

Attachment 1 – Outline of Proposed implementation Process for Conversion of Murraylink to Regulated Status

Introduction

The purpose of this attachment is to outline the proposed implementation method for converting the market network service to a prescribed service (regulated interconnector) and to discuss any associated issues.

Regulatory Process

The ACCC published their preliminary view document on May 21. Murraylink Transmission Company (MTC) have requested a pre-determination conference to be held on the matter. This is currently scheduled for July 8.

Following the predetermination conference it is NEMMCO's understanding that the ACCC would then publish a final paper regarding this conversion. NEMMCO has been informed that the earliest point at which this is likely to occur would be late in August. At that point, provided that the ACCC offers conversion and MTC accepts the conversion, MTC would deregister the MNSP, be granted authorisation as a regulated interconnector by the ACCC, and re-register as a TNSP on behalf of the regulated asset¹.

MTC are expecting these last three steps to occur almost immediately. However, NEMMCO have informed MTC that there may be some unavoidable delays during this period. The following table summarises this information:

Milestone	Date / Expected Date
Prescribed Service Application	October 18, 2002
ACCC Preliminary View Publication	May 21, 2003
Predetermination Conference	July 8, 2003
Final Position Paper	Late August, 2003
Final Authorisation (if accepted)	Late August, 2003
Implementation	Late August / Early September 2003 ²

Proposed Dispatch Model

NEMMCO have investigated three prospective models for the implementation of Murraylink as a regulated interconnector in the NEM systems:

1. Leaving the link modelled as it is currently configured, and placing a \$zero bid in for transfers up to the capacity of the link.
2. Combining the capacity of Murraylink and the Heywood AC interconnector, and modelling the total transfers as a single combined regulated interconnector

¹ NEMMCO has been informed that the ACCC cannot grant final authorisation of the regulated interconnector until they have de-registered as an MNSP.

² Depending on NEMMCO implementation timing requirements.

3. Creating a separate inter-regional loss model for Murraylink and modelling the two interconnectors between Victoria and South Australia as separate regulated interconnectors.

Clause 3.6.1(b)(2) of the NEC requires that inter-regional loss factors on regulated inter-connectors are:

“to apply between each pair of adjacent regional reference nodes are to be determined as part of the central dispatch process using inter-regional loss factor equations derived in accordance with clause 3.6.1(c)”.

Therefore, as the current modelling of the market network service only utilises an inter-regional loss factor equation between connection points, option 1 above is not code compliant and has been ruled out as a valid option

As it is still necessary to create a dispatch target for Murraylink (as separate from the total inter-regional transfer target) option 2 has been ruled out due to its impracticality.

Therefore, Murraylink as a regulated interconnector would be modelled as a separate parallel interconnector as stated in option 3 above.

Price Scaling

Where the dispatch price in a region is capped by some market process (eg: VoLL), and energy is flowing into that region from another, the price in the other region must be scaled down from VoLL. This scaling must be performed using the average losses between the two regions. However, the automatic scaling software only uses the losses of a single interconnector, which may or may not be the appropriate interconnector to use.

Therefore, changes would be required to the automatic price scaling software such that this scaling is performed correctly. This change might be included in the November 2003 Market Systems release but may well have to be deferred until the May 2004 Market Systems release.

However, it should be noted that this issue would not hold up the potential conversion of Murraylink as NEMMCO staff would be able to perform manual scaling calculations (in a similar fashion to procedures prior to the implementation of automated scaling) in the interim until this change had been implemented.

Changeover

As far as the actual changeover from a market network service to a regulated interconnector would be concerned, the following two options were considered:

1. Changing the registration and loss model of that from that existing for an MNSP to a new model for a regulated interconnector effective from midnight on the day before the changeover date but without changing the identification of the entity: OR
2. De-registering the existing MNSP entity and registering a new Regulated Interconnector entity from midnight on the day before the changeover date.

Option 1 might create some confusion in accessing market data as the two different entities would have the same identification. However, option 2 would require a

significantly larger amount of implementation resources as all references in the dispatch systems to the old identifier would need to be altered. (For example, all constraints that include Murraylink would need to be changed).

As the potential confusion created is not considered to be a major issue, NEMMCO believes that option 1 would be a more appropriate solution.

Loss Model

Significant work would be required in order to develop the final loss factor equation. If unnecessary delays in any conversion process are to be avoided, such work must be commenced shortly in anticipation of a possible “go-live” date in late August.

The first critical issue that must be resolved in order to develop the final loss factor is the location of the regulated interconnector connection point³. (It is this point that all dispatch targets and metering would be referred to, and that the loss model must also be referred to.) The choices that have been considered include the Redcliffs (Victoria) end of the link, the Monash (SA) end of the link or some geographical point within the link.

NEMMCO has approached the ACCC for guidance in this area. However, the ACCC did not have a position in relation to this question. After careful consideration NEMMCO believes that the optimum location for the connection point is considered to be the Monash end of the link. This would provide:

- greater consistency with current constraint equations;
- greater loss modelling accuracy;

There are also additional issues in relation to metering that are considered in the next section.

Metering

The first metering issue that needs to be confirmed is the location of the regulated interconnector connection point which NEMMCO proposes to nominate as the Monash end of the link. Naturally, the most logical metering point for Murraylink as a regulated interconnector is also Monash substation.

The only remaining work that would need to be performed in the metering area is in relation to standing data (MMS and MSATS) and the engagement of a meter data provider (MDP) by NEMMCO. These steps will require involvement of third parties and change management processes within MSATS which will restrict the degree of preparation which can be undertaken in this area prior to formal advice from MTC.

Settlements and SRA

Preliminary investigations have been performed into the operation of settlements and the Settlements Residue Auction (SRA) where two parallel regulated interconnectors exist in the dispatch system. Several issues have already been identified.

³ This question is also critical in relation to the metering requirements of this project.

(a) SRA Changes

The rules of the SRA operate on a region to region basis, and not on a regulated interconnector basis. As such, units are sold from region to region with no reference to interconnectors. However, the SRA interface software (SRIS) has been developed on the basis of regulated interconnector identifiers. NEMMCO proposes to address this issue, if required, in two stages:

Stage 1: This would be the period of time between the Murraylink “go-live” date and the first date in which auctioned Murraylink units are auctioned. (As there is a requirement for notification of changes to the SRA arrangements which usually look out one year this date would be likely to be 30 June 2004).

Stage 2: This occurs when Murraylink units would start to be auctioned. This stage would commence on the completion of Stage 1.

For the duration of Stage 1, all residues attributable would go back to the TNSP in the importing region. During this stage, the SRA software would be manually populated with Murraylink data, ensuring that a defined number of units on this interconnector present for settlements purposes, but that none are available for purchase by participants.

There would also be minor changes required to the billing software for the duration of stage 1 as well as changes to the SRA software before the first auction after the “go-live” date (September 03).

For the duration of stage 2, residues on Murraylink would go to the SRA holders (in the same ratio as on the AC link). During this period, the SRA software would be configured such that zero units are available for auction on Murraylink and all units (Murraylink and the AC interconnector) are allocated to the Vic/SA interconnector.

Consequently, the settlements application would combine the calculated residue amounts on the two interconnectors into a single combined amount. This would require a change to the settlements application. This is currently provisionally scheduled for the November 2003 software release.

(b) Nomination of Appropriate TNSP

As discussed above, prior to the point at which Murraylink residues are auctioned, they would have to go to the Transmission Network Service Provider(s) (TNSP(s)) in the importing region. Once regulated, MTC would also be a TNSP in relation to the importing region. Therefore, the question needs to be answered, to which TNSP(s) would the residue go to and in what proportion? NEMMCO would require advice on this issue as part of the implementation process.

Registration and Standing Data

- To meet Change Management requirements, registration process would need to commence approximately six weeks prior to the “go-live” date. Standing data will need to be ready for pre-production approximately 4 weeks prior to the “go-live” date (late July for a “go-live” date of late August).

Summary

The essential features of NEMMCO's proposed implementation process are:

- Regulated Murraylink would be implemented as a separate parallel regulated interconnector to the Heywood AC link.
- Price scaling changes would be implemented in either the November 2003 or May 2004 release (with manual price scaling performed where necessary in the interim).
- Identifier currently used for Murraylink as an MNSP would be retained for the regulated interconnector.
- The regulated interconnector connection point would be at the Monash Substation.
- Metering point would coincide with the connection point at Monash.
- NEMMCO needs to now progress work on the engagement of an MDP and the associated standing data requirements of MMS and MSATS if unnecessary delays in the possible conversion process are to be avoided
- SRA related changes would need to occur in two stages as outlined above
- An "in principle" decision on which TNSP would be the initial recipient of the inter-regional settlement residue and auction proceeds needs to be made shortly and advised to NEMMCO if unnecessary delays in the possible conversion process are to be avoided.