HRL / Dual Gas power station - a risky investment

August 2011

Potential investors in the proposed HRL / Dual Gas brown coal power station in Victoria are strongly advised to view the project with extreme caution, as it carries numerous significant financial and reputation risks. <u>Greenpeace is seeking assurances from investors that they will not finance or provide any other kind of investment to the proposed HRL project.</u>

Background to project

The HRL group of companies proposes to build a 600 Megawatt brown coal power station in Victoria's Latrobe Valley¹. It intends to use a technology known as Integrated Drying Gasification and Combined Cycle (IDGCC) to reduce the greenhouse emissions from this brown coal power station to a level comparable with standard black coal power stations.

HRL, through subsidiary company Dual Gas, has received works approval from the Victorian EPA for their project but only at half-scale (i.e. 300 Megawatts)².

To date, the only identifiable capital for the plant comes in the form of government grants. A federal grant of \$100 million was announced in March 2007 through the Commonwealth Government's Low Emissions Technology Demonstration Fund (LETDF) and the Victorian Government has also committed \$50 million. No private finance has been identified and all of Australia's "big four" banks have indicated they will not support it³. HRL is listed on the BankTrack website's list of "dodgy deals"⁴.

Investors considering this project need to be aware of a number of substantial risks:

- Project costs have been underestimated
- The \$100 million federal grant is vulnerable
- Substantial delays are likely to continue
- <u>Carbon price risk</u>
- <u>Regulatory risk due to federal emissions performance standard</u>
- Widespread community opposition leading to reputation risk for investors

http://epanote2.epa.vic.gov.au/EPA/media.nsf/7957c9b407150e5f4a256695000c4970/3ef6c05c3ece1db4ca257896000bac95?OpenDocument

¹ Details of the proposed plant can be found in its works approval application, lodged with the Victorian EPA. http://www.epa.vic.gov.au/compliance-enforcement/comments/past-dualgasinfo.asp

² EPA media release, "EPA grants part approval for HRL demonstration project", 20 May 2011

³ Big banks "no" to coal plant, *The Age*, 24 May 2011 http://www.theage.com.au/national/big-banks-no-to-coal-plant-20110520-1ewxj.html ⁴ http://www.banktrack.org/show/dodgydeals/hrl_dual_gas_power_station

RISK: Project costs have been underestimated

Despite Dual Gas citing project costs of \$750 million it its works approval application to the Victorian EPA⁵, it was recently reported that project costs have now reached \$1.3 billion⁶. Further, based on figures from ACIL Tasman⁷, the current capital costs for a new entrant IDGCC plant are currently estimated to be \$3,227/kW, suggesting costs of this project at full scale are closer to \$2 billion.

Under a strong Emissions Performance Standard HRL will be forced to run on increasing levels of natural gas, an economically volatile fuel source. It also raises the possibility of stranded assets, as the expensive IDGCC equipment would no longer be necessary when running HRL as a gas plant. Dual Gas has put forward four scenarios of fuel mixes for the plant in its EPA works approval application, acknowledging that running entirely on natural gas would be the most expensive scenario but clearly aware that this may become a necessity.

RISK: The \$100 million federal grant is vulnerable

A financial lynchpin of HRL's proposal is the \$100 million grant committed by the Howard Government in 2007 under the LETDF. The grant is vulnerable on several grounds.

- An expert panel appointed to assess applications for grants from the LETDF cited significant economic and technical risks with HRL's proposal. This included the vulnerability of HRL's joint venture partner Harbin, who was bringing \$500 million to the project⁸. Harbin withdrew from the project in 2009, validating the expert panel's caution.
- The expert panel was also fully aware that HRL's project would need to be at least 400 Megawatts in size in order to be commercially viable - the EPA approved the project at only 300 Megawatts. After the EPA's decision, Energy Minister Martin Ferguson described the LETDF funding as a "legacy grant" and indicated it would be reviewed⁹.
- At the time the grant was made, energy and climate policy was conducted within substantially different parameters than currently exist. The political environment has shifted substantially since early 2007 and the grant is arguably no longer compatible with the climate and energy priorities of an ALP/Green minority Government.
- Freedom of Information documents obtained by Greenpeace indicate a history of HRL failing to meet project deadlines, requesting numerous extensions and raising significant doubts amongst the Department of Energy's regard for the project itself.

Although HRL has contracted the China National Electric Equipment Corporation to construct the plant¹⁰, there is no indication that it has found an alternative source of capital to replace the \$500 million previously committed by Harbin. In recent months, Australia's "big four" banks have all gone on the record to clarify they have no intention to invest in HRL's project and database searches have revealed no indication of financial agreements made to support HRL's proposal.

⁵ As per footnote #1

⁶ Clean coal plant sought \$600 million handout, Australian Financial Review, 25 May. Article available by subscription only -

http://www.afr.com/p/national/clean_coal_plant_sought_handout_2Z13PDc389sT8u3463VEKJ

⁷ ACIL Tasman 2009, *Carbon capture and storage projections to 2050*, Prepared for the department of Resources, Energy and Tourism. The figure quoted for IDGCC is without carbon capture and storage.

⁸www.legislation.vic.gov.au/domino/Web_Notes/newmedia.nsf/8fc6e140ef55837cca256c8c00183cdc/f22ae2b1bb6b4d44ca25729c00835a04! OpenDocument

⁹ Closer look at coal funding, The Age, 28 May 2011. http://www.theage.com.au/victoria/closer-look-at-coal-funding-20110527-1f8o5.html ¹⁰ http://www.sinomach.com.cn/templates/T_news_en/content.aspx?nodeid=161&page=ContentPage&contentid=4978

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In late 2010 HRL sought - and was refused - additional public funding on top of the \$150 million in grants currently available for its project. This includes \$200 million requested directly from the Federal Government and a proposal to the Victorian Government for a power purchase agreement worth \$384 million over 15 years¹¹. If agreed to, these investments would have increased the level of public financing to \$750 million, equivalent to the entire original project costs when HRL's project was first proposed.

At a recent Senate Estimates hearing, the Department of Energy refused to confirm or deny whether HRL had made any other requests for funding support. However, the Department did make clear that HRL had until the end of the 2011 to meet its milestones (including reaching financial closure, obtaining all necessary legal approvals and demonstrating a pathway for incorporation of carbon capture and storage) for the grant¹², suggesting the grant will be withdrawn in the event that HRL fails to meet this deadline.

These factors create substantial uncertainty over whether or not the \$100M grant will materialise. In the event that the \$100 million grant is withdrawn, it is highly likely that the remaining funds from the Victorian Government will also be withheld¹³.

RISK: Substantial delays are likely to continue

HRL's works approval application took nine months to be fully assessed, in large part due to the failure of HRL to provide the necessary documentation to the EPA. It is not clear that this documentation was ever provided to the full satisfaction of the EPA.

The decision by the EPA on 20 May to approve only 300 Megawatts of HRL's 600 Megawatt proposal also presents likely delays, as both HRL and environmental groups have challenged this ruling. All cases will now go to a four week tribunal commencing 24 October 2011. Should HRL attempt to advance its project at 300 Megawatts it will require an updated business plan to be viable at this scale, which will also require some time to produce.

In the event that HRL attempt to progress their project at any time without resolution over its legal approval, Greenpeace and other environmental groups will consider the use of direct action to physically block and delay works on the plant's construction.

RISK: Carbon price risk

The Federal Government has announced the details of its carbon price package, with a price per tonne of carbon dioxide starting at \$23 from 1 July 2012. With the likely emissions from HRL's project at full scale at 3.2 million tonnes of carbon dioxide per year, this would create an annual carbon liability of \$73.6 million, increasing in step with the carbon price. HRL has not been clear about how it has factored a carbon price into its project costing.

RISK: Regulatory risk due to federal emissions performance standard

Prime Minister Julia Gillard made a pre-election commitment that no more dirty coal-fired power stations would be built in Australia¹⁴. An Interdepartmental Task Group released a discussion paper in

¹¹ As per footnote #6

¹² Senate Economics Committee considering Budget Estimates, 31 May 2011.

http://www.aph.gov.au/hansard/senate/commttee/S213804.pdf ¹³ Documents revealed under Freedom of Information show that the Victorian and Federal grants are conditional on one another being in place.

ALP statement, 23 July 2010. www.alp.org.au/federal-government/news/tough-emissions-standards-for-new-coal-fired-power

December 2010 to explore policy options on an emissions performance standard for new power plants¹⁵.

The discussion paper maps out a range of options for the allowable emissions intensity of power stations starting at 0.86 tonnes of CO_2/MWh of electricity produced, and the most stringent proposed standard of 0.7 tonnes of CO_2/MWh .

According to the Victorian EPA, HRL's emissions intensity would be 0.8 tonnes CO_2/MWh , already putting it in the frame as potentially illegal under an emissions performance standard. However, this reported emissions intensity masks the role of natural gas, which will provide a portion of the fuel and act to reduce overall emissions from the plant. As the HRL proposal describes itself as an IDGCC brown coal plant, it is important to distinguish the emissions intensity of gasified brown coal from natural gas.

Based on calculations from the Dual Gas works approval application to the Victorian EPA, the emissions intensity of gasified brown coal is 0.83 - 0.91 tonnes of CO_2/MWh^{16} . An intensity this high puts it above many of Australia's existing crop of black coal power plants, and potentially makes the IDGCC proposal more polluting than even the weakest emissions performance standard presented in the Government's discussion paper. The emissions performance standard will be made more stringent over time, creating the likelihood that HRL will not be able to operate as planned in a sustained manner.

RISK: Widespread community opposition leading to reputation risk for investors

The Victorian EPA received almost four thousand submissions were received from the community when assessing HRL's application for works approval. 99% of these submissions opposed the plant¹⁷. Greenpeace, Environment Victoria and the Stop HRL coalition of grassroots groups will continue to campaign to prevent HRL from going ahead, with protests involving hundreds of people taking place in April¹⁸ and May¹⁹ 2011. Potential investors in the HRL project are at risk of becoming a target of community protests and are likely to see legal challenges creating lengthy delays to the HRL timeline, further escalating the cost of the project.

Confirm your position on HRL

Greenpeace is urging equity investors and providers of debt finance to avoid involvement in the proposed HRL power plant. To provide this assurance or to discuss this matter further, please contact Julien Vincent from Greenpeace Australia Pacific.

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¹⁷ See "tally of issues", available as per footnote #1.

¹⁹ Protesters chained outside Baillieu's office, The Age, 11 April 2011

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¹⁵ A cleaner future for power stations, interdepartmental task group discussion paper. Available from www.ret.gov.au/

¹⁶ Data taken from pages 56-61, *Dual Gas Demonstration Project Greenhouse Gas Assessment*, 1 September 2010. Calculations were based on all four cases put forward by HRL for the years 2020/21 and 2025/26

¹⁸ Protesters demonstrate against new power plant, ABC News online,

²⁴ May 2011 http://www.abc.net.au/news/stories/2011/05/24/3225698.htm?site=melbourne

http://www.theage.com.au/victoria/protesters-chained-outside-baillieus-office-20110411-1da74.html