous changes have also been made to clarify matters and to improve the Deed's operation.
- Reduced Existing Gas Requirements The Deed now covers a significantly reduced subset of Genesis' total gas, restricted to existing retail and core generation requirements and e3p needs. In total, the Crown's gas exposure is reduced by PJ, \$9(2)(b)(c) which at the Crown's rate of compensation to Genesis for gas shortfalls equates to million. In addition, the Deed provides for a reduction to the Crown's gas exposure if Genesis does not need or cannot use gas for a number of reasons relating to the performance of e3p or its existing retail and core generation requirements.
  - Flexibility of gas use The Deed now makes it clear that Genesis has discretion on physical gas use, but the Deed ensures that this does not impact on the Crown's exposure to gas shortfalls. This is to cater for changing circumstances and demands on the use of gas, such as in the event of a shortage, when Genesis could divert gas to end users who might otherwise have been left without gas.
  - Coverage of Existing contracts The Deed now provides the Crown the option to initiate a mid-term review to allow the opportunity to evaluate the status of gas fields, and reduce the Crown's exposure to proven fields. If the fields are in operation, reserves have not decreased, and the contracts are robust, then after the review such gas contracts will become proven and the Crown will no longer be at risk for non-delivery from them. Genesis has agreed that its current gas contracts for Mangahewa/McKee, Maui and Kauri are considered proven now, reflecting they are in operation with low delivery risk. This removes PJ of gas formerly at risk, equating to million at the compensation rate.

• Gas banking -

J 5.9 (2) (b) (ii) 6.9(2) (j)

Calculation of the Crown's liability - In the Deed, the calculation of liability has now been simplified, and is now conceptually linked to reflect a part-share of the gross margin Genesis requires to make its expected financial returns under its business case rather than Genesis' notional interest cost on e3p debt as previously. This does not change the level of the Crown's payment should the arrangement be invoked. The Crown remains liable for deductible (discussed below) and C

of million over the ten-year term of the arrangement (in the unlikely case of catastrophic gas loss).

• Uneconomic gas below assumed prices— The Deed still requires Genesis to use reasonable endeavours to acquire further gas to fill any shortfalls if it is economic.

) s. 9(2)(b)(i), s. 9(2)(c)

• Threshold for Claims – The Deed now requires Genesis to bear the first pa 39(a)(b)(i) in the value of shortfall gas, and the Crown only covers the balance exceeding the threshold so that the threshold now operates as a deductible.

Officials consider that the Deed represents a material improvement on the initial arrangement. It reflects a range of concessions made by Genesis, and more clearly defines and strengthens the incentives on Genesis to seek gas supplies beyond existing contracts as required. This is because Genesis retains a larger share of the adverse financial risk from gas supply failure.

It is possible that Deed could impact on broader investment intentions. Rather than deter base load generation investment, it may lead incumbents to the incorrect view that the Deed reflects a greater tolerance by the Government to share base load generation investment risk, and so result in other similar approaches to the Crown to share risks.

Overall, in assisting to achieve the Government's energy policy objectives, we consider the Deed involves the likely lowest level of financial risk to the Crown and policy risk to the Government while still providing sufficient comfort to Genesis to proceed with e3p.

If Ministers are in agreement with officials, it is recommended that the Ministers of Finance and Energy execute two copies of the attached Deed by 12 August 2004, including two copies of the attached associated letter that contains a schedule to the Deed. In a separate but related CCMAU report, it is recommended that shareholding Ministers execute the shareholder resolution for a major financing transaction on the same day contingent on the Crown executing the Deed. Lastly, sign the attached letter to Genesis by 12 August 2004 that will accompany the legal documentation. This would enable Genesis to meet the 15 August 2004 deadline for contracting with Mitsubishi for the completion of the power station on schedule.

Information is being prepared in consultation with Ministerial offices and Genesis for a media release to co-incide with Genesis' announcement shortly.

## Consultation

The Crown Company Monitoring Advisory Unit was consulted in the preparation of this report.

#### Recommended Action

It is recommended that Ministers:

- a **note** that on 9 August 2004 Cabinet authorised the Ministers of Finance and Energy to negotiate with Genesis to enter into a risk sharing arrangement that will allow **e3p** to be built by December 2006 (CAB (04) 26/21 refers);
- note that following negotiations with officials pursuant to a Ministerial letter of 19 July 2004, Genesis has written again to shareholding Ministers on 3 August 2004 proposing a revised risk sharing arrangement for enabling the commissioning of e3p, a 385 MW Combined Cycle Gas Turbine at Huntly, by December 2006;
- note that if the Government was unwilling to commit to a risk sharing arrangement, e3p would be jeopardised and may not be commissioned before 2009, which would mean other less certain, timely, and substantial generation options would need to fill electricity supply requirements;
- d **note** that the changes to the risk sharing arrangement represent a material improvement on the initial arrangement, and reflects a range of concessions made by Genesis to retain a larger share of the adverse financial risk from gas supply failure;
- e note that officials consider that the proposed risk sharing arrangement assists to achieve the Government's energy policy objectives by providing sufficient comfort to Genesis to proceed with e3p, but at the likely lowest level of financial risk to the Crown and policy risk to the Government;
- agree to support the current form of the risk sharing arrangement to facilitate the building of e3p;

Agree/declined

Agreed/decline

g sign and initial the attached two copies of the attached "Deed Relating to Risk Sharing Arrangements for Huntly e3p 385 MW Power Station", and sign the two copies of the attached associated letter that contains a schedule to the Deed all by 12 August 2004;

Agree/declined

Agree/decfined

h sign the attached letter to Genesis by 12 August 2004 that will accompany the legal documentation;

Agree/declined

Agree/dediined

- **note** that in a separate but related CCMAU report, it is recommended that shareholding Ministers execute the shareholder resolution for a major financing transaction on 12 August 2004 contingent on the Crown executing the Deed;
- note that the legal documentation between the Crown and Genesis needs to be executed by 12 August 2004 so that Genesis can keep to its schedule for commissioning e3p; and

k **note** that information is being prepared in consultation with Ministerial offices and Genesis for a media release to co-incide with Genesis' announcement shortly.

**David Taylor** 

Manager, Commercial Investments for Secretary to the Treasury

Albert de Geest

Manager Electricity

Ministry of Economic Development

Hon Dr Michael Cullen

Minister of Finance

Hon Pete Hodgson
Minister of Energy

Treasury Report:

Genesis Power Limited (Genesis) and Amendments to the Risk Sharing Agreement for **e3p** 

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## Analysis

1. Concerns have been expressed about whether a risk sharing arrangement is really necessary and how financing e3p may impact on this. In addition, there have been follow up questions to T2004/1274 regarding the financial modelling for e3p, a quantitative assessment of the gas risk, and an assessment of the impact of the sale of Contact Energy to Origin on Kupe (refer to Annex 3).

## Why the Need for a Risk Sharing Arrangement?

- 2. In the electricity industry and amongst broader electricity market stakeholders there is an expectation that e3p will go ahead. Genesis has been developing its plans for e3p since 2001, and commercial prerequisites that previously held it up including long-term contracts for gas supply, finance and building contracts are now perceived to be in place. e3p is generally accepted as the next significant generation project. A further decision to materially delay e3p or cancel the project would be an unwelcome surprise, and would probably raise concerns about electricity market conditions in 2007-2009. It would also raise doubt about the ability of the industry to attract sufficient investment in new capacity over the longer term. Therefore, consideration of a risk sharing arrangement in the circumstances of uncertain gas supplies is reasonable.
- 3. Genesis' position has been unequivocal since 2001. The Board has stated it will not proceed with e3p unless its long-term gas position is secure. This is a view also shared by shareholding Ministers in the original consultation on e3p, and Genesis' financiers as discussed below. When e3p was first proposed, several other generators were also investigating building new CCGT stations, but with the unexpected deterioration in the gas supply (Maui was re-determined down and Pohokura was delayed with estimates of its size were also significantly reduced) these other plans have been progressively deferred<sup>3</sup>, including e3p.
  - Now that Genesis has long-term constraints from the Pohokura and Kupe fields, which are in the process of development further supported by other contracts from currently producing fields, the question remains whether there is sufficient certainty regarding gas supply for Genesis to proceed without Crown assistance.
    - Pohokura is not projected to be in operation until mid-2006 and Kupe has yet to obtain the resource consents necessary for it to develop the field. Therefore, these fields are still subject to a number of significant risks, and can not be considered proven at this point in time. In addition, the aggregate sum of Genesis' contracted gas supplies are not sufficient to meet all Genesis' projected gas requirements (existing retail, other committed generation and e3p). For these reasons the Genesis Board and

regard a risk sharing arrangement as a prerequisite to progressing **e3p** at this time<sup>4</sup>. While there will be differing industry views, ultimately Genesis Board's judgement is critical for determining whether the gas supply has sufficient uncertainty

T2004/1465: Genesis Power Limited (Genesis) and Amendments to the Risk Sharing Agreement for e3p

Page 7

6 9(z)(b)(ii) 6 9(z)(ba)(i 8 9(z)(i)

<sup>&</sup>lt;sup>3</sup> Our understanding of typical industry arrangements is that plants like **e3p** are typically not built using unproven gas fields (i.e. there has to be reasonable confidence in them), as the risks are generally too high, and therefore Genesis' position is not unexpected.

For example, in the unlikely extreme that Genesis failed to obtain any gas from Kupe and Pohokura or any replacement gas, e3p would yield an NPV of finillion for Genesis in the absence of a risk sharing agreement.

to merit some sort of risk sharing arrangement until the gas fields are proven. Nevertheless, the very need for it may also raise industry concerns about proceeding with **e3p** in a period of significant uncertainty while the market transitions from a reliance on Maui to smaller less secure fields.

- 6. Ministers agreed in principle to conditionally support Genesis' decision to build **e3p** subject to a revised risk sharing arrangement regarding **e3p**'s gas supply (T2004/1274). This was based on the advice by officials that from an energy policy perspective **e3p** proceeding is desirable (but not essential from a security of supply perspective) because there are presently few other generation options with **e3p's** certainty and timeliness and none as substantial as **e3p**. In addition, **e3p** offers a substantial boost in the margin between electricity supply and demand
- 7. Regarding **e3p**'s impact on transmission investment, we understand that for the purposes of Transpower's grid planning to date. Transpower has made the assumption that **e3p** would be commissioned by 2008. On the basis that **e3p** or similar plant is built, Transpower has identified the need for substantial investment by winter 2010, in order to maintain security of supply for the upper North Island. With **e3p** (or alternative generation projects in the region) uncommitted, security risks emerge earlier than 2010. For example, without additional generation in the region, the local security risks could reach unacceptable levels in 2008.
- 8. In short, if **e3p** is built it would resolve some of the investment uncertainty and related wider energy issues for an industry in period of transition. However, if the Government is unwilling to commit to a risk sharing arrangement, **e3p** would be jeopardised. **e3p** is not considered to be critical to Genesis survival,

∖ Without a risk sharing (๑๔๖(๒๑)(

arrangement, Genesis probably would not commit to e3p until at least 2007 when the status of Kupe and Pohokura would be clearer, meaning that e3p may not be commissioned before 2009.

# Do e3p's Financing Arrangements have an Impact?

- 9. e3p will be 100% debt financed (refer to Annex I for the details), and Genesis is no longer seeking a change in dividend policy to mitigate the impact of debt servicing costs before e3p is in operation. Instead it will review dividend policy each year as part of the annual business planning process, and according to the circumstances as is the standard SOE practice. The finance facility that Genesis has negotiated qualifies as a major transaction under section 129 of the Companies Act 1993, and as such Genesis is required to obtain the explicit approval of shareholding Ministers before it can enter into the facility. A separate report prepared by the Crown Company Monitoring Advisory Unit [04-314 refers] recommends that shareholding Ministers approve the signing of the special resolution, conditional on the Crown committing to the risk sharing agreement.
  - While there will be full recourse to Genesis' whole balance sheet for the revolving credit facility of \$675 million, the

11. Leaving aside the gas supply uncertainties, if Genesis had opted to project finance **e3p** we understand that typically the finance rate would be materially higher than currently

s-9(2)(b)(ii) s-9(2)(b)(i) s-9(2)(1) on offer because financiers would not have recourse to Genesis broader business should e3p struggle to meet finance payments. This would also mean that the restrictions on e3p's arrangements would have been more onerous.

- 12. If Genesis was to use equity finance **e3p** through a capital injection, we understand that the Board would still be reluctant to commit to **e3p** without a risk sharing arrangement, as the Board would not want to be held to account by shareholders for potentially significant losses by Genesis should gas supplies be insufficient.
- 13. In conclusion, Genesis' choice of financing method has no impact on Genesis' desire for a risk sharing arrangement, but depending on Genesis' preferred financing method it would impact on the particulars of such an arrangement.

## Overview of the Deed's Operation and Its Impact

- 14. The principle purpose of the Deed is to secure the construction of e3p by committing the Crown and Genesis to partially share the financial risk of gas shortfalls. The Deed evaluates Genesis' gas position in six-month intervals for a maximum period of ten years in order to meet Genesis' base case gas needs arising from:
- Non-delivery from Pohokura and Kupe or any other unproven gas fields ; and (390)(6)(6)
- Genesis' inability to procure additional gas at economic prices, when above the assumed replacement cost of gas in the e3p business case.
- 15. The Deed excludes from gas shortfalls, for example, gas that is available but cannot be used, gas that is not acquired when economic to do so, and non-delivery of gas from proven fields. The reason for these exclusions is to maintain strong incentives on Genesis to obtain sufficient gas, and to self manage risks to e3p's performance.
- 16. The Deed requires the Crown to compensate Genesis when the value of shortfall gas exceeds the level of the deductible but there after 59(2)(4) the Crown shares around of Genesis' foregone gross margin from not being able to operate e3p. The Crown's maximum liability under the Deed is nominally million (less the deductible and any in the very unlikely but catastrophic scenario where e3p has no gas for the full ten years (its total gas requirement over that period). The sharing of the foregone gross margin and deductible further strengthens
- Normally the Crown would bear the risk indirectly through its equity ownership of Genesis. The Deed alters this so that in the event of a gas shortage the Crown would be making payments directly to Genesis.

#### Timing Issues

Genesis' incentives.

18. Genesis has a contract with Mitsubishi to deliver **e3p** by December 2006 that requires execution by 15 August 2004 for the delivery date to be met. Should the contract lapse it would be subject to significant risk regarding its terms, costs, and delivery date. The key risk for the Crown regarding energy policy is that any delay would put at significant risk the ability to commission **e3p** prior to winter 2007. This is a material risk, as we understand there is very strong international demand to build CCGT plant.

# Do the Changes Satisfy Ministers' Prior Concerns?

19. In Ministers' letter of 19 July 2004 Ministers sought two outcomes by amending the risk sharing arrangement to reflect several principles. The following assesses the negotiated changes against the principles set out by Ministers. The conclusion considers all the changes as whole, and whether the new risk sharing arrangement will achieve the outcomes sought.

# Avoiding Risk Transference with Respect to the Gas Supply for Existing Requirements

- 20. The negotiation was intended to find an appropriate balance that recognises Genesis' existing base case supply commitments while also ensuring that the incentives are sufficient to maximise the availability of gas to **e3p**, thus reducing the Crown's exposure to use of gas by Genesis for non-**e3p** purposes.
- 21. As can be seen by the table below, the new agreement significantly reduces base case gas uses.

Table 1: Previous offer vs current offer shortfall gas calculations



5.9(2)(b)(ii) 5.9(2)(ba)(i) 5.9(2)(j)

Notes

1 Unchanged between 29 June and 11 August proposals.

- The base case gas profile still left within the scope of the Deed is the minimum that Genesis would contemplate. We understand it reflects contractual and core business requirements that if impinged on would seriously undermine Genesis' existing activities and obligations. In addition, Genesis has agreed to reduce base case uses where it does not need or cannot use gas for any reason relating to the performance of e3p or its existing retail and core generation requirements.
  - Officials consider that Genesis' base case concessions considerably reduces the degree to which the Crown shares risk on non-e3p gas usage. We consider that the proposed schedule strikes an appropriate balance between Ministers' preference not to support the supply of gas for non-e3p uses while still recognising that e3p is incremental to Genesis' business.

# Avoiding Risk Transference with Respect to Non-delivery on Existing Gas Contracts

- 24. Genesis has established that Kupe and Pohokura gas fields are unproven, and it would unusual for a commercial Board to build a CCGT plant using contracts from such fields as its major fuel source. However, once these fields are in operation and have accumulated a track record of success for delivery these arguments could no longer be sustained. The mid-term review proposed by Genesis to assess the performance of the fields and change their status to proven and no longer at Crown risk is a satisfactory compromise that balances the risks for both parties. Moreover, we consider the suggested process and criteria for establishing the status of the fields as being reasonable.
- 25. Genesis' other significant concession to define its Mangahewa, McKee, Maui and Kauri gas contracts as currently proven reflects the reality that risks around these fields are not unusually high and are within the expected range of risk tolerance of a commercial generator such as Genesis. It also significantly reduces the Crown's exposure by removing PJ of gas formerly at risk, equating to million at the compensation rate.

Transferring the Minimum Level of Risk to the Crown such that the Board has Sufficient Comfort to be able to Recommend that Proceeding with e3p is in the Commercial Interest of Genesis

- 26. The combination of the mid-term review of unproven gas supply contracts and the reduction in base case gas uses covered by the arrangement, together with the improved drafting of the Deed to reflect a number of risks that should be borne by Genesis significantly reduce the likelihood and size of any Crown payment.
- 27. Officials have tried to reach a position that minimises the amount of risk transferred to the Crown, but maintains Genesis' willingness to build. Given that Genesis is still prepared to commit to e3p should Ministers commit to the Deed, demonstrates that the negotiation has successfully balanced the two objectives.

#### Conclusion

- 28. Officials consider that the Deed represents a material improvement on the initial arrangement. It reflects a range of concessions made by Genesis, and more clearly defines and strengthens the incentives on Genesis to seek gas supplies beyond existing contracts as required. This is because Genesis retains a larger share of the adverse financial risk from gas supply failure.
- 29. It is possible that Deed could impact on broader investment intentions. Rather than deter base load generation investment, it may lead incumbents to the incorrect view that the Deed reflects a greater tolerance by the Government to share base load generation investment risk, and so result in other similar approaches to the Crown to share risks.
- 30. Overall, in assisting to achieve the Government's energy policy objectives, we consider the Deed involves the likely lowest level of financial risk to the Crown and policy risk to the Government while still providing sufficient comfort to Genesis to proceed with e3p.

#### Next steps

31. If Ministers are in agreement with officials, it is recommended that the Ministers of Finance and Energy execute two copies of the attached Deed by 12 August 2004, including two copies of the attached associated letter that contains a schedule to the

Deed. In a separate but related CCMAU report, it is recommended that shareholding Ministers execute the shareholder resolution for a major financing transaction on the same day contingent on the Crown executing the Deed. Lastly, sign the attached letter to Genesis by 12 August 2004 that will accompany the legal documentation. This would enable Genesis to meet the 15 August 2004 deadline for contracting with Mitsubishi for the completion of the power station on schedule.

32. Information is being prepared in consultation with Ministerial offices and Genesis for a media release to co-incide with Genesis' announcement shortly.

# Annex 1 - Genesis' Finance Arrangement with Westpac

Genesis has negotiated with Westpac Institutional Bank (Westpac) a \$675 million revolving credit facility to finance the cost of e3p's construction, and to replace an existing credit facility. Westpac's offer of finance is structured as a full recourse corporate finance facility. Westpac would therefore have the comfort of full remedy over Genesis should it find itself in a position of credit default. The finance facility is also partly to be used as a standard revolving credit account to fund a number of other significant future outgoings. This provides Genesis a degree of flexibility that other financing arrangements may not be able to deliver.

Genesis undertook a comprehensive commercial tender round before selecting Westpac as lead financier. This included engaging an independent financial advisor (ABN Amro) to independently assess financing bids received. ABN Amro concluded that the Westpac offer represented the most favourable financing option available. The finance rate was quoted

59(2)(b)(ii)

. To compare this rate with other recent transactions, in May 3.9(2)(6) 2003 Mighty River Power borrowed \$200 million at 7.07% and in September 2003 another \$113.8 million at 6.73%, to refinance existing short term debt for its existing hydro business. The difference in finance rates reflected a then likely movement from a BBB (flat) credit rating to BBB+. On this basis, officials have little reason to question Genesis' selection of Westpac to syndicate the financing of e3p, or the rate to be charged.

Westpac has applied three conditions precedent to its offer of finance, requiring:

5.902(ba)(i) 5.9(1)(j)

Genesis is well placed to assume significant additional debt, with a current debt ratio of just 8.4%. Following completion of e3p, Genesis' debt ratio is projected to peak in 2007 at [

J As **e3p** begins normal operations,

gearing is projected to tail our quickly and return to approximately by 2010. Debt \$9(2)(b)(in service ability under the base case conditions remain comfortable, with funds from operation \$9(2)(ba)(in the base case conditions remain comfortable). within the ranges defined by Standard and Poors as appropriate to similar utility companies with a BBB(flat) credit rating.

5-9(2)(b)(ii) (-9(2)(ba)(i)

<sup>6</sup> Debt ratio defined as debt / [debt + equity]

T2004/1465: Genesis Power Limited (Genesis) and Amendments to the Risk Sharing Agreement for e3p

Page 13

<sup>&</sup>lt;sup>5</sup> Such as Genesis' share of Kupe development costs, P40 construction costs, the Hau Nui and Awhitu windfarm development costs.

<sup>&</sup>lt;sup>7</sup> Standard and Poors stipulate a preferred gearing ratio range of 40-60% for utility companies, and a FFO to total debt ratio range of 10-50%.

## Annex 2- Key Negotiated Changes to the Risk Sharing Proposal

In accordance with Cabinet resolutions on 19 July 2004 and 9 August 2004, officials have continued to engage with Genesis to negotiate a Deed that satisfies the issues identified by Ministers in their letter of 19 July 2004 to Genesis. The following sets out the key changes between the Deed and the Indicative Term Sheet dated 29 June 2004, reflecting the outcome of negotiations between Genesis and officials.

### New Principles and Miscellaneous changes

The Deed sets out all the key parameters for risk sharing. To deal with possible future interpretations, a set of principles was developed, which also has helped in seeking clarity and focus in drafting the substantive portions of the Deed. The principles also reflect the key outcomes Ministers are seeking as part of the Deed. Furthermore, the Deed has been reorientated to reflect its energy policy underpinnings.

In drafting the general provisions of the Deed the following improvements have been made:

- Genesis is now explicitly required to behave reasonably and prudently in making it decisions as though it did not have the benefit of the Deed;
- The Pro rata and wash up provisions have been strengthened to ensure payments better reflect the timing of exposures, and to reflect the fact that gas figures are annualised, but liabilities are based on six monthly periods<sup>8</sup>, and that the Deed can commence and terminate part way through six month periods;
- The commencement of the Deed can be no later than 1 April 2007 so that Genesis has a stronger incentive to commission the plant before the important pre-winter period;
- Monitoring and auditing provisions have been clarified to better reflect the information needs of the Crown:
- The timeframe for payments has been lengthened and dispute resolutions clarified; and
- Confidentiality arrangements now better reflect a balance between allowing for public scrutiny of the Deed while providing for commercial in confidence information to be withheld.

## Reduced Existing Gas Requirements

The base case for Genesis' gas needs upon which the Crown's liability is calculated in the event of gas shortfalls has been reduced significantly. What is now left in the base case just covers Genesis' existing retail and core generation requirements, plus e3p gas. This reduction significantly reduces the Crown's exposure, as it means a greater proportion of the gas available is set off against defined needs, thus reducing gas shortfalls should Genesis not be able to find enough gas to meet all of its wider business needs not subject to the Deed.

Compared to its earlier proposal, Genesis has reduced its base case gas requirements by PJ over the term of the arrangement, as follows:

sq(2)(b)(ii) s-q(2)(ba)(i) Genesis has agreed to hold its retail gas requirements to its present sales level of PJ pa for the period of the arrangement, resulting in a reduction in baseline gas requirements of PJ.

<sup>&</sup>lt;sup>8</sup> The base case schedule uses annual figures and so does not take into account the Deed coming into force and ending, in general, half way through the year.

- Gas required for P40, Genesis' recently commissioned 48MW open cycle gas turbine, has been removed. This reflects e3p's relative priority over P40 because of its higher efficiency of gas use. This reduces baseline gas requirements by PJ over the term of the arrangement.
- (PJ of gas is required for low level running for Huntly as coal is unsuited for this purpose.

At the Crown's rate of compensation to Genesis for gas shortfalls, this reduction in overall gas exposure equates to million. In addition:

- If e3p is re-rated to less than 385MW so that it is not capable of using 20 PJ pa, or if Genesis needs less gas for its existing retail or generation business than is currently being assumed, the gas it does not need is deducted from the base case so that the Crown is not at risk for that gas;
- If e3p is less efficient than assumed, it will need more gas than expected which is deducted from the base case.
- If Genesis converts **e3p** to run on distillate, the gas equivalent of the energy being used is deducted from the base case.

## Flexibility of Gas Use-

The Deed now provides Genesis with operational control over the physical use of gas. This is to prevent Genesis being forced to use gas in ways that are economically not rational e.g. depending on circumstances, other players in the gas market may wish to buy gas at very high prices that are well beyond the value of using gas at e3p. The Crown's risk exposure is protected in this circumstance because the use of gas for purposes not defined within the base case would be excluded from the calculation of the Crown's payments.

#### Coverage of Existing Contracts

Genesis had previously insisted that the risk sharing arrangement must cover, for the duration of the arrangement, those long-term gas contracts that Genesis already has in place because of the uncertainty associated with those yet unproven fields. The Deed now provides the Crown the option to initiate a mid-term review, five years following the commissioning of e3p, to allow the opportunity to evaluate the status of fields that are now considered unproven. If the fields are in operation, contracted reserves have not decreased, and the contracts are robust, then after the review the gas contracts will become proven and the Crown will no longer be at risk for non-delivery from them. Genesis has agreed that its gas contracts currently for supply from the Mangahewa/Mckee, Maui and Kauri fields can now be considered proven, reflecting the fact they are already in operation with little delivery risk. This removes PJ of gas formerly at risk equating to a value of m.

Gas Banking

2.8(功(月)(以

596)(b)(ii), 59(2)(ba)(i) 59(2)(j)

### Calculation of the Crown's Liability

In the earlier risk sharing arrangement, the Crown's liability for shortfall gas was notionally calculated with reference to the approximate interest cost associated with Genesis' borrowings to finance e3p. In the Deed the calculation of liability has been simplified, and now reflects a part-share of the gross margin. Genesis requires to meet its expected financial returns under its business case. This does not change the level of the Crown's payment, should the arrangement be invoked. The Crown remains liable for

5,9(3(1) 5.9(2) O

less a deductible (discussed below) and

Jup to a maximum of million pa, capped at a maximum of

Imillion over the 5-90) (1)

ten-year term of the arrangement (in the very unlikely event of catastrophic gas loss).

(ii) (2)(s) P. 2

The Crown's payment does not fully compensate Genesis for shortfall gas. Beyond the deductible, for every PJ of shortfall gas, it has been estimated that Genesis would forgo around/ Imillion in gross margin because of lower e3p electricity production from which e3p finance costs and other fixed and operating costs are met. After the Crown's contribution of million of this gross margin shortfall. million, Genesis would bear around

### <u>Uneconomic Gas Below Assumed Prices</u>

As before, the Deed still requires Genesis to use reasonable endeavours to acquire further gas to fill any shortfalls if it is economic, but it still does not require Genesis to purchase gas that is uneconomic because the gas price was too high relative to the electricity revenues that could be generated from it. This clause has been further refined to exclude from the definition of uneconomic gas, gas that is below the assumed price of replacement gas in the business case. Creating a floor price to uneconomic gas means that the Crown does not effectively share risks on electricity prices being below the projections assumed in the business case.

### Threshold for Claims

The earlier risk sharing arrangement required the Crown to bear all the cost associated with gas shortfalls, but only if the value of the shortfall exceeded million threshold in a six month period. The Deed has now revised the way this threshold operates to become a deductible at the same level, so that Genesis bears the first million in the value of Sayloci) shortfall gas, and the Crown only covers the balance exceeding the threshold. A deductible avoids potential incentives for Genesis to manufacture losses when close to the threshold, as was a possibility under the former threshold approach.

#### Annex 3 - Other Issues

## Further Analysis of Capital Cost Value Impacts

Since Genesis submitted its original business case in support of **e3p** in 2001, many of the assumptions underpinning the existing base valuation have changed. In particular, since 2001 the counterfactual to the build **e3p** scenario upon which the NPV analysis is based has changed. In 2001 it was assumed that if **e3p** was not built, an equivalent station was built by a competitor. Now it is assumed that if **e3p** is not built, no equivalent station is built. Although, both in 2001 and 2004 the business case was based on an integrated analysis of building **e3p** on Genesis, as opposed to on a stand alone basis.

As noted in T2004/1274, the single greatest net value shift is due to unfavourable movements impacting on the capital expenditure estimate.

\$900(4)(11) The \$900(54)(1)

value loss associated with the capital cost estimate can be further broken down as follows:

Value Item	NPV Impact	
Reduction in capital cost savings on existing Huntly plant		
Advancement of capital expenditure profile		(994)(6)(11)
Increased capital expenditure estimate		(.4(2) (ba) (i)
Sum of NPV movements relating to capital expenditure		

#### Quantitative Risk Assessment

It is not possible to assign reliable quantitative probabilities to elements of either party's risk exposure under the risk sharing arrangement - any attempt to do so would require arbitrary assignment of probabilities to scenarios for which neither officials nor Genesis have sufficient information to estimate. Risk to parties can only therefore be meaningfully assessed at a qualitative level.

Acknowledging this, officials have given significant consideration to the elements of risk that the Crown will assume by committing to the risk sharing arrangement, and the measures and safeguards that are (or are likely to be) in place that will mitigate against the possibility of unfavourable supply scenarios. Officials consider that by committing to the risk sharing arrangement, the Crown is assuming exposure to two distinct categories of risk:

- 1. that gas Genesis has already contracted for cannot be delivered, either in full or in part; and/or
- 2. that Genesis is not able to secure entitlement to sufficient volumes of gas to replace volumes from its existing supply contracts as delivery from those contracts tails off.

In assessing the likelihood of either or both of these risk categories materialising, officials make the following comments:

### Existing Gas Risk

• the Kupe and Pohokura annual contract quantities specified in the risk sharing arrangement reflect P90<sup>9</sup> reserve estimates, implying a significant level of confidence that the delivery volumes will be achieved<sup>10</sup>;

(5.9(2)(3)(i)

- as the incumbent Kupe partner, Genesis has significant insight into Kupe's seismic and deliverability data and holds entitlement to favourable levels of liquidated damages should delivery not be made by the field operator. The key risk facing Kupe that is difficult to quantify is associated with obtaining necessary resource consents, as the projected gas price should make the field economic except in the unlikely event capital costs of the developing the field are significantly higher.
- while Genesis is simply a wholesale gas customer for Pohokura gas<sup>11</sup> (it does not hold an
  equity interest in the field), Pohokura is the most advanced non-producing field in
  development at present, and there is significant industry confidence in its ability to deliver
  the volumes the Pohokura partners have already contractually committed to supply, and
  necessary resource consents have been obtained.

### Replacement Gas Risk

- recently there has been a significant increase in the level of gas exploration being committed to by the industry. Most notably, Contact Energy and Methanex have recently announced independent exploration programmes to complement those of a number of other explorers already underway.
- Genesis has announced its own exploration programme, committing in April 2004 to fund the drilling of the onshore Cardiff field.
- industry appears confident that both the Maui and Pohokura fields contain significant further quantities of gas beyond those already contracted for. Any additional volumes are likely to come to market incrementally over the next decade.
- In the unlikely event that additional gas does not come to market, LNG remains as a longer-term alternative. Failure to find sufficient extra gas for the market would be a serious issue for all gas users and would necessitate some industry wide responses to avoid the stranding of very significant nationally important gas assets. Any decision to commit to LNG is likely to be made well inside the time bounds of the risk sharing arrangement, with the likelihood that LNG supplies will at least partly offset any severe shortfall situations.

<sup>9</sup> Field reserves are typically defined in terms of probability distribution. P90 reserves are regarded as 'proven', as they have a better than 90% chance of being technically producible. P50 reserves are regarded as 'probable', as the probability of being viable falls to 50%.

<sup>10</sup> There are a number of conditions precedent that must be satisfied before the field operators will commit to developing the fields, such as the achievement of resource consents on the fields. If these milestones are not achieved, the fields will likely not be developed.

<sup>]</sup> sq(2)(b)(ii) 5-q(2)(j)

<sup>11</sup> As opposed to Kupe where it was able to leverage its equity stake in the field to secure favourable terms for a gas supply agreement with the field operator.

# Sale of Contact Energy Limited to Origin Energy Limited

Ministers will be aware that Origin Energy Limited (Origin) was recently declared the successful bidder for Edison Mission Energy Limited's controlling 51.2% holding in Contact Energy Limited.

While at an operational level the transaction is not expected to impact on Genesis, it is of some strategic relevance to Genesis' Kupe interest. In January 2004 Genesis selected Origin as the successful bidder to buy 50% of Genesis' Kupe shareholding. As well as Origin acquiring a controlling interest in Kupe, the deal included a long-term gas sale agreement for the supply of Kupe gas to Genesis. Kupe gas remains an integral part of Genesis' longer-term supply profile, and it would be of significant concern if Genesis' position was compromised as a result of Origin's acquisition of Contact. Contact is Genesis' main competitor in the thermal generation space, and as such there is a clear mutual incentive in a short gas market to secure any available incremental gas supplies.

Genesis is confident that it incorporated appropriate safeguards in its agreements with Origin to ensure that its objective of achieving timely delivery of Kupe gas will remain in the mutual best interests of both parties. Genesis' primary intent on selling down its Kupe interest was to ensure that it secured a favourable gas sales agreement, and that the development of Kupe is not stalled. While it could be argued that following its acquisition of Contact that Origin now has an incentive to now rest on its Kupe investment with the objective of developing the field at a later date 12, (b) (ii)

Genesis is therefore comfortable that it has appropriate measures in place to ensure that Origin's Kupe incentives remain indifferent to its Contact acquisition.

5 9(2)(b)(i), 59 (2)(ba)(i), 5.9(2)(j)



# Office of Hon Dr Michael Cullen Deputy Prime Minister

Minister of Finance Minister of Revenue Leader of the House of Representatives

12 AUG 2004

Mr Brian Corban Chairman Genesis Power Limited PO Box 17-188 Greenlane AUCKLAND

By Fax: 09 580 4898

Dear Brian

#### **CROWN SUPPORT FOR E3P**

Thank you for your letter of 3 August 2004 regarding a risk sharing proposal as a means of progressing the development of \(\epsilon 3p\).

We understand that since our last correspondence, Genesis has continued to engage with our officials in a constructive and open manner, and in this regard we wish to express our appreciation. All parties have been working to tight timelines, and it is a credit that the parties now find themselves in a position that is mutually acceptable and that, pending final commitments, will secure the construction of e3p according to the schedule you have outlined.

We consider that good progress has been made towards addressing the outcomes and principles identified in the letter of 19 July. Specifically, we are now satisfied that the risk sharing arrangement represents the appropriate balance of risk exposure to e3p's fuel risk by the parties. We are confident that the incentives for Genesis to seek and secure further gas entitlements remain very strong and that the risk sharing arrangement will not impact on Genesis' conduct as a reasonable and prudent operator in this respect.

We note your acknowledgement that the conditions attached to our support in 2001 remain valid. Our expectation is that the pre-conditions outlined in our letter of 4 December 2001 have been satisfied before Genesis irrevocably commits to e3p, and that Genesis will commit to meeting those conditions that will require ongoing attention after commitment to e3p is made. We also understand that Genesis will use its best endeavours to commission e3p prior to winter 2007.

On this basis, we are pleased to enclose the executed Deed formalising the risk sharing arrangement. Also enclosed is the signed special resolution approving Genesis' commitment to the Westpac financing facility.

We understand that our commitment to the risk sharing and financing arrangements is sufficient for Genesis now to make its onward commitments to **e3p**'s financiers and contractors.

We look forward to receiving notice of your final commitment to **e3p**, and to being regularly updated on progress as construction commences.

Yours sincerely

Hon Dr Michael Cullen

Minister of Finance

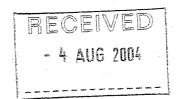
Hon Pete Hodgson Minister of Energy

Encl.

cc: Murray Jackson

Chief Executive Officer
Genesis Power Limited

Maureen Shaddick General Counsel Genesis Power Limited





3 August 2004

Hon Mark Burton
Minister for State Owned Enterprises
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Hon Dr Michael Cullen Minister of Finance Parliament Buildings WELLINGTON The Genesis Energy

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Dear Ministers

Thank you for your letter of 19 July 2004, responding to our proposal of a way forward for commissioning Huntly e3p, a 385MW Combined Cycle Gas Turbine, at Huntly, by December 2006.

We confirm that, despite having in place a number of long term gas contracts for Kupe, Mangahewa-McKee and Pohokura gas, the Genesis Energy Board still considers there is insufficient certainty around the gas supply arrangements for Genesis Energy to commit to building Huntly e3p. The particular gas risk of concern is that the Pohokura and kupe fields have not yet been developed and are not proven and, post ( ) we do not have sufficient contracted gas. To address this risk Genesis Energy has sought to enter into a risk sharing arrangement with the Crown.

We note your advice as to the level of risk shareholding Ministers would normally countenance and your further comment that in this situation there are energy security of supply reasons why the Crown may wish to support Huntly e3p, which overside normal State Owned Enterprise policy considerations.

You have indicated a number of issues and principles in respect of which you wish to be satisfied before the Crown would enter into a risk sharing arrangement confident that there is an appropriate allocation of risk between the parties regarding Huntly e3p.

We note and concur with the high level outcomes and principles that the Crown wants to achieve. Genesis Energy expects to retain, and believes it has strong incentives to resolve any gas supply issues itself by seeking to purchase gas supply, as needed, beyond its existing contracts. In entering into a risk sharing arrangement with the Crown, Genesis Energy would not wish to, and does not believe it will, deter investment in generation by other market participants.

With a view to addressing the Crown's outcomes and principles, Genesis Energy management has worked with Government officials to ensure the transfer of the minimum level of risk to the Crown, such that the Genesis Energy Board has sufficient comfort to be able to recommend that proceeding with Huntly e3p is in the commercial interests of Genesis Energy. A deductible will be applied to any six monthly invoices to the Crown. Provisions have also been made for gas banking and to ensure there are strong incentives for Genesis Energy to purchase gas.

# 9(2)(b)(i) # 9(Z)(ba)(i) With regard to avoiding risk transference with respect to non-delivery on existing gas contracts, we have provided for a mid-term review of existing, amended or new gas contracts focusing on whether the contracted quantities of gas are being supplied under those contracts and the default provisions under those contracts. (

# ) 5.9(2)(b)(i) 5.9(2)(ba)(i) 5.9(2)(j)

With regard to avoiding risk transference with respect to the gas supply for existing requirements, Genesis Energy would not expect the Crown to accept risk for gas required for retail sales growth or existing Huntly generation, including P40, over and above the agreed minimum required to enable Huntly Power Station's coal fired units to operate. The flexibility of operation provisions in the proposed agreement mean Genesis Energy will not be constrained in its operation of its business and that the Crown will not bear the risk of Genesis Energy pursuing any discretionary operation including growth and other investment opportunities.

We acknowledge your expectation that Genesis Energy will select technology options that do not jeopardise plant reliability, seek appropriate contractual remedies for non-performance of Huntly e3p's contractors and report regularly on progress relative to budgets and timetables/milestones as part of the Company's regular quarterly reports to shareholding Ministers. The Board has the same expectations and in that regard has monitored the development of the Huntly e3p project and will continue to ensure such expectations are met.

The matter of Genesis Energy's dividend policy was addressed in the Indicative Term Sheet for the proposed risk sharing arrangement, however, it is not anticipated that there will be any specific reference to dividend policy in the risk sharing agreement.

Pursuant to its obligations under the State Owned Enterprises Act 1986 Genesis Energy is required to specify its dividend policy in its Statement of Corporate Intent. Your letter dated 28 June 2004 recognised that the current priority for Génesis Energy and shareholding Ministers was to finalise details concerning Genesis Energy's Huntly e3p proposal and extended the deadline for Genesis Energy to supply its final Statement of Corporate Intent until 30 September 2004. The Company continues to engage with officials on the business planning process. In its draft Statement of Corporate Intent Genesis Energy notes that it will review its dividend policy once all the final details of financing arrangements for the Company's capital investment in Huntly e3p are known. In accordance with their obligations under the Companies Act 1993 the Directors of Genesis Energy, may at any time, determine not to pay distributions to the Company's shareholders or, may determine to reduce the level of distribution payable. In particular, given the level of investment in Huntly e3p, it may be prudent not to make distributions in respect of profit in the financial years ending 30 June 2005 and 30 June 2006.

At the meeting of the Board held on 27 July 2004, Genesis Energy management reported on the outcome of their discussions with officials in relation to the principles outlined in your letter dated 19 July 2004. The Board is comfortable with the outcomes Genesis Energy's management and officials have achieved. The Board is comfortable with the balance of risk between the

Crown and Genesis Energy in the proposed risk sharing arrangement and the extent to which it has changed from that contemplated in the Indicative Term Sheet as presented to the Board at its previous meeting on 29 June 2004. Subject to shareholding Ministers also being comfortable with these outcomes and entering into the deed recording the risk sharing agreement, and subject to shareholding Ministers approving the Company entering into a Revolving Cash Advances Facility with Westpac Banking Corporation ("Westpac") which, with a face value of \$675 million, constitutes a major transaction under the Companies Act 1993, and confirming that the conditions of shareholding Ministers' support for Huntly e3p recorded in shareholding Ministers' letter dated 4 December 2001 are satisfied, the Board remains committed to proceeding with Huntly e3p. On receipt of such advice from shareholding Ministers, the Board will arrange for execution of all necessary documentation with Mitsubishi Corporation ("Mitsubishi"), the supplier of the Combined Cycle Gas Turbine, Westpac and the Crown before 15 August 2004. Management is working with officials to conclude all documentation during the week commencing 2 August 2004.

We appreciate the time and commitment shareholding Ministers and government officials have given to addressing Genesis Energy's Huntly e3p proposal. We look forward to receiving your advice that the shareholder consultation process has been concluded and execution of the major transaction resolution, in connection with the financing facility with Westpac and the deed recording the risk sharing agreement. We will then be in a position to finalise all documentation with Mitsubishi, Westpac and the Crown to achieve the commencement date of the Huntly e3p works on 15 August 2004, which in turn enables Huntly e3p to be commissioned by 15 December 2006.

Yours sincerely

Brian Corban, QSO

Chairman