

**INQUIRY INTO THE CONTINUED PUBLIC OWNERSHIP
OF SNOWY HYDRO LIMITED**

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Date Received: 4/07/2006

Theme:

Summary



**Minister for Commerce
Minister for Finance
Minister for Industrial Relations
Minister for Ageing
Minister for Disability Services
Leader of the Government in the Legislative Council**

The Rev. the Hon. Gordon Moyes MLC
Chairperson,
Select Committee on the Continued Public Ownership
of Snowy Hydro Limited
Parliament House
Macquarie St
Sydney NSW 2000

30 JUN 2006

Dear Reverend,

I refer to the activities of the Select Committee into the Continued Public Ownership of Snowy Hydro Limited. The New South Wales Government is pleased to present our submission to the Inquiry into the Continued Public Ownership of Snowy Hydro Limited.

Yours sincerely

A handwritten signature in black ink, appearing to read 'John Della Bosca'.

John Della Bosca MLC



**NEW SOUTH WALES GOVERNMENT SUBMISSION TO
THE INQUIRY INTO THE CONTINUED PUBLIC
OWNERSHIP OF SNOWY HYDRO LIMITED**

July 2006

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1. Background

In December 2005 the New South Wales Government announced its decision to sell its shareholding in Snowy Hydro Limited (*Snowy Hydro*). In reaching this decision the Government identified two key issues facing the State of New South Wales and the company. Firstly Snowy Hydro's business environment means that the company needs to continue to grow and diversify in order to remain successful. This requires access to significant capital. However the company is constrained by the fact that its current owners – the Australian, Victorian and New South Wales Governments – are not in a position to provide new capital.

Secondly, the company had already made major capital investments in Victorian energy assets, using New South Wales taxpayers' money. The company's corporate governance arrangements mean that it is not possible for the New South Wales Government to control the company's investment strategies. As the majority shareholder, this means that the New South Wales Government has significant investment in Snowy Hydro, without the ability to manage that investment directly.

The decision to sell Snowy Hydro was based on the desire to resolve these issues. It would have given the company access to new capital via the Australian stock market. It would also have allowed the New South Wales Government to reinvest our funds in priority projects here in New South Wales.

In June 2006 the Government announced that the sale of Snowy Hydro Limited would not continue, after the Australian Government withdrew from the transaction. Subsequently, the New South Wales Government passed legislation which ensures that our shareholding in the company will not be sold without the approval of both Houses of Parliament, unless that sale is to the Australian Government.

1.1. The Snowy Scheme

The Snowy Mountains Hydro-electric Scheme (*Snowy Scheme*) is a dual purpose hydro-electric and irrigation scheme located in south-eastern Australia. The Snowy Scheme captures the snow melts and rainfall of the Snowy Mountains, including the south flowing waters of the Snowy River and its tributaries. The Snowy Scheme also involves the regulation and utilisation of the headwaters of the Tumut, Tooma, Geehi, Crackenback, Bogong and Eucumbene Rivers. Situated predominantly in the Kosciuszko National Park (*KNP*) New South Wales, the Snowy Scheme took over 100,000 people from many parts of the world more than 25 years to build (1949-1974).

The Snowy Scheme is a large capacity, fast starting and flexible hydro-electricity generation facility with a total generation capacity of 3,756 megawatts (*MW*) and an annual average energy production of 5,100 gigawatt hours (*GWh*). It generates hydro-electricity utilising a network of seven power stations, 31 generating units, 16 dams and 225 kilometres of tunnels and aqueducts dispersed over a catchment area of 5,124 square kilometres. The electricity is sold into the National Electricity Market (*NEM*).

The Snowy Scheme was designed, and continues, to mitigate the effects of drought for water users on the River Murray and Murrumbidgee River, thereby supporting the growth of irrigated agriculture in those regions.

1.2. Snowy Hydro Limited

Snowy Hydro Limited is an unlisted public company owned by the New South Wales, Victorian and Australian Governments. The company was corporatised in 2002 to take over the assets and liabilities of the Snowy Mountains Hydro-electric Authority (*SMHEA*).

Over the last few years Snowy Hydro has expanded its asset base outside of the Snowy Mountains region. Since corporatisation Snowy Hydro has acquired the 300 MW Valley Power gas-fired peaking power station located in Victoria and Red Energy, an electricity retailer operating primarily in Victoria. In addition, Snowy Hydro is currently constructing a 320 MW gas-fired power station in Laverton, Victoria.

The Snowy Scheme is mainland Australia's largest producer of clean, renewable energy. Historically, Snowy Hydro's generation accounts for more than 70 per cent of renewable energy produced in the mainland NEM. Electricity generated from the Snowy Scheme avoids the generation of around 4,500,000 tonnes of carbon dioxide that would otherwise be released into the atmosphere each year by coal-fired generation, equivalent to exhaust emissions from around one million cars.

Snowy Hydro's generation assets operate predominantly as peak generators. The Snowy Scheme's fast start generation assets can provide up to 1,000 MW of generation capacity in 5 minutes, up to 3,000 MW in 10 minutes and be at near full available capacity in 30 minutes. Snowy Hydro's unique portfolio of fast start generation assets, combined with low marginal cost of production, gives it a strong competitive position in the NEM. Snowy Hydro predominantly earns revenue from generating electricity into the spot market and providing electricity price risk hedging contracts to other energy market participants.

Snowy Hydro's discretion about the timing of water releases from the Snowy Scheme is constrained by a set of water regulatory arrangements that balance the competing objectives: water for irrigation, water for environmental flows and water for the generation of clean, renewable hydro-electricity.

1.3. Corporate governance arrangements and Government shareholders

Snowy Hydro was corporatised on 28 June 2002 under the *Corporations Act 2001 (Cth)* and is subject to the corporations law. The Shareholders' Agreement and Snowy Hydro Constitution deal with the establishment of the company and its corporate governance arrangements.

1.3.1. Corporations Act company

Other fully State-owned Corporations in New South Wales are governed by the *State Owned Corporations Act 1989 (NSW) (SOC Act)*. The SOC Act was designed specifically for Government ownership of corporations and provides the New South Wales Government with enhanced shareholder powers compared to the *Commonwealth Corporations Act*.

With three Government owners of Snowy Hydro it was not possible to incorporate the company under any specialist legislation from one of the three shareholder jurisdictions.

1.3.2. Constitution

Snowy Hydro was established with a constitution closely modelled on a standard *Corporations Law* constitution in order to:

- avoid giving preference to any one jurisdiction’s legislation;
- to establish Snowy Hydro with a regulatory and corporate governance framework similar to other companies that compete in the NEM; and
- subject Snowy Hydro to regulation by the Australian Securities and Investments Commission (*ASIC*).

Under the *Corporations Act*, board directors have a fiduciary duty to act in the best interest of the company, including its creditors and shareholders, not only its majority shareholder.

As a consequence, the corporate governance arrangements applying to Snowy Hydro afford the board greater independence than the boards of New South Wales State-owned Corporations, particularly in relation to investment strategies. These arrangements are appropriate for Snowy Hydro as a business operating in the NEM, but they are not ideal for the New South Wales Government as a majority shareholder.

For example, unlike State-owned Corporations Snowy Hydro is not captured by the NSW Government’s *Commercial Policy Framework*. In practice this means that the New South Wales Government cannot require the company to seek Budget Committee approval for projects that qualify as Projects of State Significance. As a reflection of this degree of board independence over investment strategies, and therefore the potential funding requirements of such strategies, the company’s Constitution also limits the ability of shareholders powers in relation to approving dividends.

Similar to Section 254U(1) of the *Corporations Law*, Section 124.1 of Snowy Hydro’s Constitution provides that the board determines whether a dividend is payable and the amount and timing of any dividend. This contrasts with Section 20S of the SOC Act that provides that a statutory State-owned Corporation will have a “share dividend scheme” which is formulated by the board and the voting shareholders and approved by the New South Wales Treasurer.

The result is that the New South Wales Government, as majority shareholder of Snowy Hydro, is limited in exercising its preferences over dividends declared by the company and capital investment by the company in new projects. This creates a major tension between the roles of Government in allocating taxpayers' funds to carry out the core functions of Government and as a shareholder in Snowy Hydro.

1.3.3. Shareholders' Agreement

The Shareholders' Agreement is complimentary to Snowy Hydro's Constitution and sets out the arrangements specific to the particular situation and business of Snowy Hydro.

One outcome of corporatisation was that each of the three Governments became shareholders in Snowy Hydro with ownership being equivalent to their original economic interests in the electricity generation of the Snowy Scheme (through their electricity entitlements). These shareholdings comprise: New South Wales 58 per cent; Victoria 29 per cent; and the Commonwealth 13 per cent.

This effectively ensured New South Wales owned 58 per cent of the value of company and an entitlement to 58 per cent of the dividend stream paid by the company. Tax arrangements were also set in place to ensure that no one Government was either financially advantaged or disadvantaged as a result of the process.

The Governments' intention at corporatisation was to establish Snowy Hydro with corporate governance arrangements to allow the company, to the greatest extent possible, to compete effectively with private companies in the NEM. It was therefore agreed that:

- the Governments would have equal shareholder voting rights; and
- unanimous shareholder resolutions would be required to exercise shareholder power.

As set out later in this submission Snowy Hydro is forecasting to continue its capital programme moving beyond refurbishment and upgrade of the Snowy Scheme and further increases in its gas-fired peaking generation capacity and electricity retail business. With continued public ownership it is the growth strategy that poses significant issues for New South Wales. As the majority shareholder, the New South Wales Government has a greater financial exposure to the board's decisions, but has limited ability to influence those decisions.

1.4. Regulatory arrangements applying to Snowy Hydro

The corporatisation of Snowy Hydro in 2002 took Snowy Hydro from being a statutory authority directly operated by Government, to effectively an independent business owned at arms length by Government shareholders. For the New South Wales Government the role shifted to one of regulation.

The process of corporatisation took eight years to complete and resulted in a number of significant achievements. The most notable were the development of a clear, comprehensive and robust set of regulatory arrangements applying to the operations of the Snowy Scheme; and the establishment of Snowy Hydro with commercial and corporate arrangements appropriate for its unique position with respect to water and the NEM.

These achievements are outlined below. The environmental and regulatory arrangements are set out and explained in further detail later in this submission.

1.4.1. Financial and corporate governance arrangements

The process of corporatisation established Snowy Hydro as a financially viable entity able to compete effectively in the NEM, by:

- clarifying ownership of the Snowy Scheme assets and the hydro-electric generating business;
- developing a financial structure and corporate governance arrangements for the company; and
- developing a comprehensive and legally enforceable contractual framework in relation to water providing the appropriate flexibility for the operations of Snowy Hydro.

1.4.2. Environmental regulation

Prior to corporatisation SMHEA operated as if the original Snowy Scheme legislation exempted SMHEA from a range of New South Wales laws and regulations, specifically land use planning, environmental and water regulation.

Corporatisation saw the repeal of the original Snowy Scheme legislation and removed any Crown protection enjoyed by the Snowy Scheme from the operation of New South Wales laws. The operation of the Snowy Scheme is now subject to the same suite of New South Wales laws and regulations as similar businesses in New South Wales and therefore Snowy Hydro now operates within a robust environmental regulatory regime.

The occupation by Snowy Hydro of land in the Kosciuszko National Park (*KNP*) is now governed by a commercial lease, the *Snowy Park Lease (Lease)* issued for a period of 75 years by the New South Wales Minister for the Environment under the *National Parks and Wildlife Act 1974 (NSW) (NPW Act)*. Snowy Hydro is also subject to the Snowy Management Plan (*SMP*) which is part of the Kosciuszko National Park Plan of Management (*PoM*), a statutory instrument under the NPW Act. Any further development would be subject to the standard approval processes under the NPW Act and the *Environmental Planning and Assessment Act 1979 (NSW) (EPA Act)*.

Other key environmental achievements of corporatisation are:

- the development and definition of the environmental obligations and responsibilities of Snowy Hydro with respect to the operation of the Snowy Scheme within the KNP; and
- the obligations on Snowy Hydro in relation to the remediation of the former Snowy Scheme sites.

1.4.3. Water regulation

The Snowy Scheme was designed to capture and divert 99 per cent of water flows in the Snowy Mountains Area into the Snowy Scheme storages. Prior to corporatisation, only about 1 per cent of the original average flows of the Snowy River passed through Jindabyne Dam.

Prior to corporatisation, releases of water from the Snowy Scheme were governed by decisions of the Snowy Mountains Council (*Council*). The Council comprised of both water and power representatives from each of the State and Commonwealth Governments. Over the past 50 years, the decisions of the Council had accumulated into a set of highly complex and overlapping operational procedures.

Corporatisation resolved a large range of issues associated with the water operations of the Snowy Scheme and developed a clear set of rules governing releases of water from the Snowy Scheme. This includes an agreement on releases to provide increased flows for environmental purposes, specifically the adoption of the following target levels of water flows to be achieved progressively over 10 years:

- total flows equivalent to 21 per cent of original average flows in the Snowy River (about 212 gegalitres per year);
- increased flows equivalent to 150 gigawatt-hours per year of foregone electricity generation in the alpine rivers in the KNP and the upper Murrumbidgee River (about 120 gegalitres per year); and
- dedicated environmental flows allocated to the River Murray of 70 gegalitres per year.

The New South Wales and Victorian Governments committed to a contribution of \$150 million each, and the Commonwealth \$75 million, over 10 years (2002 - 2012) to achieve the water savings required for the increased environmental flows.

Snowy Scheme water operations are now governed by the Snowy Water Licence (*Licence*) issued under the *Snowy Hydro Corporatisation Act 1997 (NSW)* for a period of 75 years. The New South Wales Government issues the Licence which imposes conditions on the operation of the Snowy Scheme from a water resource management perspective and imposes environmental flow obligations on the company arising out of the Snowy Water Inquiry.

Snowy Hydro neither owns nor controls the water of the Snowy Scheme. The company is licensed to capture, divert, store and release the water to generate hydro-electricity. The Licence is regulated by the NSW Water Administration Ministerial Corporation (**MinCorp**). The affairs of MinCorp are administered by the NSW Minister for Natural Resources.

MinCorp operates within the parameters set by a number of contractual obligations agreed at corporatisation. These parameters reflect the fundamental arrangements agreed by NSW Parliament (*Heads of Agreement, 6 December 2000*). These contracts require a transparent process for any variation to the Licence. They also clarify and make certain the environmental and economic implications of regulatory changes.

2. Term of Reference 1 (a) – Impacts on the short and long term financial position of the Government including revenue and recurrent costs

The 2006/07 New South Wales State Budget did not include any proceeds from the sale of the Government's shareholding in Snowy Hydro. The State's Balance Sheet continues to reflect the book value of New South Wales' shareholding in Snowy Hydro as determined at corporatisation and the State's Operating Statement continues to reflect the receipt of New South Wales' share of forecast dividends.

In the short term, the impact of continued public ownership of Snowy Hydro is likely to be that the forecast dividends paid by the company to its owners will decline as the company needs to reinvest its profits in new investments.

In the longer term, Snowy Hydro's continued need for new capital to fund new projects will result in demands for new funds from the New South Wales, Victorian and Australian Governments.

2.1. Interaction between the finances of Snowy Hydro and Government shareholders

Shareholder returns in a business generally come from dividend flows and/or capital gains when shares are sold. The company's decision to pay dividends or re-invest profits is driven by:

- the investment opportunities available to the business, in part influenced by the market the business operates in and the role of the business in that market;
- funding requirements to ensure a prudent and appropriate capital expenditure program on asset maintenance; and
- shareholder preferences regarding dividend streams now, versus the potential for capital gains and/or higher dividends in the future. This is in part influenced by the alternative uses that shareholders have for potential returns, and their willingness to accept the risks of further investment by this business.

For a publicly listed company with a diffuse shareholding, decisions concerning dividend policy, investment and capital value are made by the board. If the trade-off between dividends and capital gains embodied in these decisions is not in accordance with the preferences of an individual shareholder, they can sell their shares and invest elsewhere.

For a company with a highly concentrated shareholding, an extreme example being State-owned Corporations, shareholders appropriately have a more direct influence over dividend and investment decisions. This results from the fact that they can be constrained from selling their equity if decisions are not being made in accordance with their preferences for dividend flows, capital gain and risk.

The New South Wales Government, as a shareholder in a number of State-owned Corporations has a preference for stable, reliable dividend flows after making allowances for the investment necessary to maintain the business. The preferred dividend policy is one that reflects the rationale for Government ownership of businesses.

Ownership allows the Government to be involved in a business-like manner in areas where:

- the private sector is unlikely to deliver, or incapable of delivering, the required products or services;
- the community considers it appropriate that Government should own a business, for example, one that operates as a natural monopoly; or
- there is a requirement of Government to fulfil a community service obligation.

Government ownership is not driven by financial gain, but rather fulfilling the Government's core functions in a business-like manner. The Government's preference for a stable and reliable dividend flow is driven by a recognition of the important contribution dividends make to funding general Government expenditure on core services, such as health, transport, education and police. The Government is also committed to ensuring the continued operation of the services provided by the business.

Snowy Hydro raises two sets of issues for the New South Wales Government in its role as shareholder. Firstly, the company is pursuing a growth strategy that could well be justified from the viewpoint of the future value of the business. However, given its inability to access additional equity, the growth strategy results in a reduction in dividends and an increase in the risks that existing shareholders are exposed to via the company's acquisitions and investments.

Secondly, the corporate governance arrangements prevent the New South Wales Government's preferences for dividends versus capital gain to influence the board's decisions.

In considering the restrictions of the corporate governance arrangements on the New South Wales Government, it is important to recognise that the arrangements set out and enforce the disciplines and accountabilities of corporations law on the board and company and are a significant improvement from pre-corporatisation where SMHEA operated as a Government-owned statutory authority.

The arrangements were developed and agreed by all three shareholder Governments at corporatisation. The arrangements were considered the most appropriate and prudent for the time, given the nature of Snowy Hydro's operations within the NEM at corporatisation. The arrangements reflected the intentions of the three Governments to establish Snowy Hydro with the ability to effectively compete in the NEM.

Since corporatisation there has been significant change in the NEM – both regulatory change and different behaviour of market participants. As discussed later, the emerging trend in the NEM is the integration and consolidation of market participants. Given Snowy Hydro's unique position in the NEM, the impact of vertical integration of other market participants on the company is significant. It is these changes in Snowy Hydro's operating environment, unprecedented at corporatisation, that create the tension between the duties of the board and the preferences of the New South Wales Government as a shareholder.

2.2. Snowy Hydro's growth strategy

Since corporatisation, Snowy Hydro has adopted a robust growth strategy to take advantage of increasing electricity demand. Furthermore, this strategy has been designed to enhance and protect its unique position as a provider of peak electricity generation and as a leading provider of electricity price risk hedging contracts to participants in the NEM.

The company's growth strategy focuses on:

- seeking opportunities to expand its gas-fired peaking generation capacity;
- expanding the company's portfolio of electricity price risk hedging contracts;
- expanding the company's retail electricity customer base;
- considering acquisitions in the energy sector; and
- maintaining and enhancing the Snowy Scheme.

To date, this growth strategy has been demonstrated as commercially viable by the board and has been viewed favourably by credit rating agencies Standard & Poor's and Moody's Investment Services. The growth strategy has increased the company's profitability and is likely to continue to do so as implementation of the strategy is maintained.

2.3. Financing Snowy Hydro's growth strategy

Listed companies have access to both debt and equity finance, comprising of borrowing funds from banks and financial institutions (debt) and new capital from shareholders or retaining company earnings (equity).

Snowy Hydro is not a publicly listed company and cannot access the equity market. The three Government shareholders do not have a preference to inject further equity into the business as it is more appropriate for Government funds to be allocated to investing in Government priorities and delivering core Government services.

As with most businesses, Snowy Hydro's growth strategy and its impact on business value is not without risk. The greater the amount of Government funds invested in the company the greater is the Government's exposure to the risk faced by the company.

Further, the longer term benefits of Snowy Hydro's growth strategy - capital gains through increased value of the company - can only be accessed by the three Government shareholders if they have the ability to sell their shareholdings.

For these reasons, funding Snowy Hydro's growth strategy, and consequently benefiting from the returns, is a function better suited to private sector investors. Therefore Snowy Hydro is effectively confined to the use of debt and retained earnings to finance its growth strategy. As the company's capacity to increase debt decreases the reliance on retained earnings increases.

Without access to equity, Snowy Hydro cannot continue funding business growth through debt, without seeking explicit guarantees on the debt by shareholders. This will increase the risk to Government shareholders and reduce the shareholder value through the higher cost of debt.

As a result, despite the company's profits and retained earnings increasing, dividends to Government shareholders can decline. Government shareholders are essentially receiving lower dividends today in expectation of potentially higher future capital gains.

3. Term of Reference 1 (b) – Future capital expenditure requirements of Snowy Hydro Limited in order to remain competitive in the national energy market

3.1. Snowy Hydro – business overview

Snowy Hydro owns and operates the Snowy Scheme, the 300 MW Valley Power gas-fired power station in Victoria, and Red Energy, an electricity retailer operating primarily in Victoria. In addition, Snowy Hydro is currently constructing a 320 MW gas-fired power station in Laverton, Victoria.

Snowy Hydro is mainland Australia's largest renewable energy generator. It is also the NEM's third largest electricity generator by capacity, although due to the nature of the business as a peak generator, it is not so significant in terms of energy generated. Historically, Snowy Hydro's generation accounts for more than 70 per cent of renewable energy produced in the mainland NEM.

Snowy Hydro's generation assets operate predominantly as peak generators. The Snowy Scheme's fast start generation assets can provide up to 1,000 MW of generation capacity in 5 minutes, up to 3,000 MW in 10 minutes and be at near full available capacity in 30 minutes. Snowy Hydro's unique portfolio of fast start generation assets, combined with low marginal cost of production, give it a strong competitive position in the NEM. Snowy Hydro predominantly earns revenue from generating electricity into the spot market and providing electricity price risk hedging contracts to other energy market participants.

Spot market generation

For the purposes of the NEM, electricity cannot be stored and must be generated to match demand at any one time. Electricity markets such as the NEM are therefore among the most volatile markets in the world in terms of financial returns. In the NEM, electricity spot prices are calculated at five-minute dispatch intervals. Spot prices in the NEM are determined by market forces within the parameters established by the National Electricity Rules and prices can vary from -\$1,000/MWh to \$10,000/MWh over a five minute period. A significant proportion of this variability in spot prices occurs during times of peak electricity demand.

Regular demand in the NEM is met by coal fired baseload generators. Peak electricity generators tend to operate only when there is high demand for electricity within the market which is not met by base load generators, thus leading to an increase in electricity prices. This usually occurs during normal higher demand periods and during extreme weather fluctuations such as hot summer days.

Hedging contracts

Snowy Hydro is a leading supplier of electricity price risk hedging contracts. It sells those contracts to other NEM participants such as retailers and generators who are seeking protection to limit the price risk they face from highly variable electricity prices in the NEM spot market. Snowy Hydro's ability to draw on a very highly reliable, large scale generation source at very short notice means that it is able to manage the risk it takes on under those contracts by generating electricity as required.

3.2. Snowy Hydro – business and growth strategy

Snowy Hydro's business strategy is focused on growing the business, as the company believes this strategy best allows the company to:

- protect current business performance (and shareholder value) against developments in the NEM which is trending towards more consolidated, vertically integrated market participants;
- improve future business performance (and shareholder value) by positioning the company to capitalise on growth in maximum energy demand; and
- improve future business performance (and shareholder value) by positioning the company to capitalise on renewable energy policy developments.

3.2.1. Consolidation and vertical integration of participants

Recent electricity industry reform offers customers a choice of electricity supplier. This choice, referred to as retail contestability, is being phased in across each State. Customers in Victoria, New South Wales, South Australia and the Australian Capital Territory are now able to choose their electricity supplier. Queensland has announced the introduction of full retail contestability from July 2007.

Retail contestability results in increased price competition and benefits to customers. The ability to procure wholesale electricity at a known competitive price is therefore a primary driver for electricity retailers' profits, resulting in increased vertical integration of generation and retail participants. For example, AGL is an electricity retailer that has acquired baseload, peaking and intermediate generation capacity: the Somerton plant in Victoria, an interest in the Loy Yang A plant in Victoria, the Hallett plant in South Australia and the Southern Hydro wind and hydro generation portfolio.

Vertical integration in the industry reduces the demand for electricity price risk hedging products. Snowy Hydro derives much of its value from helping generators and retailers manage risk, uncertainty and volatility in the electricity market. An extensive range of electricity risk management products are sold in the form of bilateral contracts to large market participants across the NEM.

Snowy Hydro fears that its products will either not be required or the pricing of them will be significantly reduced as vertical integration of the NEM increases. Vertical

integration of retailers and generators allows the integrated business to manage retail and generation risks internally, instead of seeking risk management products from third parties.

3.2.2. Positioned to capitalise on growth in maximum electricity demand

The National Electricity Market Management company (*NEMMCO*) has forecast expected maximum demand for electricity to grow at a rate approximately 55 per cent higher than average electricity demand from 2005 through to the end of 2015 [NEMMCO, Statement of Opportunity for the National Electricity Market 2005]. This increase in demand is driven by continued economic growth, variability in weather and increased use of air-conditioning.

Given Snowy Hydro's substantial existing peaking generation portfolio, its experience in operating and managing peak generation assets and its ability to enter into electricity price risk hedging contracts, the company is well positioned to take advantage of this forecast growth and to benefit from future expansion opportunities in the energy sector.

3.2.3. Renewable energy developments

Snowy Hydro is the largest generator of renewable energy in mainland Australia, supplying over 70 per cent of the renewable energy in the NEM in the year ending June 2004. As such, Snowy Hydro benefits from existing schemes to promote the use of renewable energy such as the Mandatory Renewable Energy Target scheme (*MRET scheme*) and is ideally positioned to benefit from increased demand for electricity from renewable sources.

In addition, Snowy Hydro could significantly benefit from any future introduction of carbon trading or carbon reduction schemes as the marginal costs of fossil fuel powered electricity generators would be expected to increase from such measures.

Australia has not ratified the Kyoto Protocol, but is committed to restricting its greenhouse emissions to 108 per cent of 1990 levels by 2008-2012. Current initiatives to meet this objective involve a mixture of Commonwealth and State Government policies including voluntary abatement programs and emissions trading in New South Wales, such as the New South Wales Greenhouse Gas Abatement Scheme.

The primary renewable energy framework in Australia is the MRET Scheme, introduced by the Australian Government in December 2000. The primary objective of the MRET scheme is to target an additional 9,500 GWh of renewable energy generation per annum by 2010. The MRET Scheme applies on a national basis, including to those States and Territories outside the NEM.

Alternative schemes to promote emissions reduction may also be adopted. Such alternatives include the establishment of a broader emissions trading regime or the introduction of a carbon mitigation scheme. For example, the Premiers and Chief Ministers of the States and Territories agreed on a set of principles in March 2005 for

the development of a multi-jurisdictional greenhouse emissions trading scheme. Details are due to be published soon.

3.3. How the strategy is being implemented

Since corporatisation Snowy Hydro has commenced implementation of a number of strategies to grow the company. The company believes this is the best approach to mitigate the risks to the business and take advantage of market opportunities.

Expand gas-fired generation capacity

By expanding its peak generation capacity, Snowy Hydro can:

- respond to the increase in demand for peak electricity thereby maintaining and enhancing its industry position as a leading provider of electricity price risk hedging products;
- mitigate the risk of inter-regional transmission constraints and price differences between regions by building and acquiring additional gas-fired peaking generation outside of the Snowy region; and
- diversify energy sources thereby allowing for the choice between energy sources from which to dispatch generation.

Examples of this strategy to date are:

- the construction of a \$180 million, 340 MW gas-fired peaking plant in Laverton North, Victoria, scheduled for completion December 2006; and
- the acquisition of Valley Power, a \$240 million, 300 MW gas-fired peaking plant in the LaTrobe Valley, Victoria in August 2005.

Expand portfolio of electricity price risk hedging contracts

Snowy Hydro will seek to expand its contract portfolio by attracting new customers and growing its business with existing customers. Snowy Hydro intends to achieve this objective both by modifying its electricity price risk hedging contract products to make them mutually more attractive and through creating new types of contracts that add value to Snowy Hydro and its customers. Snowy Hydro intends to satisfy this increase in demand with increased generation capacity.

Expand retail customer base

In 2004/05 Snowy Hydro acquired Red Energy, a fledgling Victorian energy retailer. As at July 2005 the retailer has approximately 44,000 small retail customers. The addition of residential retail customers diversifies Snowy Hydro's revenue and removes an element of contract renewal risk by giving Snowy Hydro the ability to sell electricity to its retail customers.

Snowy Hydro will seek to expand its retail customer base both organically (by growing its existing Red Energy retail customer base) and by considering other retail acquisitions.

Consider other acquisition opportunities in the energy sector

Given its substantial existing peaking generation portfolio and its experience in operating and managing peak generation assets, Snowy Hydro is well positioned to take advantage of acquisition opportunities that arise in the energy sector generally. Acquisition opportunities are expected to arise as a result of consolidation in the energy sector and privatisation of government owned entities, such as the recently announced sale of the Queensland Government's electricity retail businesses. Snowy Hydro will consider making strategic acquisitions that complement its existing portfolio, including additional gas-fired peaking plant and retail acquisitions.

Maintain and enhance the Snowy Scheme

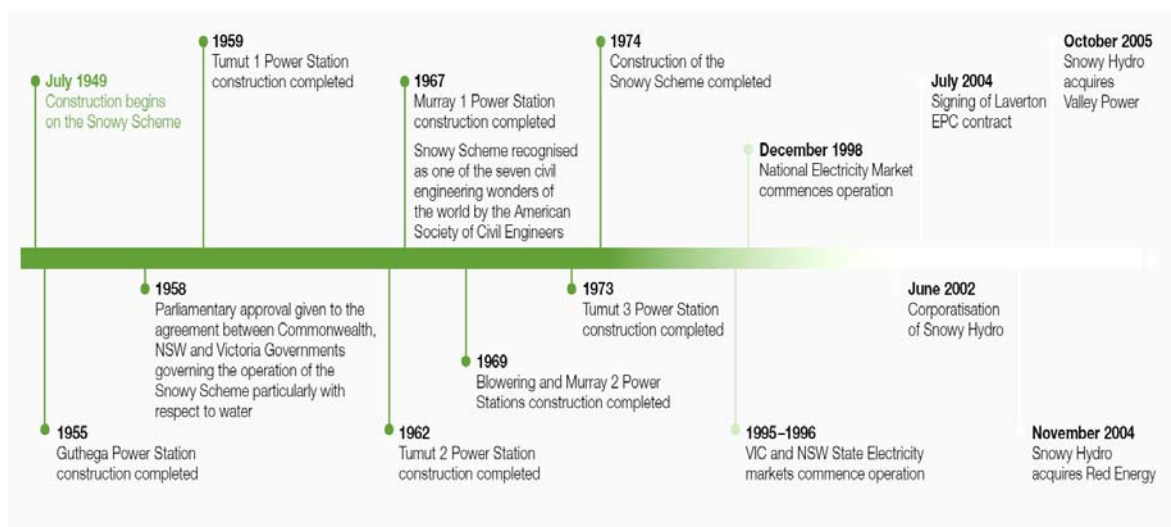
Snowy Hydro's core business strategy and competitive position is underpinned by the unique portfolio of generation assets of the Snowy Scheme. The company has programs in place to keep the assets in proper working condition, thereby enhancing the company's ability to grow its portfolio of electricity price risk hedging contracts through increased reliability of plant and increased capacity.

Prior to the corporatisation of Snowy Hydro in 2002, the Snowy Mountains Hydro-electric Authority established a capital refurbishment and replacement program designed to ensure the ongoing asset integrity of the Snowy Scheme. Since corporatisation, Snowy Hydro has maintained and extended this program to enhance the Snowy Scheme's capabilities. Snowy Hydro is undertaking a ten year capital expenditure program designed to ensure the continuing high reliability and availability of the Snowy Scheme.

The program is estimated to cost between \$220 million and \$250 million, of which \$140 million has been approved for expenditure over the next five years. Implementation of the program is scheduled to occur between 2006 and 2016 and will involve all power and pumping stations, tunnel systems and major infrastructure assets. Snowy Hydro expects that the balance of the ten year capital expenditure program will be approved closer to the time when the relevant work is scheduled to commence.

On completion, the program is expected to result in an increase in capacity of 300 MW and an increase in energy output of 75 GWh per annum. The ten year capital expenditure plan forms part of Snowy Hydro's rolling twenty year asset management plan.

Key milestone developments of Snowy Hydro



3.4. Why is Snowy Hydro different?

The New South Wales Government is managing the impact of the energy market developments New South Wales State-owned energy businesses through the State's energy industry policy. This approach cannot be directly applied to Snowy Hydro. As discussed above, the corporate and financial structure and operations of Snowy Hydro are substantially different from other State-owned Corporations. The company is accountable to three shareholders and is not governed by the policy objectives of the New South Wales Government.

Unlike other State-owned Corporations, Snowy Hydro is already vertically integrated, owning both retail and generation functions in the Snowy and Victorian regions of the NEM.

Further, the role of the company in the NEM is fundamentally different from the other New South Wales State-owned electricity generators which are coal-fired baseload generators located relatively close to the New South Wales energy load. Snowy Hydro is uniquely positioned as the largest peak generator and provider of energy insurance products, and is located between the two key energy loads of Sydney and Melbourne. The characteristics of Snowy Hydro increase the threat of vertical integration of other participants in the energy market, both in terms of value and immediacy.

4. Term of Reference 1 (c) – Control of water regulation

4.1. Overview

The objectives of the design and construction of the Snowy Scheme were to mitigate the effects of drought on irrigated agriculture along the River Murray and Murrumbidgee River and at the same time create a hydro-electric scheme capable of producing clean, renewable hydro-generated electricity.

The Snowy Scheme is able to capture and store the highly variable annual inflows into the Snowy Water Catchment (varying from 35 per cent of the annual average to 250 per cent of the annual average) and release more reliable and constant water flows across wet and dry years. The Snowy Scheme makes these releases through the hydro-electric infrastructure which harnesses the water to produce hydro-electricity.

The regulatory arrangements applying to the water releases of the Snowy Scheme reflect these two key functions of the Snowy Scheme and are designed to:

- ensure certain minimum water releases into both the River Murray and Murrumbidgee River each year, even through a drought sequence as severe as the 1937 to 1946 drought (the “design drought sequence”), the most severe drought sequence in the last 110 years; and
- provide Snowy Hydro with sufficient flexibility in regard to intra-year releases of water to be able to fulfil its role in the NEM as a key provider of peak electricity.

4.2. The water regulatory arrangements – what are they?

Of the eight years spent on the corporatisation process, over half this time was dedicated to the development of comprehensive water regulatory arrangements. The water regulations constitute a set of clearly defined and legally enforceable arrangements, which are sufficiently robust to continue to be enforceable in the absence of Government ownership of Snowy Hydro.

The water regulations address the competing needs of the water captured by the Snowy Scheme by all stakeholders. They ensure the appropriate balance between the need for water for environmental flows, water for irrigation purposes, and water for the generation of clean renewable hydro-electricity.

The arrangements made at corporatisation established the rights and obligations of Snowy Hydro in relation to the water resource. They make explicit the rules applying to releases of water from the Snowy Scheme including both required annual releases to the west for irrigation purposes and environment flows to the east. The regulations also protect and preserve New South Wales and Victoria’s right to water.

Inquiry into the continued public ownership of Snowy Hydro Limited

The arrangements are set out in a package of some 14 legal documents:

- *Agreement between New South Wales and Victoria on the Outcome from the Snowy Water Inquiry;*
- *Heads of Agreement: The Agreed Outcome from the Snowy Water Inquiry;*
- *Snowy Water Inquiry Outcomes Implementation Deed (SWIOID);*
- *Snowy Water Licence;*
- *Snowy Compensation Deed;*
- *Snowy Scheme Deed of Indemnity;*
- *Murray Darling Basin Amending Agreement;*
- *Intergovernmental Agreement;*
- *Joint Public Statement (Communiqué);*
- *Snowy Scheme Long Term Water Arrangements Deed;*
- *Snowy Bilateral Deed;*
- *Blowering Works Operating Deed and Lease;*
- *Blowering Airspace Deed;*
- *Tumut River Works Agreement.*

These documents bind Snowy Hydro and the three shareholder Governments to the agreements reached at corporatisation in relation to water. The extent of the documents reflects the ability of the arrangements to continue to be enforceable irrespective of Government ownership of Snowy Hydro. The arrangements include legal and contractual obligations both between the Governments and Snowy Hydro, and among the three the Governments.

The key documents in regard to water are the Snowy Water Inquiry Outcomes Implementation Deed and the Snowy Water Licence. These documents were made publicly available by the three shareholder Governments during the corporatisation process.

The Licence is also available on the New South Wales Department of Natural Resources website [<http://www.naturalresources.nsw.gov.au/whatsnew/index.html>]. More recently, these documents have been tabled in the New South Wales Parliament.

A summary of the water operations of the Snowy Scheme and how these are regulated by the water arrangements is set out below.

4.3. The water regulatory arrangements – what do they cover?

4.3.1. Required annual irrigator releases

The Snowy Scheme's water operations are regulated by the Snowy Water Licence (*Licence*). The Licence provides Snowy Hydro the rights to collect, divert, store and release water within the Snowy Water Catchment but does not provide Snowy Hydro with ownership of the water.

The Licence, which expires in 2077, achieves a balance between water releases timed for the benefit of downstream irrigation and environmental uses, while at the same time providing Snowy Hydro with the timing flexibility it needs as a peak generator in the NEM. The Licence achieves this outcome in two ways.

Firstly, it prescribes that Snowy Hydro must make minimum annual water releases but it is generally not prescriptive in terms of when during each water year those releases must be made. The minimum annual water releases are 1,062 gegalitres (*GL*) for the Snowy-Murray Development and 1,026 GL for the Snowy-Tumut Development, totalling 2,088 GL. This equates to 87 per cent of the long term inflows of both Developments. Before corporatisation in 2002, there was no formal obligation for either annual releases or within-year release patterns from the Snowy Scheme.

In terms of the timing of the minimum annual water releases, the Licence includes a protection against the possibility of Snowy Hydro moving its generation into the winter months when the likelihood of irrigation storage spills is greater. The Licence specifies conditional minimum release requirements for the summer months and restrictions on the rate of water releases from the Snowy-Tumut Development during times when Blowering Dam is spilling.

Secondly the Licence prescribes that any water in excess of that required to make the required annual minimum releases can be released at Snowy Hydro's discretion. In every water year since corporatisation, the Snowy Scheme has met its annual water release obligations.

Snowy Scheme releases are not supplied directly to downstream water users. Rather, those releases and the other River Murray and Murrumbidgee River catchment inflows are re-regulated by the Hume Dam on the River Murray and Blowering Dam on the Tumut River. Both dams are operated by Government water authorities.

4.3.2. Environmental flows

In early 1998, the New South Wales and Victorian Governments commissioned the Hon. Robert Webster to carry out the Snowy Water Inquiry (*Inquiry*). The purpose of the Inquiry was to develop costed options to address the environmental issues arising from the pattern of water flows caused by the operation of the Snowy Scheme. The report of the Snowy Water Inquiry was submitted to the two Governments in October 1998.

Based on the Inquiry, in December 2000, the New South Wales, Victorian and Australian Governments adopted the following target levels of water flows to be achieved progressively over 10 years:

- total flows equivalent to 21 per cent of original average flows in the Snowy River at Dalgety (about 212 gigalitres per year);
- increased flows equivalent to 150 gigawatt-hours per year of foregone electricity generation in the alpine rivers in the Kosciuszko National Park and the upper Murrumbidgee River (about 120 gigalitres per year);
- dedicated environmental flows allocated to the River Murray of 70 gigalitres per year.

An additional 7 per cent of further flows in the Snowy River up to a total of 28 per cent of original average flows may be achieved after 2012 following the implementation of additional major capital works to achieve water savings in the southern Murray-Darling Basin beyond those required to offset the 21 per cent.

The above environmental flows are set out in a legally binding agreement between the Governments called the Snowy Water Inquiry Outcomes Implementation Deed (*SWIOD*). These provisions are also reflected in the Licence.

All increased environmental flows in the Snowy River are offset with water obtained primarily through prior verified water savings in diversions (irrigation channels) from the River Murray and in the Murrumbidgee and Goulburn-Murray river systems. Water savings are also used to provide dedicated environmental flows in the River Murray.

The water savings recovered in the irrigation districts reduce the volume of water required to supply the needs of irrigation farmers, without affecting production. These water savings offset increased flows in the Snowy River by reducing the required annual releases from the Snowy Scheme to the west for irrigation farming. These reductions enable increased releases from Jindabyne Dam to the east to provide increased flows in the Snowy River.

To achieve these water savings, the New South Wales, Victorian and Commonwealth Governments have established the Joint Government Enterprise (trading as Water-4-Rivers) with a charter to obtain water savings at least cost.

New South Wales and Victorian Governments have each committed to contribute \$150 million, and the Commonwealth \$75 million, over 10 years (2002 - 2012) to achieve the water savings.

4.3.3. Protection of States' rights to water

Prior to corporatisation, the Murray-Darling Basin legislation ensured water sharing between Victoria, South Australia and New South Wales. In very broad terms, New

South Wales and Victoria share equally the flows in the River Murray, with South Australia entitled to a fixed volume of water from each share. The exception is in declared drought conditions, when the water in the River Murray is shared equally between the three States.

These rights were preserved and protected in the arrangements made at corporatisation for releases of water from the Snowy Scheme. In the *Murray-Darling Basin Amending Agreement (MDBA Agreement)* the New South Wales, Victorian, Commonwealth and South Australian Governments agreed to amend the existing Murray-Darling Basin legislation to:

- implement new arrangements for sharing water made available from the Snowy Scheme to the River Murray catchment above Hume Dam;
- secure Victoria's water rights (and consequently those of South Australia) which were contained in the original Snowy Scheme legislation by requiring specific performance by New South Wales; and
- require the Murray-Darling Basin Commission to adjust water accounts to restore the status quo if New South Wales amends the Licence in a way which alters Victoria's access to water.

In addition, the *Snowy Scheme Long Term Water Arrangements Deed* protects the interests of Victoria and South Australia on the expiration of the Licence or its revocation by New South Wales.

4.4. Enforceability

Since corporatisation, the three Governments have not relied on their ownership of Snowy Hydro to achieve water release outcomes, but have relied on the comprehensive regulatory arrangements. These regulatory arrangements are legally enforceable, regardless of the ownership structure of the company.

The Snowy Water Inquiry Outcomes Implementation Deed (*SWIOID*) sets out in legally binding and enforceable terms the agreements reached by the three Governments in relation to the outcomes of the Snowy Water Inquiry.

The principal regulatory instrument governing the use of water by Snowy Hydro is the Snowy Water Licence (*Licence*). The Licence was granted to Snowy Hydro under section 22 of the *Snowy Hydro Corporatisation Act 1997 (NSW) (SHC Act)*. The Licence is administered solely by the New South Wales Minister for Natural Resources.

Essentially, the Licence grants Snowy Hydro:

- rights to collect, divert and store all water from the rivers, streams and lakes within the Snowy Water Catchment;
- the right to use that water to generate electricity; and

- the right to release water from storage.

These rights replicate the provisions of the SWIOID. Snowy Hydro and the New South Wales Government are the parties to the Licence and therefore are both bound by the document. As such, the enforceability of the Licence ensures the enforceability of the provisions of the SWIOID.

4.4.1. Ownership of water

A fundamental function of the Licence is to ensure that the water resources of the Snowy Scheme are, and will continue to be, owned by the New South Wales Crown.

Importantly, the Licence obligates Snowy Hydro to release all water collected and stored by it to rivers and streams flowing from the Snowy Water Catchment. Both the Licence (c.7.4) and the *New South Wales Snowy Hydro Corporatisation Act 1997* (s.23 (7)) make explicit for the avoidance of doubt, that the Licensee (Snowy Hydro) is not authorised to act as a supplier of water released from the Snowy Scheme to others or to give rights to others to use that water.

With no legal right to supply the water, Snowy Hydro has no ability to charge downstream users for the supply of the water released from the Snowy Scheme. The ownership arrangements for the water will continue regardless of any change to either the ownership of Snowy Hydro or amendment of existing regulatory arrangements.

4.4.2. Obligations on Snowy Hydro

The SHC Act sets out in legal terms that Snowy Hydro must not contravene or fail to comply with the terms or provisions of the Licence. Further, the SHC Act sets out that Snowy Hydro directors who cause contravention or failure of the provisions of the Licence that result in harm to, or is likely to harm, the environment are subject to a maximum penalty including two years imprisonment.

4.4.3. Obligations on New South Wales

As the Licensor, the New South Wales Government administers the principal regulatory instrument in the Snowy Hydro water arrangements. A range of obligations ensures consistency with the SWIOID. The Licence itself sets out that the New South Wales Government must ensure that it is administered in a manner that is consistent with the provisions of the SWIOID.

Water Management Act 2000

The SWIOID also sets out that the New South Wales Government must ensure that the *Water Management Act 2000 (NSW)* (**WMA**) does not permit the Government to act in contravention of the provisions of the SWIOID.

The water regulatory arrangements include a number of other key documents and contractual arrangements that protect the interests of Victoria, the Commonwealth, and South Australia, regardless of the ownership structure of Snowy Hydro.

New South Wales Snowy Hydro Corporatisation Act 1997

The Licence is issued under s. 23 of the *New South Wales Snowy Hydro Corporatisation Act 1997 (SHC Act)*. In addition to setting out the rights and obligations the Licence confers on Snowy Hydro in relation to water, s.23(3) of the SHC Act also legally binds New South Wales to issue a Licence that is not inconsistent with the provisions of the SWIOID.

Murray Darling Basin Amending Agreement

The *Murray Darling Basin Amending Agreement (MDBA Agreement)* binds the Governments of New South Wales, the Commonwealth, Victoria and South Australia. It safeguards Victoria's share of the water released from the Snowy Scheme by allowing the Murray Darling Basin Commission (*MDBC*) to reallocate water released into the River Murray from the Snowy Scheme to ensure Victoria's allocation is consistent with the provisions of the SWIOID.

The MDBA Agreement also protects South Australia's water entitlement by protecting Victoria's entitlement as South Australia receives water down stream from Victoria. It also enables management of the additional environmental flows for the River Murray arising from the SWIOID.

The MDBA Agreement operates separate from the Licence and ensures Victoria's right to water is consistent with the agreements under the SWIOID. It should be noted that New South Wales does not require any such converse protection from Victoria as New South Wales administers the Licence.

Snowy Scheme Long Term Arrangements Deed

The purpose of the *Snowy Scheme Long Term Arrangements Deed (Long Term Deed)* is to safeguard the water interests of Victoria and the Commonwealth when the Licence expires 75 years after corporatisation or if it is revoked earlier.

Essentially, the Long Term Deed recognises the ability of New South Wales to revoke the Licence where Snowy Hydro breaches the terms of the Licence. According to the Long Term Deed the New South Wales Government is bound to a process of negotiation if the Licence is revoked.

If the New South Wales Government determines to revoke the Licence and issue a further licence, the Government must as soon as practicable negotiate in good faith with the Commonwealth and Victoria upon the terms of the further licence to protect their rights and interests after revocation.

If the New South Wales Government determines to revoke the Licence and not issue a further licence, the Government must, as soon as practicable, negotiate in good faith with the Commonwealth and Victoria upon either or both of a set of legislative and other legally binding arrangements to protect their rights and interests after revocation.

The New South Wales Government must do all things reasonably necessary to introduce into the New South Wales Parliament any legislative arrangements as may be agreed between the three Governments as soon as practicable after such agreement is reached.

Snowy Bilateral Deed

The Snowy Bilateral Deed (***Bilateral Deed***) provides contractual rights to Victoria against Snowy Hydro in relation to compliance with the Licence. The Bilateral Deed provides a safeguard for Victoria's water rights where New South Wales does not take action to enforce compliance with the Licence.

The Bilateral Deed also creates an obligation on Snowy Hydro to consult with Victoria in relation to the preparation of the Annual Water Operating Plan (***AWOP***).

4.4.4. Other water regulatory arrangements

In addition to the regulatory arrangements described above there are two other notable arrangements applying to the water in the Snowy Scheme. These arrangements will also continue to be enforceable regardless of the ownership structure of Snowy Hydro.

Cold water pollution

The New South Wales Government has agreed a strategy for mitigating the impact of cold water impacts of releases from large dams. Section 56A of the *Protection of the Environment Operations (General) Regulation 1998* now provides a limited exemption from the *Protection of the Environment Operations Act 1997 (NSW) (POEO Act)* offence of water pollution for temperature of releases from certain dams, subject to works approvals under the WMA.

It is the intention of New South Wales to extend this strategy to dams owned by Snowy Hydro, as reflected by the agreement of the New South Wales Department of Environment and Conservation (***DEC***) to amend the POEO (General) Regulation 1998 to add an exemption for releases from Jindabyne and Tantangara dams. Snowy Hydro has completed works to address coldwater impacts of releases from those dams.

This will achieve the most positive environmental outcome in the most efficient way for Government and for the company. It establishes a single regulator, prevents duplication of the Snowy Water Licence and provides a framework that is consistent with other dams. It also retains an incentive for Snowy Hydro to address the issue at their other dams in order to extend the exemption in future.

Environmental Management Plan – water quality

As described above, the regulation of water releases from the Snowy Scheme is essentially defined and governed by the New South Wales Government through the Licence.

A requirement at corporatisation was that Snowy Hydro develop an Environmental Management Plan. This plan includes the obligation on Snowy Hydro to establish a regime for Snowy Hydro to manage the impacts of planned water releases on receiving water quality within the Kosciuszko National Park. This includes pollutants such as chemical, temperature and sediment.

5. Term of Reference 1 (d) – Access to lands controlled by Snowy Hydro Limited

5.1. Land occupation

Outside the Kosciuszko National Park (**KNP**), Snowy Hydro owns land required to operate the Snowy Scheme.

An important function of the SHC Act is that it severs the fixtures of the Snowy Scheme infrastructure located within the KNP and transfers ownership of this infrastructure to the company while continuing the New South Wales Government's ownership of the freehold title of the land. Consequently, inside the KNP Snowy Hydro obtains its right to occupy land under the Snowy Park Lease (**Lease**) which expires in 2077 consistent with the Licence. The Lease also governs access to lands controlled by Snowy Hydro within the KNP.

5.2. Land use

Outside the KNP, Snowy Hydro is subject to the full range of environmental and planning laws and instruments as would be any other business carrying on activities on land. The Snowy Scheme straddles four local government areas – the Cooma-Monaro Shire, Snowy River Shire, Tumbarumba Shire and Tumut Shire – whose planning instruments apply to Snowy Hydro where relevant.

Inside the KNP, Snowy Hydro is subject to the provisions of environmental and planning laws applicable within national parks, in particular the *National Parks and Wildlife Act 1974 (NSW)* (**NPW Act**) and the *Environmental Planning and Assessment Act 1979 (NSW)* (**EPA Act**).

Snowy Hydro's activities within the KNP are regulated by two plans of management under the NPW Act, the general KNP Plan of Management (**PoM**) and the Snowy Management Plan (**SMP**) which is specific to Snowy Hydro's activities within the KNP. The SMP includes an obligation on Snowy Hydro to prepare an Environmental Management Plan (**EMP**) for operations within the KNP.

5.3. Snowy Park Lease

The Lease was established between the New South Wales Minister for the Environment and Snowy Hydro at the time of corporatisation and categorises land controlled by Snowy Hydro within the KNP as either "leased areas" or "licensed areas".

Importantly, nothing in the Lease affects the rights of the New South Wales Minister for the Environment to perform their duties under the NPW Act or any other statute.

"Leased areas" are those where third party use of or access to the land will substantially and materially interfere with or prejudice the ability of Snowy Hydro to operate in

accordance with its rights under the Licence. Leased areas are essentially land occupied by Snowy Hydro power stations and dam structures. The Lease allows Snowy Hydro rights of occupation to peacefully possess and quietly enjoy the leased area.

“Licensed areas” are those occupied by other Snowy Hydro facilities, such as aqueducts, pipelines and communications equipments and land occupied by water such as reservoirs and lakes. Snowy Hydro’s occupation in licensed areas is non-exclusive. The Minister may grant other third party licences with some covenants and public access is allowed.

5.4. Access to lakes

For lakes and foreshores located within the KNP, the Lease must make provision for public access to the waters of the Snowy Scheme that have previously been available for public recreation.

Outside the KNP, most notably Lake Jindabyne and Lake Eucumbene, Snowy Hydro owns the land under the lakes. Both Lake Jindabyne and Lake Eucumbene have extensive foreshores of which significant proportions adjoin the KNP and is therefore accessible to the public. Further shoreline is either New South Wales Crown land or leased to Snowy River Shire Council for the express purpose of public access.

Lake Eucumbene and Lake Jindabyne both have easy access from the public roads that run to the edge of Snowy Hydro land. These roads are maintained by the local council, are well sign posted, and offer easy access to the key recreational access points around both lakes.

Snowy Hydro has developed 10 key recreational access points around these lakes to ensure safe access for recreational users. These sites are well maintained and offer well sign posted and environmentally friendly facilities.

In addition Snowy Hydro has in place cooperative arrangements with local government to ensure boating access including boat ramps and public access at key locations including the southern foreshore of Lake Jindabyne adjoining the township of Jindabyne and Old Adaminaby on Lake Eucumbene. Further public access is available from numerous caravan parks and camping areas that have been developed to provide a wide range of recreational opportunities.

6. Term of Reference 1 (e) – Removal of disused Hydro infrastructure in National Parks

6.1. Infrastructure currently owned and controlled by Snowy Hydro

The Lease provides that areas within the KNP currently under the control of Snowy Hydro will undergo suitable remediation when, in general terms, an area is no longer required for operational purposes. Remediation is the responsibility of Snowy Hydro and includes removal of disused infrastructure.

6.2. Infrastructure no longer controlled by Snowy Hydro

As part of the corporatisation process, an environmental audit was carried out to identify and assess former construction sites of the Snowy Scheme. The report and subsequent audits identified a total of nearly 1000 former Snowy Scheme sites, of which approximately 630 sites were assessed as having no known or identified environmental liabilities and 310 as having minor liabilities. Sixty were initially identified as sites with potential major environmental liabilities.

After further environmental assessment the final number of sites classified as major and minor former scheme sites was 35 and approximately 350 respectively.

Following extensive consultation between the NSW National Parks and Wildlife Service (*NPSW*), Environmental Protection Authority (*EPA*), Department of Land and Water Conservation (*DLWC*), SMHEA and NSW Treasury agreement was reached on the remediation plan for the major and minor sites and the liability for such remediation.

These agreements are set out in the Major Former Scheme Sites Management Deed and a Minor Former Scheme Sites Management Deed.

For major sites, Snowy Hydro will pay NPWS \$25 million (maintained in real terms) over five years from the corporatisation date. Snowy Hydro has one payment of \$5 million remaining.

NPWS has to use the funds to remediate only the major former Snowy Scheme sites. NPWS is responsible for the timing, scope, location, priority and management of any remediation works.

The New South Wales Government has committed to Snowy Hydro that in return for the payment of \$25 million, the New South Wales Government will assume responsibility for the environmental remediation of the major former Snowy Scheme sites, excluding any obligations that arise under the *Contaminated Land Management Act 1997 (CLM Act)* which will be fully retained by Snowy Hydro.

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For minor sites, Snowy Hydro has paid NPWS \$7 million, reflecting the estimated cost of weed reduction and small scale remediation over several years.

7. Term of Reference 1 (f) – Heritage issues

7.1. State heritage

DEC has confirmed that there is no intention to seek individual items of the Snowy Scheme to be listed for State heritage significance under the *New South Wales Heritage Act 1997 (Heritage Act)*.

However, were there an intention to do so, there are no express arrangements prohibiting items of the Snowy Scheme being listed on the on the State Heritage Register (“**Register**”) pursuant to the Heritage Act.

The New South Wales Minister administering the Heritage Act can direct the listing on the Register of a building or work where the Minister considers it is of State heritage significance, but only if the Heritage Council recommends that listing (s.32(1), Heritage Act).

7.2. Aboriginal heritage

Under the Environmental Management Plan Snowy Hydro is required to establish an approach to the management of Aboriginal heritage, including the parameters that Snowy Hydro will follow with respect to the protection and management of Aboriginal heritage for those activities approved under the *Snowy Hydro Corporatisation Act 1997*.