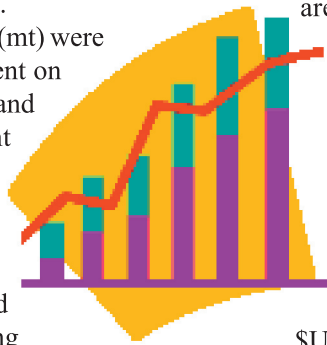


Record sales for Solid Energy

In November, Solid Energy announced record exports and New Zealand sales returning a profit of \$33.7 million for the year ended June 2004. While profit was down on last year's extraordinary result (2003: \$56 million), it was in line with the company's long-term projections as revenues increased 5 percent to \$334 million (2003: \$317.1 million).

A record 4.21 million tonnes (mt) were sold in the year, up three percent on last year (4.09 mt). New Zealand sales increased by six percent from 1.96 mt in 2003 to 2.07 mt, reflecting strengthened demand for coal as a low-cost and reliable form of energy for electricity generation and industry, as a result of declining Maui gas reserves.

Coal for electricity generation now accounts for over a third of Solid Energy's sales in New Zealand. Just over 780,000 tonnes was supplied to Genesis Energy (2003: 650,000 tonnes) for Huntly Power Station, while sales to New Zealand Steel Ltd for its Glenbrook Mill, south of Auckland, were maintained at 802,000 tonnes (2003: 830,000 tonnes).



Export sales were a record 2.14 mt, almost exactly in line with last year (2003: 2.13 mt). Export markets were extremely strong and the company had the production capacity for further sales but was constrained by rail capacity between the West Coast and the export Port of Lyttelton.

"The company's management and staff are to be congratulated for their operational achievements in the year and the sound financial return, despite our profitability being very dependent on US dollar denominated export markets. Currency hedging in place significantly reduced the impact of the New Zealand dollar which traded as high as \$US.072 in the year." Commented Solid Energy Chairman, Tim Saunders.

"It also should be noted that the 2003 result was exceptional, benefiting from strong international prices, coinciding with a brief period of very low exchange rates and the utilisation of carry forward tax losses. The company is in good heart, the balance sheet is strong and we were pleased to be able to pay a dividend for the year of

continued on page 6

U.S: three-pronged climate change strategy

The United States is pursuing a three-pronged climate change strategy outside of the Kyoto Protocol, an effort which is equal to that of any other nation to deal with climate change according to Dr Harlan Watson, senior climate negotiator for the U.S. State Department, speaking at a press briefing on the sidelines of the conference of the parties to the United Nations Framework Convention on Climate Change (UNFCCC) in Buenos Aires, Argentina, on 7 December.

"We believe we match or exceed what any other country in the world is doing to address climate change and the need to control greenhouse gas emissions," says Dr Watson.

The first prong in the U.S. strategy is to reduce carbon intensity - that is, the amount of carbon emissions generated per dollar of economic output - and consequently to reduce emissions.

"With regard to our domestic programme, we are committed to reducing our greenhouse gas intensity by 18 percent over the ten-year period 2002-2012. This is a domestic commitment the President made. We are doing this through a number of programmes through both incentives and voluntary programmes, and through some mandatory programmes such as improving the fuel economy of our automobiles, improving the efficiency of our appliances and so on.

"Second, we are making substantial investments in science and technology and institutions designed to address both climate change in the near term and in the long term," says Dr Watson. The senior official, who is also the alternate head of the U.S. delegation to the meeting, said the United States is spending about \$5 billion annually on science and technology projects,

continued on page 5

Vision: Coal is accepted as a secure, competitive and environmentally sustainable energy resource contributing to New Zealand's prosperity

Contents

Industry News

Record sales for Solid Energy	1,6
NZ energy supply reports abound	2,7
New Cobden rail bridge	4
Huntly receives flack over coal burning	4
Marsden B submissions	4
13-year deal for Toll NZ	5
Fonterra plans large coal burning power station	6
Coming events	6

Climate Change

US: Three-pronged climate change strategy	1, 5
Review of Projects tender round	3

CRL Energy Research

New coal analysis update	7
--------------------------	---

Member details

Coal Association of New Zealand Inc.	8
Associate Membership	8

This Newsletter is published for the Coal Association by CRL Energy Ltd.

We value your feedback on issues discussed in the Coal Newsletter. If you have comments or enquiries please contact:

The Editor
CRL Energy Ltd
PO Box 31 244
Lower Hutt
Tel 04 570 3715
Fax 04 570 3701

NZ energy supply reports abound

Earlier this month, Transpower New Zealand Ltd published two documents which focus on New Zealand's security of electricity supply over the next ten years. The "System Security Forecast 2004" report, and a companion document "Future of the National Grid", have been prepared by Transpower as System Operator and provided to the Electricity Commission under the Electricity Governance Rules and Regulations (EGRs).

The "System Security Forecast 2004" report provides a ten year view of the security of New Zealand's power system, including the identification of security of supply issues which may occur if investment is not undertaken in that timeframe.

Electricity Commissioner Roy Hemmingway says the System Security Forecast is a useful document.

"The SSF points out crucial issues, such as the parts of the country that will experience problems unless timely action is taken. The Commission is pleased with the planning work that Transpower has underway to address such issues and believes this will benefit security of electricity supply for the longer term."

Power transfer to the Upper North Island in particular is discussed in the report: "Demand in Auckland and further north is predominantly supplied from generating stations at Huntly, Otahuhu, Waikato, Tokaanu, Rangipo, in the Taranaki region and from the South Island (through the HVDC link). Under certain generation patterns, the power system has inadequate capacity to balance supply and demand in this region. There are two key power system capability issues that constrain the power transfer from the south to the north of the island. These are:

- Limits on power transfer resulting from circuits reaching stated capability. These circuits are Tokaanu-Whakamaru, the Wairakei ring (the 220 kV circuits connecting Wairakei, Whakamaru, Atiamuri, and Ohakuri), Huntly-Takanini-Otahuhu, and Otahuhu-Whakamaru 3.
- Limits on power transfer resulting from voltage instability. Power system capability limits are required for the loss of major generating units north of Whakamaru and the loss of key transmission circuits such as the Otahuhu-Whakamaru 3 circuit to avoid cascade failure from voltage instability."

The loss of a Huntly unit or the Otahuhu combined cycle plant increases reactive power losses. The resulting generation deficit in the Auckland region has to be covered by transporting power from Whakamaru, Huntly, the lower North Island and the HVDC (High Voltage Direct Current). Loss of Otahuhu combined cycle plant both increases the flow on the transmission lines into Auckland from the south (assuming constant load) and removes the single largest source of reactive power within the region.

Reactive power losses due to higher loading of circuits south of Auckland could lead to voltage instability. This limits the maximum power able to be transferred through the circuits. When the Otahuhu combined cycle plant is in service, the loss of Huntly E3P unit (from 2006) will become the worst case contingency for voltage instability.

The second document, "The Future of the National Grid - A Summary of Transpower's Core Grid and Regional Transmission Plans", summarises the work being undertaken or planned by Transpower as owner of the national grid to address security issues, including those raised in the System Security Forecast.

Chief Executive Dr Ralph Craven says that while some of the projects are committed, many are only proposals which will ultimately be influenced by the future investments of others in the industry. By disclosing our intentions here, we hope to help other industry participants with their own investment plans, while also keeping the public informed."

The reports are both available from the Transpower Web site, at <http://www.transpower.co.nz/?id=5251>.

Securing supply in New Zealand

On the generation rather than distribution side, in November, Solid Energy published an analysis of New Zealand's energy demand drivers and electricity supply options. The 60-page report, "Energy Options: Securing Supply in New Zealand", prepared by the coal producer, with support from Concept Consulting Ltd and the New Zealand Institute of Economic Research, reviews in detail the country's energy supply options as the supply of gas available to firm hydro generation dwindles. It considers several scenarios for demand growth and for the effects of climate change policies on future electricity generation.

The report concludes that energy demand growth rates will slow from current rates due to a variety of demographic, geographic and economic factors and that a mix of generation types will be required to meet the significant shortfall created by declining Maui gas reserves.

The report states: "Even if significantly more renewable energy is introduced, strong continuing growth in primary energy supply will require significant new gas finds to be developed and/or substantially increased use of coal. A shortfall of gas supply relative to demand will widen rapidly after 2010 if more, affordable gas is not found and developed. Failure to develop these options will place security of energy supply at risk and cause the price of energy to increase dramatically. The lead time for new generation is significant (at least three to five years) and

continued on page 7

Review of Projects tender round

By Wayne Hennessy, CRL Energy Ltd.

The Climate Change Office (CCO) has released a review on the outcome of the first "Projects to Reduce Emissions" tender round and considers options to further enhance the value of the Projects Programme. The delay of several months has been attributed to commercial sensitivity of some aspects of the review and the likelihood that the Government will achieve greater competitiveness in this year's bidding prices.

In the first tender round that closed in October 2003, tenders were received for 46 different projects. Twenty-seven of these were ruled ineligible because they would not have delivered real emissions reduction and/or they would have been viable without incentives. The 46 tenders were forecast to deliver a total of 15.9 million tonnes CO₂-equivalent of emission reductions during 2008-12 and requested a total of 15.2 million emission units from the Government. There were 15 successful projects reducing greenhouse gas emissions by nearly four million tonnes CO₂-equivalent during 2008-12. Further an additional 5.3PJ of electricity generation (about 55 percent from renewable sources) is expected to be provided by these projects.

No tenders were received from a number of project types that were, in principle, capable of being eligible. This included projects involving transportation fuel choice and efficiency, transportation modal choice, energy conservation, micro-scale embedded electricity generation projects, and projects from small businesses. For these types of projects the 10,000 tonnes CO₂-equivalent size threshold may be a material barrier to entry.

Consistent with the variability of project size, capital costs associated with the projects varied considerably - 18 projects forecast capital expenditure of less than \$5 million, and five projects forecast capital expenditure above \$100 million. The expected value of the emission units in the tenders varied from \$2 per unit to \$25 per unit. Across all tenders, the weighted average value was \$11.50 per unit. Typically the expected value of the emission units represented three to four percent of the project's capital cost.

Four wind farm projects were awarded a total 1,227,414 units representing a total of 409GWh generation in 2008. The New Zealand Refining Company co-generation project (660GWh in 2008) was awarded 1,225,545 units, two landfill gas collection and generation projects (14GWh in 2008) were awarded 382,749 units and two bio-energy projects 117,978 units. Details of the

remaining six projects, representing about 25 percent of the units including at least two small hydro projects, have been removed for commercial sensitivity. The scale and timing of twelve projects is dependent on the projects obtaining satisfactory resource consents and three projects are dependent on the project owner negotiating a satisfactory connection agreement to the electricity grid. In terms of performance variability, additional emissions reductions delivered during 2008-12 projects will only be awarded emissions units up to the level requested in the tender. If the emissions reductions are lower than forecast the Crown will only award emissions units up to the level of emissions reductions achieved.

Officials from CCO and the Ministry of Foreign Affairs and Trade intend to hold discussions with the European Commission to ensure that access of New Zealand project-based units into the EU Emissions Trading Scheme is maximised. Officials from CCO are exploring with Senter, the Netherlands government agency responsible for the ERUPT programme, how projects awarded emission units under the Projects programme could make better use of the ERUPT tender process, providing more certainty for participants in the Projects programme.

The review acknowledged that the recognition of early emission reductions acted as a bias against larger projects that would take longer to construct. In addition to the ranking approach, a number of factors may have influenced the bidding behaviour of the tenderers in the first Projects round including:

- Tenderers bear a number of risks in the Projects Programme and may have requested the maximum available units to mitigate uncertainty around the market values of emissions units.
- This was the first tender round and tenderers may have believed it would be undersubscribed.
- Emissions units represent a small proportion of project capital costs. To demonstrate a project's investment additionality the maximum number of emissions units may have been requested.

The CCO Projects programme has won the Supreme Award at this year's Bearing Point Innovation Awards. These awards recognise and promote world-class innovation in service to the public and in organisational management in the public sector.

"No tenders were received from a number of project types that were, in principle, capable of being eligible.

This included projects involving transportation fuel choice and efficiency, transportation modal choice, energy conservation, micro-scale embedded electricity generation projects, and projects from small businesses."

Marsden B submissions

Whangarei residents will have extra time to lodge submissions over Mighty River Power's plans for Marsden B to become a coal-fired power station.

The Northland Regional Council has doubled the submission timeframe to 40 days.

NRC consents manager Dave Roke says with the application set to be publicly notified on 8 December, submissions will close on Thursday, 24 February 2005.

Mighty River is seeking resource consents for a coal-fired station with a generating capacity of up to 320MW. The project will cost more than \$100m and involves refitting the existing Marsden B plant, which has sat idle since being built in the 1970s to run on oil.

Mighty River Chief Executive Doug Heffernan says the company hopes to have the coal-fired plant operating by 2008 or 2009, subject to getting resource consents. Heffernan is aware of environmental opposition but stresses: "Trade-offs between environmental, economic and social well being and the cost of providing that generation need to be made." The Marsden B plant will burn up to 1m tonnes of coal per year.

New Cobden Rail Bridge

New Zealand Railways Corporation (NZRC) and Solid Energy New Zealand Ltd have reached an agreement to construct the new Cobden rail bridge across the Grey River near Greymouth on the West Coast.

The agreement provides for NZRC, the new rail network provider, to construct the bridge and rail connections, and for coal producer, Solid Energy to repay the cost of construction. This is the first major capital investment to be announced since the Government brought the rail network back into public ownership in July 2004.

Contractor, Smithbridge Ltd, is expected to start on the site this month. The estimated \$15 million bridge will be built just upstream of the existing 110-year old structure. Under the agreement signed between Solid Energy and NZRC, Solid Energy will pay for construction of the new bridge through an annual charge over a 30-year period. Solid Energy is currently the sole user of the rail bridge, and is likely to be for the foreseeable future.

Construction of the new 285-metre long concrete bridge, which will be supported by 10 piers in the riverbed, is expected to be completed in early 2006. Once the new rail bridge is completed, the old wooden

bridge, registered as a Category II Historic Place under the 1993 Historic Places Act, will be dismantled and removed. The old piers from the former road bridge will be removed at the same time. A section of the wooden rail bridge will be rebuilt in a separate location.

Solid Energy coal from its Spring Creek Mine, near Greymouth, is transported by up to two trains a day by rail to the Port of Lyttelton for export. Alignment of the new bridge will take the rail route away from the middle of Greymouth as at present, connecting more directly with the line to Stillwater. However, trains will still be able to run to the Port of Greymouth if facilities are built at the port to accommodate rail access.

Solid Energy Chief Operating Officer, Barry Bragg, said: "Solid Energy is extremely pleased that an agreement has been reached to replace the bridge with a new modern structure which will be able to accommodate increasing volumes of coal from Spring Creek Mine. The mine will approach full production over the coming year and it is very important for its long term viability that we have a reliable transport system in place to deliver our coal to our customers."

Huntly receives flack over coal burning

Genesis Energy has this month come under fire in the media from both the Green Party and Green Peace for increasing coal use in the face of dwindling gas supplies at Huntly, sourcing coal both domestically and importing the shortfall from Indonesia.

Greenpeace protesters took to the sea in an effort to stop coal-carrying ships from Indonesia docking at the Port of Tauranga. In 2003, the Port signed a 15-year coal-handling contract with Genesis Energy and committed \$25 million to new facilities to cope with handling the coal, including covered conveyor belts and warehouses to limit the spread of any coal dust to the surrounding environment.

Other companies to benefit from the new coal burning arrangement include Toll NZ with orders for 33 new coal wagons

for Genesis Energy in order to transport the increasing shipments from the Port to Huntly.

Solid Energy also in the firing line

In related news, Solid Energy's Resource Management application to create two stockpiles of 250,000 tonnes of coal at the Huntly West mine, 3km northwest of Huntly has been opposed by a group of Hetherington Rd residents.

Waikato District Council's hearing into Solid Energy's application for consent to form the stockpiles concluded at the Ruawaro Hall on Thursday, 9 December, with the hearings committee reserved its decision until the middle of next week.

A lawyer for the residents group argued the application was flawed and should not proceed in its present format.

13-year deal for Toll NZ

Toll NZ and Solid Energy have struck a 13-year deal to transport West Coast coal to Lyttelton.

The agreement will allow Solid Energy to move up to 3.8 million tonnes of coal per annum from 2007/08. Over the current year 2.4 tonnes will be moved, with up to 2.7 million tonnes in 2005/06. The increase in tonnage will eventually see the current seven trains a day between the West Coast and the Port increased to eight. The two companies will be working with New Zealand Railways Corporation to address increasing the capacity and reliability of the line.

Solid Energy chief executive Don Elder said the deal was a "significant milestone as it secures the future of our export coal business through Lyttelton and allows us to maintain our competitiveness in international markets. It gives us the confidence and capacity to achieve increased

production volumes from our current and planned mines around the Greymouth and Buller areas of the West Coast. We look forward to using this capacity in the near future."

Toll NZ chief executive David Jackson said the deal created transparency and a new environment to enable it to deliver an extremely important export for the country.

The agreement also established a framework for the possible transportation of Solid Energy coal on other parts of the rail network, including carrying it to ports in Westport and Greymouth. The coal route between the West Coast and the port will receive at least \$25 million of the \$200 million the Government is investing over the next four years to improve rail tracks.

U.S: three-pronged climate change strategy

continued from page 1

including solar and renewable energy technologies, and advanced, still-developing technologies such as nuclear fission and fusion.

The United States has established partnership arrangements with other nations in pursuit of those technological breakthroughs - the third element of the U.S. strategy.

"We have well over 200 projects with our partners addressing climate change science, clean energy technologies, earth observations, and so forth," says Dr Watson. The United States and partners are working to develop a new generation of nuclear reactors, new methods for the capture and storage of fossil fuel emissions, and the technologies and support structure to move society toward a hydrogen-based economy.

Some of the projects which Dr Watson listed as having United States backing include:

- The Group on Earth Observations - which involves over 50 nations and 30 international organisations, including the European Commission, designing and implementing, over the next ten years, a comprehensive earth observation system which will provide data not only on climate change but also on other environmental issues.
- The Generation IV International Forum - a partnership among 10 countries and the EURATOM (European Atomic Energy Community) which are working to develop a new generation of nuclear reactors.
- The Carbon Sequestration Leadership Forum - 16 countries and the European Commission which are working on technologies that will allow the capture and storage, in a safe and environmental manner, of emissions from fossil fuel burning plants.
- The FutureGen programme - clean coal with sequestration producing hydrogen and electricity.

➤ The International Partnership for the Hydrogen Economy - 16 countries and the European Commission which are working to advance the global transition to a hydrogen economy.

➤ The Methane-to-Markets Partnership - where 13 countries joined the United States this year to launch an innovative program that will be targeted on reducing methane emissions. With regard to this latter partnership, the U.S. committed some \$53 million to the Partnership over the next five years.

The looming implementation of the Kyoto Protocol is the main agenda item at the conference. The protocol, an amendment to the UNFCCC, was negotiated in December 1997 and is due to enter into force on 16 February, 2005. The United States is not a party to that agreement, which calls for compulsory reductions in greenhouse gas emissions. Watson said the United States might not be in accord on the Kyoto agreement, but it has taken actions to reduce emissions and control climate change.

"We believe that economic development is absolutely key to addressing this issue, because without economic development and economic growth around the world we are not going to be able to afford the new technologies that we need to address the problem in the long term."

In response to questions from the press regarding the science-base of the Kyoto Protocol, Dr Watson said that, the Kyoto Protocol was "a political agreement. It was not based on science."

In response to another press question on the perceived negative attitude towards the Bush Administration and their lack of support for the Kyoto Protocol, Dr Watson replied, "Perhaps there's a perception that it is more important to agree to things rather than taking actions. We believe the focus ought to be on the actions. But, agreeing to Kyoto does not necessarily mean that you're going to meet those commitments. . . Much more focus ought to be put on the action."

Fonterra plans large coal burning power station

Fonterra has submitted a resource consent application for a 250MW coal burning power station being built at its Whareroa site near Hawera. The consent application covers the construction of five new boilers, associated cooling towers, a 60-metre high discharge stack and turbine housing. The application indicates that 5500 truckloads of coal per year would need to be transported to the site, either by road or rail, from Port Taranaki.

Fonterra said it had not yet decided whether it would proceed with the construction of a dual-fuel energy centre at the Whareroa site. Fonterra's contracts for gas supply to the current gas fired plant will expire in 2006.

Fonterra said that a continuous supply of electricity and steam is vital to their processing operation. Given the uncertainty surrounding future gas supplies in the region, they are continuing with the resource consent application process for the new centre as a contingency plan.

Record sales for Solid Energy

continued from page 1

\$10 million to our shareholder, the New Zealand Government.”

Chief Executive Officer, Dr Don Elder, commented, “Our larger operations performed particularly well with increased volumes from Stockton, Strongman and Rotowaro Opencast and Huntly East Underground Mines. Our biomass business, which trades as Nature’s Flame, has gone from strength to strength, with a 250 percent increase in the installation of wood pellet fireplaces over the year.

“Health and safety remains a top priority for our business and we have made significant progress in managing the impacts of our operations on the environment. We still have some way to go to reach ‘best practice’ at every site, but we are confident that we can achieve that goal from day one at mines under development and at our current mine sites in the foreseeable future. But it is a big challenge as in many areas we have to address the impact of years of historical mining.”

Future Outlook

Demand for Solid Energy coal in New Zealand has almost doubled in recent years,

from 1.55 mt in 2002, to 2.07 mt in 2004 and an estimated three mt in 2005. Over the next 10 years Solid Energy estimates that coal-fired electricity plants are likely to provide between 500 and 1,000 MW of new, mostly baseload generation, creating additional annual demand for up to three mt of coal. Growth in the dairy, timber and other industrial processing sectors is likely to increase annual coal demand by around two mt.

“If major new low-cost gas fields are not discovered and developed, and New Zealand’s growth continues to be driven by the primary sector, potential demand in New Zealand could grow up to 10 mt within the next 10 years. By 2015 up to 25 percent of New Zealand’s electricity could be generated from coal. Increasingly strong demand for coal is likely to continue for at least 20 years. To support this growth Solid Energy is making significant investments in resource development and in new energy forms, in addition to coal-fired generation and cogeneration,” Dr Elder said.

“Demand for Solid Energy’s high-value New Zealand coking, thermal and specialist coals is also forecast to grow internationally. Coal is likely to remain an important New Zealand export for some years to come.”

Full Year Summary Solid Energy audited result for 12 months ended 30 June 2004

	2004	2003	% Change
Sales Volumes	Tonnes	Tonnes	
Tonnes of coal sold	4.21 million	4.09 million	+2.9%
Exports	2.14 million	2.13 million	+0.5%
New Zealand	2.07 million	1.96 million	+5.6%
Profitability			
Revenue	\$334.0 million	\$317.1 million	+5.3%
Surplus before tax	\$51.1 million	\$62.0 million	-17.0%
Tax	\$18.9 million	\$4.7 million	+302.0%
NET SURPLUS	\$33.7 million	\$56.0 million	-39.9%
Cashflow			
Operations	\$53.9 million	\$58.5 million	-8%
Investing	\$(51.5) million	\$(22.9) million	+125%
Financing	\$(10.0) million	\$(15.2) million	-34%
NET CASH INCREASE/(DECREASE)	\$(7.6) million	\$20.5 million	-62%

Coming Events

10-12 May 2005 Second International Conference on Clean Coal Technologies for our Future, Castiadas (Cagliari), Sardinia, Italy, Contact Conference Secretariat, Tel: +39 070 499242-43, Fax: +39 070 485402, Email: info@cct2005.it

New coal analysis update

An “Analysis of New Zealand Industrial Coals 2004” is due out in print in the next few weeks.

The Analysis Update provides a summary of Coal Association of New Zealand Inc. members’ coal production.

The sampling of industrial coal generally occurs at the point of production and is undertaken according to procedures laid down in International Standard ISO 1988:1975. The variables calculated or measured include total moisture, ash, volatile matter, fixed carbon, gross and net calorific values, sulphur, crucible swelling number, ash fusion temperature, and dry ash free values.

The analytical methods used are those specified in International Standards. The analyses are expressed on the “as sampled at the mine” basis.

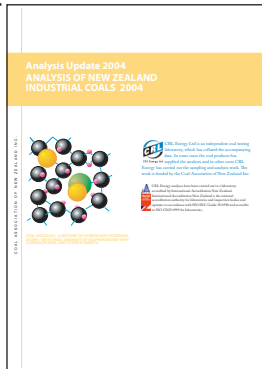
Various sampling rounds have been carried out by CRL Energy Ltd over several years. The analyses show some degree

of variability from sample to sample, due mainly to mining conditions and the weather. Reliable figures are obtained by averaging the results from recent years’ sampling or by including data from mines that are monitoring coal quality on a regular basis.

The data are a combination of samples taken and analysed by CRL Energy staff and data provided by mining companies, where they have had independent analysis carried out.

It must be stressed that, as most mines produce more than one grade of coal, the analyses quoted in the report are intended to be independent of any particular grade. However, some analyses vary significantly with grade.

Copies of the Analysis Update 2004 will be available from mid-January, please contact: CRL Energy Ltd, Tel: (04) 570 3700, or download the PDF file from the Web site at <http://www.crl.co.nz>.



Securing energy supply in New Zealand

continued from page 2

action or inaction now will affect our future supply as well as our future options.”

The study analyses four demand and supply options in the electricity sector to 2021. Low and high energy demand growth scenarios are coupled with two climate change policy scenarios: one where a carbon tax is relatively low and there are widespread exemptions, and one where the carbon tax is high with few exemptions. The key conclusions are:

- If electricity demand growth were to fall significantly below rates of the past 10 years, which are continuing at present, and more aggressive climate change policies were to be implemented, New Zealand’s electricity demand to 2021 could be supplied primarily from renewable resources, supplemented by gas. However, under all other scenarios coal-fired capacity would need to be a significant contributor in the absence of cheap, abundant gas.

- Wholesale electricity prices are likely to continue to rise significantly – by 15 to 20 percent with no carbon tax, and by 30 to 40 percent or more with a carbon tax, depending on its level. If energy demand growth continues at rates similar to those experienced over the past 10 years electricity prices will rise quickly to these levels. Further price rises will depend primarily on the rate of future increase in the carbon tax.

The report concludes: “New Zealand faces some important resource allocation and energy supply development problems. Conflicts between climate change and security of supply objectives are likely to emerge in the electricity sector. The Government and the Electricity Commission will have a key role in resolving these issues; this in turn will influence investment strategy for existing participants throughout the industry, the degree of security for consumers, the cost to consumers and economic growth itself.”

“New Zealand faces some important resource allocation and energy supply development problems. Conflicts between climate change and security of supply objectives are likely to emerge in the electricity sector.”

Coal Association of New Zealand Inc.

Directors

C Baker *Chairman*
Saunders Unsworth
B Bragg Solid Energy
B Francis Francis Mining
G Perkins Birchfield Coal Mines
R Pullein NZ Steel
S Riddell Solid Energy
N Shewan G L Bowron

Officers

Secretary T W Matheson
Treasurer R McGregor

Coal Producer Members

Birchfield Coal Mines Ltd
Burkes Creek Mining
Canterbury Coal Company
Cascade Mining Ltd
Francis Mining Co. Ltd
Glencol Energy Ltd
Harliwich Carrying Co
Heaphy Mining
Kai Point Coal Co. Ltd
MacDougall Mining
McLaughlin Mining
Menzies Mining Company
Mt Somers Mines Ltd
New Creek Mining
New Vale Coal Co. Ltd
O'Reilly's Opencast Ltd
ROA Mining Co. Ltd
Rogers Mining Ltd
Solid Energy NZ Ltd
Victory Lime 2000 Ltd
Waituna Coal Mine

Associate Members

A W Taylor Industrial Coal Ltd
Alliance Group Ltd
Bruce Grant Consultants

Canterbury Health
Coal Distributors (Auckland) Ltd
Coal Marketing Services
Coal Power Ltd
Doug Hood Contractors
G L Bowron Ltd
Genesis Power
Golden Bay Cement
Heinz-Wattie Ltd
Holcim (New Zealand) Ltd
Huntly Retail Distribution Centre
Kenham Holdings Limited
Kenroll Industrial Coal Ltd
Lincoln University
Lion Breweries South
Lyttelton Port Company Ltd
McDonald's Lime Ltd
Meridian Solutions
Meritec (Worley Consultants)
Metso Minerals (New Zealand) Ltd
Montgomery Watson Ltd
National Institute of Water and Atmospheric Research (NIWA)
Natural Gas WEL Energy
NZMP (Edendale)
NZ Steel Ltd
Oderings Nurseries, Christchurch
Otago Regional Council
Phillips Fox
Pike River Coal Ltd
Port of Greymouth
Robert H Hall Group Ltd
Sea-Tow Ltd
SGS NZ Ltd
Shipherd Nurseries
Sinclair Knight Merz
Skellerup Industries Ltd
Southtile Ltd
University of Canterbury
University of Otago Physics Dept.
Websters Hydrated Lime Co Ltd

Associate Membership

Did you know that you can join the Coal Association, even if you are not a coal producer, by becoming an Associate Member?

Why should you join?

The Coal Association needs the support of Associate Members more than ever, so that New Zealanders can retain access to the plentiful and economic fuel coal. Your support is vital, as the Association attempts to reduce the impact of economic measures, designed to help meet New Zealand's Kyoto Protocol obligations. As an Associate Member, you can keep up to date with happenings in the energy industry by reading the Coal Newsletter, which is sent out quarterly, and the Annual Review, which every Associate Member receives with an invitation to the Annual General Meeting.

Other benefits of Associate Membership are:

- opportunities to participate in Coal Association activities;
- opportunities to make your voice heard through Coal Assn initiatives;
- free access to information held by CRL Energy Ltd;
- free short consultations with CRL Energy staff; and
- free updates of recently published coal information.

What does it cost?

An annual fee of \$350 +GST.

How do I join?

Ring CRL Energy 04 570 3715 for the details.



CRL Energy Ltd

LOWER HUTT

68 Gracefield Road
PO Box 31-244, Lower Hutt
Tel: +64 4 570 3700
Fax: +64 4 570 3701

HAMILTON

C/- Ruakura Research Centre
East Street
Private Bag 3123, Hamilton
Tel: +64 7 838 5261
Fax: +64 7 838 5252

CHRISTCHURCH

77 Clyde Road
PO Box 29-415
Christchurch
Tel: +64 3 364 2768
Fax: +64 3 364 2774

GREYMOOUTH

43 Arney Street
PO Box 290, Greymouth
Tel: +64 3 768 0586
Fax: +64 3 768 0587

