

## ATTACHMENT A – SUMMARY OF NEMMCO'S CONSULTATION ON THE FORWARD LOOKING LOSS FACTOR METHODOLOGY

In February 2009, NEMMCO (now AEMO) completed a consultation on the loss factor methodology<sup>1</sup> in accordance with rule 8.9 of the NER which, among other things, sought to address the issue of unacceptably high static intra-regional loss factors (known as intra-regional marginal loss factors (MLFs) for transmission network connection points (connection points) where one MLF is unable to satisfactorily represent losses for either active energy generation or consumption. This issue was identified because of the high volume weighted average MLF for the Lower Tumut Power Station for 2008–09. NEMMCO's draft determination considered a number of options to address this issue:

- Separate metering points for energy generation and consumption. This option was not considered an appropriate solution because separate connection points would be required to be established and this would necessitate amendments to the current connection agreements; and
- Application of a time weighted methodology to calculate one MLF for the connection point where the 30% net energy balance condition was met.

NEMMCO received two submissions to its first round of consultation from Hydro Tasmania and Snowy Hydro Limited (Snowy Hydro) which addressed this issue. Snowy Hydro supported NEMMCO's proposal and noted that the loss factor methodology, particularly for dealing with pump storage schemes, may need to be revised if there were future changes to Lower Tumut Power Station's generation and pumping patterns. Hydro Tasmania noted that separate loss factors for generation and pumping appeared contrary to the requirements of clause 3.6.2(e)(2A) of the NER and suggested a materiality threshold approach and undertaking a broad review of the processes of loss factor calculation and application to ensure that the NER's requirements are being complied with. Further details of NEMMCO's response are included in the table below.

NEMMCO's draft determination resolved to calculate Lower Tumut Power Station's MLF using a time weighted approach and apply it in 2009–10 and 2010–11, and to amend the relevant part of the methodology to allow this approach to be used for connection points that have active energy generation and consumption.

A joint submission from AGL Energy Limited (AGL), International Power Australia Pty Ltd (IP), Loy Yang Power (Loy Yang) and TRUenergy Australia Pty Ltd (TRUenergy) was received regarding the draft determination. This submission stated that NEMMCO's draft determination had not paid sufficient regard to clause 3.6.2(e)(2A) of the NER. It suggested that NEMMCO should review its

<sup>&</sup>lt;sup>1</sup> The methodology referred to in clause 3.6.2(d) of the NER.



determination and seek any necessary Rule changes to better align the loss factor with that clause. Regarding this issue, NEMMCO's final determination indicated that it would:

- Propose a Rule change to clause 3.6.2 of the NER to allow more than one MLF to be applied to a connection point where energy generation and consumption exists.
- Until the Rule change is approved, apply the time weighted approach for the final MLF where a connection point has both energy generation and consumption and where:
  - constructing two separate connection points for each direction of energy flow is not feasible;
  - $\circ$  the 30% net energy balance condition is met.<sup>2</sup>

Relevant sections of the Methodology for Calculating Forward Looking Transmission Loss Factors were amended accordingly.

The following table provides an outline of the stages of consultation, stakeholder comments and NEMMCO's response to these with respect to the issue concerning calculating the MLF for connection points with bi-directional energy flows. For further information regarding the consultation documents see: <u>http://www.aemo.com.au/electricityops/178-0099.html</u>.

<sup>&</sup>lt;sup>2</sup> NEMMCO performed analysis to determine under what conditions one MLF for a pump storage facility becomes inappropriate. It concluded that when the difference between net energy absorption and net energy generation for a single connection point is less than 30% of the net energy generation, one MLF is no longer acceptable.



Key Dates	Stage	Submissions Received	Comment	NEMMCO's response in Draft Determination
29 October 2008	Notice of First Stage of Rules consultation/Issues Paper (included in the notice). NEMMCO proposed that Lower Tumut either be separated into separate metering points or allow the calculation of a time weighted approach for its single connection point.	Snowy Hydro, Hydro Tasmania and International Power. Hydro Tasmania did not comment on the issue and there were no request for meetings.	Snowy supported NEMMCO's proposal to apply a time weighted approach and noted that the loss factor methodology may need to be revised for dealing with pump storage schemes. International Power commented that the provision of a separate loss factor for generation and pumping appears contrary to the requirements of clause 3.6.2(e)(2A). NEMMCO should define a threshold between individual weighting and aggregated weighing of loss factors, apply separate loss factors where aggregated weighting would lead to a difference beyond this threshold. The threshold should be consistent with the accuracy of loss factors that NEMMCO wishes to achieve. NEMMCO should broad review the processes of loss factor calculation and application to ensure that the principle set out in the Rules can be complied with in practice.	NEMMCO determined to amend the loss factor methodology for the time weighted approach and apply it to the final loss factor for the Lower Tumut power station.
21 January 2009	Notice of second stage of consultation/draft determination (included in the notice)	Joint submission from AGL, International Power, Loy Yang and TRUenergy.	No need to change existing metering configurations; NEMMCO should seek the necessary Rule changes to allow separate MLFs for generation and pumping, two suggestions including the application of separate loss factors for conditions of net export and net import in relation to Lower Tumut Power Station.	<ul> <li>NEMMCO would propose a Rule change to clause 3.6.2 which would allow more than one MLF to be applied to a connection point where both energy generation and consumption occur.</li> <li>Until the Rule change is approved, the time weighted approach would be used to calculate the MLF where:</li> <li>A connection point has both energy generation and consumption and where the energy balance is less than 30% of the energy generated.</li> <li>Constructing two separate connection points for each direction of energy flow would not be feasible.</li> </ul>

Table – Key dates for the MLF Consultation