Snowy Hydro Limited

Snowy Scheme Water Storages Update

3 July 2007

Q) Why are the Snowy Scheme water storages so low?

A) South eastern Australia is continuing to suffer from the effects of the major drought sequence that has been occurring since 1996. Like all water storages across this region, the water storage levels of the Snowy Scheme are not immune and are also suffering.

Our region is now experiencing a drought that is worse than that envisioned by the original designers and builders of the Snowy Mountains Scheme. In terms of inflows the current drought sequence is now worse than the previous worst dry sequence which occurred from 1936 to 1946. Therefore this drought has exceeded the original "dry sequence" design parameters of the Snowy Mountains Scheme.

Because of the continuing extremely low water inflows, water levels in Snowy Scheme storages have steadily decreased since 1997 and are currently at their lowest level since construction of the Snowy Mountains Scheme.

While water inflows over the months of May and June 2007 were a slight improvement on the previous 12 months, which were at about 25% of long term average, they were not sufficient to make a significant impact on water storage levels. Unfortunately, recent heavy rainfalls experienced in other areas of the country have not occurred in our region and catchment area.

In addition, while early snowfalls in the Snowy Mountains have been positive, it is still too early in the season to conclude what benefits this may provide to Snowy Scheme storages in terms of spring runoff. Snowy Hydro believes that prolonged above average inflows will be required to return water levels to those seen prior to the start of this drought cycle in 1996.

Q) What are the expected future water levels for Lake Jindabyne and Lake Eucumbene?

A) It is difficult to predict the extent or length of the current drought sequence that is affecting Snowy Scheme water storage levels. Unfortunately, under these difficult drought conditions water levels at all Snowy Scheme storages have continued to drop and may drop further if the drought persists.

Water levels in Snowy Scheme storages are dependent on a number of factors including the amount of water inflows from rain or snow (in winter/spring) and the demand for water for electricity and the environment. To meet the needs of all Snowy water stakeholders including environmental releases, if the current drought conditions continue lake levels will continue to drop.

Under these exceptional drought conditions it is necessary for all water users to explore ways to ensure that as much water as possible is accessible for the benefit of all water stakeholders. Accordingly, over the last several months Snowy Hydro has undertaken engineering assessments of our ability to continue operating the Snowy Mountains Scheme below storage levels that have historically been regarded as Minimum Operating Levels (MOL). Our assessment is that, particularly in regard to Lakes Eucumbene and Jindabyne, we can operate the Snowy Mountains Scheme at storage levels below what has historically been regarded as MOL. The extent of operation below that historical MOL should this occur would be continually under review to ensure current high levels of engineering management and environmental care are maintained .

During June the Lake Eucumbene storage decreased due to lower than average inflows and sustained periods of high demand in the National Electricity Market (NEM). July normally brings an increase in flows and if the high NEM demands experienced over the recent weeks do not continue then, in July we expect Eucumbene levels to rise marginally. If, however, this proves not to be the case, Snowy Hydro will be accessing water below historical MOL to ensure our continued commitment to meet our water and electricity obligations.

It is very difficult for anyone to accurately predict future weather patterns and associated water inflows. However, even if the current drought conditions continue and our spring runoff from snowmelt is as bad as last winter, Snowy Hydro believes that it can meet its water and electricity commitments this winter and into next summer.

Q) How does electricity generation commitments affect water releases for farmers, irrigators and the environment?

A) Snowy Hydro releases water in accordance with the NSW Government defined Snowy Water Licence. To date, Snowy Hydro has met all of its obligations under this Licence.

Water used for electricity production is released into and collected by Blowering and Hume Reservoirs. The timing and amount of water released from these reservoirs, for irrigators and farmers, is not controlled by Snowy Hydro Limited but rather the government agencies of NSW State Water and Murray Darling Basin Commission (MDBC), respectively.

Therefore, the timing and amount of water released by Snowy Hydro into these two reservoirs to meet electricity commitments, provided we meet our requirements under the Snowy Water Licence, is not important. What is important is the control over the timing and amount of water release from these two government controlled reservoirs for irrigators and farmers, which is the responsibility of NSW State Water and MDBC, not Snowy Hydro.

Q) When will the Snowy Scheme run dry?

A) The Snowy Mountains Scheme could have run dry by now had it not been for the innovative foresight, prudent management and use of creative ideas from our current workforce. Ideas such as, cloud seeding to increase winter snowfalls, recycling of water through Tumut 3 Power Station, using our gas generation plants instead of hydro to meet electricity commitments and accessing water below historical Minimum Operating Levels (MOL).

Accessing water below historical MOL, something not previously envisioned possible, will provide additional water into the government controlled Blowering and Hume reservoirs where the relevant government agencies will decide on the timing and amount of release to irrigators and farmers.

However, even by undertaking all of these initiatives to ensure that water is maintained for as long as possible for the benefit of all water stakeholders, if these extreme drought conditions continue in south east Australia and spring runoff from snowmelt is as bad as last year, there will come a time when the government will need to make hard decisions on the continual allocation of water to irrigators and farmers from their reservoirs verses other water users, including environmental flows.

Q) How can we get information on lake levels and water releases from Snowy Scheme dams?

A) Snowy Hydro has a website based water resources information service so that the public can access information on water resources data relating to the Snowy Mountains Scheme.

This service can be accessed via the homepage on the Snowy Hydro website at <u>www.snowyhydro.com.au</u>. It provides information on lake levels, snow depths and releases into local rivers including the volume of environmental releases into the Snowy River from Jindabyne Dam.