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The Chairman Australian Energy Market Commission PO Box H166 Australia Square, NSW 1215

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Dear Dr Tamblyn,

# PROPOSED NEM RULE CHANGE: COST RECOVERY of LOCALISED FCAS REGULATION SERVICES

#### Purpose

The National Generators Forum (NGF) wishes to propose a NEM Rule change relating to the cost recovery of localised Frequency Control Ancillary Services (FCAS). The intention is to both replace the current Tasmanian participant derogation and to apply to any NEM region where abnormal circumstances result in a local requirement for FCAS regulation services.

### Background

When it was announced that Tasmania would join the National Electricity Market before the completion of the BassLink interconnector, it became apparent to NGF members that the NEM Code applying that time was inadequate to handle the fair recovery of FCAS regulation costs should any part of the NEM interconnected network become islanded. This problem did not arise with FCAS contingency services because the Rules already accommodated local cost recovery of localised FCAS contingency services.

Thus at that time, the cost of FCAS regulation services was being recovered on a NEM wide basis without any recognition that a part or parts of the NEM may have a local requirement such as may occur when a region becomes islanded away. Under such circumstances the islanded part may have extremely high FCAS regulation supply costs however the cost recovery would be from all parts of the NEM based on specific causer pay factors for generators and on a common causer pays factor for most consumers.

In the case of Tasmania, the concern was that Tasmania would join the NEM before completion of BassLink and thus would in effect be an islanded part of the NEM. In the event of high FCAS regulation supply costs in Tasmania then the cost would be mainly recovered from mainland participants including generators who had FCAS regulation capability available but could not use it to offset their cost obligations. Conversely, any high FCAS regulation supply costs on the mainland would be recovered in part from Tasmanian participants.

# **Existing Tasmanian Participant Derogation**

The NGF actively proposed a Code change to correct this situation; however, the limited amount of time available before Tasmania joined the NEM (as a separated region) and the declining role of NECA meant that a more robust Code change was not possible. In the end the issue was resolved with the interim solution of a participant derogation which was approved by the ACCC in its final determination on 9 March 2005.

# Need for Permanent Rule Change

The Tasmanian participant derogation mentioned above is due to expire on 31 December 2006 so there is a need to implement a permanent solution for Tasmanian islanding. Further there is the possibility of other regions or parts thereof becoming separated into an island (due to planned and/or forced outages of transmission elements) thus requiring a more general solution. In addition it is now apparent that limitations on the operation of BassLink necessitate a local requirement for FCAS regulation services under some power transfer conditions.

# Local FCAS Regulation Requirements for Non-Islanded Regions

Whilst an islanded region would require the local provision of FCAS regulation services and in our view would then require local cost recovery, it is possible for a local requirement for FCAS regulation services to arise when a region is not islanded. For example with BassLink, local FCAS regulation requirements for Tasmania will occur when the interconnector flow is close to or within the 'no-go' zone and also when the interconnector flow approaches the maximum limit in either direction.<sup>2</sup> However in these cases there is no regional islanding – the interconnector is still closed and able to transfer power and there can still be a partial transfer of FCAS regulation services between regions.

As such it is also proposed to also recover local FCAS regulation services on a regional basis where such local requirement arises for reasons other than regional islanding.

### Draft Rule Change

The NGF proposal draws heavily on both the process for regionalisation of cost with contingency FCAS, and on the actual Rule drafting for that process.

<sup>&</sup>lt;sup>1</sup> See ACCC Final Determination 9 March 2005 and also NEM Rules Chapter 8A – Participant Derogations part 11.

<sup>&</sup>lt;sup>2</sup> Similar local FCAS regulation requirements would also probably occur for the proposed back-to-back DC link to Queensland.

It uses that process to divide the cost between regions or sets of regions. It then uses the existing causer-pays process to divide the cost between participants within the region or set of regions. This requires a small modification to the causer pays calculation, to provide for the aggregation of causer-pays data for a region or set of regions. This is a high-level change and does not alter the detailed calculation at a unit level in any way.

This rule change conveniently sweeps up the issue of cost sharing across Basslink, currently dealt with by the Chapter 8 derogation, Part 11. This derogation thus becomes irrelevant and will automatically cease to have effect provided that NEMMCO recognise this change as one which will "permit the regional recovery of *regulation services* costs" (see para (d) of this derogation).

This approach is recommended as having a number of advantages:

- It is able to deal with both partial and total localisation of services (note that partial localisation of regulation service is a common occurrence across Basslink),
- The localisation of cost allocation is driven by the localisation of the NEMMCO FCAS regulation supply requirement, thus avoiding problems of definition
- It carries across to the regulation services an established process used for all other market ancillary services, giving advantages in both consistency and implementation cost,
- Both the settlement processes and the proposed rule changes are simple extensions from the existing Rules

In order to start the process, the Attachment 'NGF Rule Change Proposal' contains a draft Rule change based on the words used in the existing rules – we would be happy to participate in any formal process by the AEMC to develop suitable wording.

## Extension of Existing Derogation

The existing derogation "NEM Rules Chapter 8A – Participant Derogations part 11 (Tasmania)" is due to expire at the end of 2006. In discussions with NEMMCO it was advised that NEMMCO could not implement the systems needed to match the proposed rule change until their November 2007 MMS release. As such it is requested that the existing derogation for Tasmania be extended by 12 months or the date, if earlier, by which NEMMCO can implement the proposed rule change into its market systems.

### **NEL Objective**

The proposed rule change will ensure that the parties that bear the cost of regulation services are those that have the possibility of influencing that requirement for service.

As such, the proposed rule change meets the NEL objective by the "efficient use of, electricity services for the long term interests of consumers of electricity with respect to price, quality, reliability and security of supply of electricity".

# This Proposal

We are aware that this is a new proposal which has not yet been discussed with the Commission. Should you wish to do so, could you please contact Mr Bob Burns on 02 8268 4237 or the undersigned on 02 6243 5120.

Yours faithfully

John Boshier

**Executive Director** 

#### **ATTACHMENT**

#### NGF RULE CHANGE PROPOSAL:

Replace existing 3.15.6A (h), (i), (j) and (k) with –

- (h) The total amount calculated by *NEMMCO* under clause 3.15.6A(a) for each of the *regulating raise service* or *regulating lower service* in respect of each *dispatch interval* which falls within the *trading interval* must be allocated to each *region* in accordance with the following procedure and the information provided under clause 3.9.2A(b). *NEMMCO* must:
- (1) allocate for each *region* and for each *dispatch interval* within the relevant *trading interval* the proportion of the total amount calculated by *NEMMCO* under clause 3.15.6A(a) for each of the *regulating raise service* or *regulating lower service* between *global market ancillary services requirements* and *local requirements* pro-rata to the respective marginal prices for each such service;
- (2) calculate for each relevant dispatch interval the sum of the costs of acquiring the global market ancillary service requirements for all regions and the sum of the costs of acquiring each local ancillary service requirement for all regions, as determined pursuant to clause 3.15.6A(h)(1); and
- (3) allocate for each relevant dispatch interval the sum of the costs of the global market ancillary service requirement and each local ancillary service requirement calculated in clause 3.15.6A(f)(2) to each region as relevant to that requirement pro-rata to the aggregate of the customer energy figures for all Market Customers in each region during the trading interval
- (4) In each *trading interval*, in relation to each *Market Generator* or *Market Customer* which has *metering* to allow their individual contribution to the aggregate deviation in *frequency* of the *power system* to be assessed, an ancillary services transaction occurs, which results in a *trading amount* for that *Market Generator* or *Market Customer* determined in accordance with the following formula:

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TA = PTA \times -1
and MPF
PTA = the aggregate of ( TSFCAS \times ---- ) for each AMPF
dispatch interval in the trading interval
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where:

TA (in \$) = the *trading amount* to be determined (which is

a negative number);

TSFCAS (in \$) = the total of all amounts calculated by

NEMMCO under clause 3.15.6A(a) for the

regulating raise service requirement or the regulating lower service requirement in respect of a dispatch interval;

MPF (a number) = the factor last set by *NEMMCO* for the

Market Generator or Market Customer, as the

case may be, under clause 3.15.6A(j) for the region or set of regions relevant to that *regulating* raise service requirement or that regulating

lower service requirement; and

AMPF (a number) = the aggregate of the MPF figures for all

Market Participants for the dispatch interval for the region or set of regions relevant to that regulating raise service requirement or the regulating lower service requirement.

(5) In each *trading interval*, in relation to each *Market Customer* for whom the *trading amount* is not calculated in accordance with the formula in clause 3.15.6A(h)(4), an ancillary services transaction occurs, which results in a *trading amount* for that *Market Customer* determined in accordance with the following formula:

**TCE** 

 $TA = PTA \times - x - 1$ 

ATCE

and

MPF

PTA = the aggregate of (  $TSFCAS \times$  ) for each

AMPF

dispatch interval in the trading interval

where:

TA (in \$) =

the trading amount to be determined (which is a

negative number);

TSFCAS (in \$) = has the meaning given in clause 3.15.6A(h)(4);

MPF (a number) = the aggregate of the factor set by *NEMMCO* 

under clause 3.15.6A(j) for *Market Customers*, for whom the *trading amount* is not calculated in accordance with the formula in clause 3.15.6A(h)(4)) for the region or set of regions relevant to that *regulating raise service requirement* or the *regulating lower service requirement*;

AMPF (a number) = the aggregate of the MPF figures for all *Market*Participants for the dispatch interval) for the region or set of regions relevant to that regulating raise service requirement or the regulating lower service requirement; and; TCE (in MWh) = the customer energy for the Market Customer for the trading interval; and

ATCE (in MWh) = the aggregate of the *customer energy* figures for all *Market Customers*, for whom the *trading amount* is not calculated in accordance with the formula in clause 3.15.6A(h)(4), for the *trading interval* for the region or set of regions relevant to that *regulating raise service requirement* or the *regulating lower service requirement*.

- (i) [Deleted]
- (j) NEMMCO must determine a factor for each Market Participant for the purposes of clauses 3.15.6A(h) and (i) in accordance with the procedure contemplated by clause 3.15.6A(k).
- (k) NEMMCO must prepare a procedure for determining contribution factors for use in clause 3.15.6A(j) taking into account the following principles:
- (1) the contribution factor for a *Market Participant* should reflect the extent to which the *Market Participant* contributed to the need for *regulation services*;
- (2) the contribution factor for all *Market Customers* that do not have *metering* to allow their individual contribution to the aggregate need for *regulation services* to be assessed must be equal;
- (3) the individual *Market Participant's* contribution to the aggregate need for *regulation* services will be determined over a period of time to be determined by *NEMMCO*;
- (4) a Registered Participant which has classified a scheduled generating unit, scheduled load, ancillary service generating unit or ancillary service load (called a 'Scheduled

Participant') will not be assessed as contributing to the deviation in the *frequency* of the *power system* if within a *dispatch interval*:

- (a) the Scheduled Participant achieves its *dispatch* target at a uniform rate;
- (b) the Scheduled Participant is *enabled* to provide a *market ancillary service* and responds to a control signal from *NEMMCO* to *NEMMCO*'s satisfaction; or
- (c) the Scheduled Participant is not enabled to provide a *market ancillary service*, but responds to a need for *regulation services* in a way which tends to reduce the aggregate deviation:
- (5) NEMMCO must determine the contribution factors relevant to each *region* or set of contiguous *regions* that may be relevant to a *regulating raise service requirement* or a *regulation lower service requirement*;
- (6) For the purpose of 3.15.6A(k)(5), the contribution factor determined over a set of regions for all *Market Customers* that do not have *metering* to allow their individual contribution to the aggregate need for *regulation services* to be determined must be divided between regions in proportion to the total *customer energy* for the regions; and
- (7) Where contributions are aggregated for regions that are not generally in synchronism during the calculation period, the contribution factors shall be normalised so that the total contributions from any non-synchronised region or regions is in the same proportion as the total *customer energy* for that region or regions.

## NOTE:

(i) Also modify clause 3.9.2A(b) by deleting the words –

"other than the regulating raise service and the regulating lower service,"

(ii). Also delete: NEM Rules Chapter 8A Participant Derogations part 11 (Tasmania)