15th April 2007

Delta electricity

Dr John Tamblyn
Chairman
Australian Energy Market Commission
Level 16, 1 Margaret Street
Sydney NSW 2000

Dear Dr Tamblyn

Draft Rule Determination

Draft National Electricity Amendment (Abolition of Snowy Region) Rule 2007

Overview

Delta appreciates the opportunity to provide comments on the Draft Determination Rule change proposal submitted by Snowy Hydro (Snowy Hydro proposal) to abolish the Snowy Region.

In addition to the Snowy Hydro proposal, there are two alternative proposals from Macquarie Generation (Macquarie proposal) and Eraring Energy ("Split Region" proposal) to resolve the same issue relating to the material and enduring transmission network congestion in the Snowy region and the associated market distortions.

Subsequently Macquarie requested AMEC to discontinue the Macquarie proposal and replace the Macquarie proposal with the Split Region proposal.

Delta commends AEMC for the detailed analysis in the draft determination in particular including the "Split Region" proposal as an additional reference case even though the Split Region proposal was not submitted originally as a Rule change proposal.

From the detailed analysis in the draft determination, it is obvious that the alternate Split Region proposal has advantages over the Snowy Hydro proposal in:

- Higher dispatch efficiency
- Lower inter-regional hedging risk

Higher dispatch efficiency will maximise short term productive efficiency while lower inter-regional hedging risk will promote more contract competition.

More importantly the Split Region proposal has a significant advantage over the Snowy proposal because it will alleviate the creation of a remote intra-generator in both NSW and VIC region as per the Snowy proposal. This appears to be a critical omission in otherwise an excellent detailed analysis.

Delta considers the current CSP/CSC snowy trial modified with Southern Generators' proposal is an option in the Congestion Management Review. Hence Delta does not

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consider the Southern Generators' proposal a viable alternative to solve the significant and persistent congestion issue in the Snowy region.

Detailed assessment of the Snowy Hydro proposal and Split Region proposal is attached.

Summary

- Delta supports the "Split Region" proposal,
  - a Murray region with RRN at Dederang – the Murray region has no customer load.
  - a Tumut region with RRN at Lower Tumut – the Tumut region has no customer load.
  - Murray Power Station, Guthega and Jindabyne pumps will be located in the Murray region
  - Lower Tumut Power Station and Upper Tumut Power Station will be located in the Tumut region

If further information is required, please do not hesitate to contact me on (02) 9285 2715.

Yours faithfully

Tim Baker

Tim Baker
General Manager/Marketing

Attachement

Assessment of the Snowy Proposal

The Snowy proposal will create two remote intra-generators:

- Murray in VIC – with the intra-regional constraint at Dederang/South Morang
- Upper and Lower Tumut in NSW – with the intra-regional constraint at Canberra/Yass/Marulan

It has been well documented that remote intra-generators may have adverse market impact resulting in:

- Reduction of the firmness of interconnector settlement residue (IRSR) that underpins inter-regional contracting
- Counter price flow that reduces the firmness of IRSR to zero

The reduction in the firmness of IRSR was explained in the draft determination (Page 57).

"If the northward QNI limit is 1000MW and the "Tarong limit" to South Pine is 2000MW, and if the Tarong group of generators is dispatched at 1200MW, price divergence will occur even though northward flows on QNI are only 800MW. This means that a NSW_QLD IRSR unit holder will receive a non-firm hedge in a similar way as if the QNI northward limit was reduced to 800MW due to a derating. The IRSR units will be even less firm if the Tarong generators produce more than 1200MW and the units will be totally non-firm if southward (counter-price) flows occur due to Tarong group generators bidding below cost."

The Snowy proposal, with Murray in VIC and both Tumut in NSW, has exactly the same impact on the new VIC-NSW interconnector in both directions as the Tarong group generators on the northward QNI flow. This is due to:

- Southern flow from NSW to VIC – dependent on Murray generation. The 1350MW nominal capacity of the new VIC-NSW interconnector could be as low as (1900MW-1560MW)[1]=340MW; and
- Northern flow from VIC to NSW – dependent on Tumut generation. The 1350MW nominal capacity of the new VIC-NSW interconnector could be as low as (3000MW-1866MW)[2] = 1134MW and reduce further to 884MW after Tumut3 increases its capacity by 250MW[3] from 2011.

As Snowy Hydro owns all the generation at Murray and Tumut, this gives it significant control over the NSW-VIC interconnector.

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[1] Current V-SN (Snowy to Vic capacity is 1900MW) and total capacity from Murray and Guthega capacity is 1560MW

[2] Current Snowy1 capacity is 3000MW and total capacity from Upper and Lower Tumut is 1866MW

[3] Refer 2007 SOO

In addition, Snowy Hydro also owns significant gas turbine capacity (about 600MW) in VIC on the other side of the constraint[4]. Together with Murray it may provide Snowy Hydro enormous market power on the new NSW-VIC interconnector in both directions.

Such "market power" that Snowy Hydro may acquire under the Snowy proposal was also highlighted by the Southern Generators presentation in the public forum held in Melbourne on 22/2/07.

While modeling results indicates that both counter price flows and binding constraints (including Murray-Tumut) are not substantial[5], the modeling does not study "system not normal" in detail. This fact was acknowledged by Dr. Danny Price from Frontier Economics, the consultant for the modeling study, in the public forum. Dr Price noted that "market power" may be exercised by a single generator during "system not normal" situations which could impose greater risk on other market participants.

Assessment of the Split Region Proposal

Although the Split Region proposal replaces the current Snowy region with two new regions, no customers will be affected as there is no demand in both the new Murray and Tumut region. Hence the Split Region proposal would reduce:

- jurisdictional concerns with changes to wholesale pricing arrangements; and
- transactions cost arising from contract negotiation due to changes to wholesale pricing arrangements

There are however, concerns that the Split Region proposal may increase the risk and complexity of trading between VIC and NSW. These concerns were described in the draft determination:

"A potential difference with the Split Region Option not associated with the Snowy Hydro Proposal is that an increase in the number of pricing regions increases the risk and complexity of trading between VIC and NSW. The trading risk modeling did not show this outcome because the modeling assumes that participants have perfect information about the frequency, duration, and severity of inter-regional price differences. In reality, participants tend to discount the value of inter-regional hedges because they cannot predict these risk characteristics with a sufficient degree of accuracy. Also the difficulty, cost, and risk of trading inter-regionally is likely to increase with a greater number of regions given that participants would have to buy inter-regional hedging products through an additional Snowy region."

Delta agrees to the limitation of modeling and the general statement of increase in trading risk with a greater number of regions. However the Split Region proposal is materially different because:

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[4] Two commonly constraints from Murray to VIC RRN are the Dederang to South Morang line and the 'F2' transformer at South Morang.

[5] Page 38 of the draft determination

- There is no customer load in the new Murray and Tumut region hence contracting risk is not an issue for customers, and
- As most inter-regional trading is between VIC and NSW, MURRAY into VIC or NSW, or TUMUT into NSW and VIC that requires IRSR to support, the current linked-bid facility in SRA is readily available for market participants to use. There is no difficulty or cost increase as compared to the Snowy proposal.

With regard to "*discounting the value of inter-regional hedges because they cannot predict these risk characteristics with a sufficient degree of accuracy*", this is no different to generators providing reserve capacity or financial hedges to cover contracts because of difficulty in predicting plant failure risk with a sufficient degree of accuracy. This is also no different to retailers providing caps to cover customers' peak load because of difficulty in predicting peak demand with a sufficient degree of accuracy.

In Delta's view, the major disadvantage of the Snowy Proposal is the uncertainty and un-predictability on the interconnector flow under both "system normal" and "system not normal" conditions that poses the greatest risk to inter-regional trading.

Contrary to the Snowy Proposal, the Split Region proposal provides more certainty, more transparency and hence higher predictability on interconnectors.

If the Split Region proposal is adopted, current SRA unit holders on V-SN and SNOWY1 should be given the right to exchange the current holding and acquire additional units on the new interconnectors. The overarching principle is to maintain existing positions as shown in the example below.

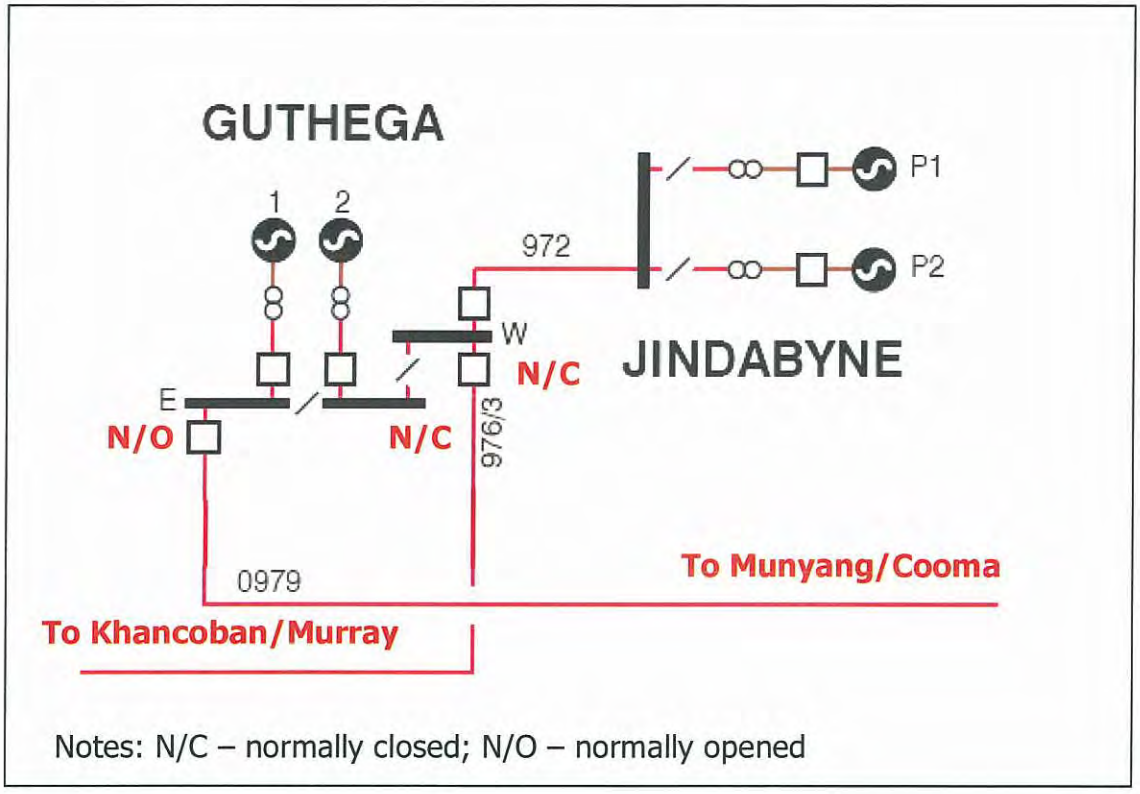
Existing SRA unit	New SRA unit					
	VIC_MURRAY		MURRAY_TUMUT		TUMUT_NSW	
	From Vic	From Murray	From Murray	From Tumut	From Tumut	From NSW
V-SN (From VIC)	1 for 1	----	1 for 1.35/1.1	----	----	----
V-SN (From SN)	----	1 for 1	----	1 for 1.35/1.9	----	----
SNOWY1 (From SN)	----	----	1 for 1.35/3	----	1 for 1	----
SNOWY1 (From NSW)	----	----	----	1 for 1.35/0.8	----	1 for 1

Note: Yellow boxes indicate right to exchange and pink boxes indicate right to acquire.

Other Considerations

A. Location of Jindabyne Pumps and Guthega Power Station

Delta understanding of the current electrical arrangements shown in the box under "system normal" for Jindabyne Pumps and Guthega Power Station are:



- the "system normal" open point is CB9792 at Guthega Power Station. CB9792 controls the 132 kV line from Guthega to Munyang;
- the "system normal" open point is necessary to operate the 330 kV network at its designed transfer capability while maintaining system reliability for customers in Southeast NSW; and
- both Jindabyne pumps and Guthega generators are electrically connected to Murray.

The current arrangement appears at odds with the presentation by Snowy Hydro in the public forum to support its proposal to put Guthega generators in the NSW region and Jindabyne pumps in the VIC region under the Snowy Hydro proposal.

It is Delta view that both Jindabyne pumps and Guthega generators are effectively connected to Murray Power Station and should be in the same region as Murray Power Station. Rearrangement as put forward by Snowy Hydro may have lower reliability for customers in southeast NSW.

Delta suggests AEMC seek TransGrid to provide independent expert advice on the best arrangements for Jindabyne pumps and Guthega generators under the Snowy and the Split Region proposal.

B. Start date of new boundary

The final determination made by AEMC (other than the status quo) would have enormous impact on the market. There will be major changes in information systems, reports, policies and procedures relating to financial hedging, contracting and physical operational of generating plants by market participants.

As requirements for changes may be different in scope and scale for different participants, these changes, nonetheless are significant and costly as commented by Dr Charlie Macaulay from NEMMCO in the public forum.

There is no compelling reason to start the new arrangement from 4th November 2007 as proposed by AEMC because it may not provide sufficient time for market participants to prepare for the major change in the NEM.

Hence it is imperative for the AEMC to consult market participants for a more realistic start date. In the interim, AEMC could extend the current "Snowy Trial" until the new regions are implemented.

Summary

- Delta supports the "Split Region" proposal,
    - a Murray region with RRN at Dederang – the Murray region has no customer load.
    - a Tumut region with RRN at Lower Tumut – the Tumut region has no customer load.
    - Murray Power Station, Guthega and Jindabyne pumps will be located in the Murray region
    - Lower Tumut Power Station and Upper Tumut Power Station will be located in the Tumut region
- Additional modeling and conceptual analysis with further assumptions suggested by market participants in the public forum and submissions is required to validate the robustness of the Split Region proposal vs Snowy proposal.
- The AEMC should consult market participants on the timing of the implementation of the Snowy regional boundary final determination.
- If the Split Region proposal is adopted, current SRA unit holders on V-SN and SNOWY1 should be given the right to exchange the current holding and acquire additional units for the SRA units created on the new interconnectors in order to maintain their position.