

## Appendix 4: Reconciliation Rules 2006 Assessment

### Statement of proposal

- 1 Sections 172E and 172F of the Electricity Act 1992 (Act) set out the requirements on the Electricity Commission (Commission) regarding consultation on, and assessment of, a rule before recommending, to the Minister of Energy (Minister), that an amendment to the Electricity Governance Rules 2003 (Rules) be made.<sup>8</sup>
- 2 As the proposal constitutes a rule amendment the process set out in the Act must be followed.
- 3 The Commission has revised the statement of proposal prepared and published for the purposes of consultation under section 172E(2)(b)(ii), having regard to the submissions received on both the initial and second round consultation papers. The revised statement of proposal is set out below.

### The proposal

- 4 The objective of the proposed rule amendment (an integrated package of a number of rule changes) is to enhance and maintain the quality of the data in the reconciliation process and achieve more visible and accountable industry processes and procedures. This objective is expected to improve the efficiency and effectiveness of the reconciliation process, thereby more accurately allocating electricity volumes to purchasers and ensuring that purchasers face the true cost of electricity.
- 5 Overall the changes to the reconciliation process proposed are substantial, the recommendations seek to create a comprehensive, well-integrated and easily understood set of rules that reflect best practice reconciliation processes in a cost effective manner. These changes are reflected in amendments to Parts A, D, E, G, and H of the Rules and the creation of a new Part J.
- 6 There are four key changes. These are the removal of incumbency, the facilitation and treatment of embedded generation data processing, the development of a compliance regime, and the grouping of GXPs for reconciliation. Each of these is briefly covered below:
  - a. **Elimination of Incumbency:** the ECRPT proposal is for the submission of consumption data by all retailers (including the incumbent retailer), to the reconciliation manager. The inclusion of incumbent retailer data in the balancing process means that the residual quantity of electricity not

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<sup>8</sup> Section 172H(3) of the Act provides that if the Minister makes, or the Commission recommends, a rule for a purpose for which an electricity governance regulation may be made, the Minister and the Commission must comply with the same conditions and process that would apply under section 172D(3), section 172E, or section 172F if they were making recommendations on that electricity governance regulation, and those sections apply (with all necessary modifications) accordingly.

allocated to any retailer (unaccounted for electricity) will be allocated according to the algorithm set out in the new part J.

- a. **Embedded generation:** Presently, only incumbent retailers can trade non half hour (NHH) embedded generation. The ECRPT has proposed that the reconciliation and switching processes will accommodate both NHH and half hour (HH) data in respect of embedded generation for all metering types. This will ensure that independent retailers are able to trade NHH embedded generation.

The ECRPT has also recommended that embedded generation volumes be processed in the same way as consumption volumes. This recommendation:

- i. allows for the processing of embedded generation data to be simplified;
  - ii. enables processing via the same mechanism as consumption;
  - iii. simplifies points for reconciliation; and
  - iv. supports the expected increase of small-scale generation.
- b. **The compliance regime:** the proposed compliance regime is based around active reporting of reconciliation participants' and distributors' performance. The regime is intended to:
    - i. consist of high-level performance checks to identify problems for rectification;
    - ii. enable a move to greater detail compliance checks at a later stage, if warranted; and
    - iii. be published so that the quality of reconciliation information can be assessed and maintained.

**Certification:** In order to provide submission information to the reconciliation manager, a reconciliation participant must be certified.

The proposed rules provide that, at the time the rules become effective, existing reconciliation participants have six months within which to obtain certification. After the date on which the proposed rules become effective, any reconciliation participant entering the market must obtain certification within three months.

Additionally, the proposed rules appoint the Board to deal with a reconciliation participant in breach of the audit and certification rules. Therefore, the rules allowing temporary certification were deleted, and a reconciliation participant without certification will now be in breach of the rules. The requirement for certification was considered to be a crucial aspect of the whole reconciliation process and therefore it was considered that the greater the incentive to obtain certification, the better.

**Audits:** In order to obtain certification or approval, a reconciliation participant or distributor must first be subject to an audit. The audit process suggested is a simple step-by-step process. It is intended to provide a standard method against which all reconciliation participants and

distributors can be assessed with respect to their methods of collection and provision of volume and submission information to input into the reconciliation process and registry activities.

The Board will approve auditors to undertake the audit process. The rules surrounding the audit process have been redrafted to provide reconciliation participants and distributors a chance to rectify any potential shortcomings that may be identified in an initial audit in relation to their procedures and processes, whilst at the same time providing them with incentive to continually maintain adequate procedures so that they will not fail an audit.

- c. **The grouping of GXPs for reconciliation (balancing areas):** The ECRPT identified a reconciliation problem arising from short term switching of ICPs between GXP's by the distributor for operational reasons. In its analysis of solutions it identified that grouping of GXPs and reconciling the group would eliminate inaccuracies in allocation of reconciled quantities. However, the ECRPT believed that this solution could have an impact on the pricing of electricity at the affected GXPs. The RIPT re-examined this situation and arrived at a solution using the concept of a balancing area to reconcile groups of GXPs in such a way that the correct allocation of reconciled quantities to retailers could be achieved with no impact on the quantities used for pricing.

7 There is a wide range of other reconciliation recommendations. A brief review of some of the more technical recommendations follows:

- a. **Application of losses:** presently data administrators apply losses to HH data and the reconciliation manager applies losses to NHH data. Under the proposal, all losses will be applied to consumption data by the reconciliation manager in accordance with the loss factors defined in a centrally held table for each loss category.
- b. **Profiling:** profiling will be carried out for all retailers in the same way as it is currently carried out for independent retailers. However, provision is being made to include NHH generation data in the profiling process. In addition, after the month seven revision, the profile will be locked down to enable retailers to true up their allocation between months. The following has been incorporated within the proposed rules:
  - i. the ability of reconciliation participants to own their profiles is not compromised;
  - ii. the obligation for profile audits is retained;
  - iii. instructions on how to create profiles are retained; and
  - iv. profiling of embedded generation is accommodated.

Part J defines the order and process of separating the various submission volume shapes in the reconciliation process. The final step of this process is the production of the final GXP residual shape, commonly called the "GXP" profile. Part of the work undertaken was to define the steps

required for processing of submission volumes, including details of the separation of each shape as a distinct step in the process.

- c. **Embedded Networks:** the ECRPT originally proposed that retailers would reconcile consumption within each embedded network and forward it to the reconciliation manager for reconciliation at the parent GXP. A number of submissions (initial consultation round) disagreed with this concept and after examination of the issues raised, the RIPT agreed that the reconciliation manager would perform full reconciliation of each embedded network at the connection point of the embedded network (gate way meter) and pass the results for reconciliation at the GXP and inclusion in the UFE identification and allocation process. This has been integrated into the proposed rules.

Additionally, rules have been developed to facilitate the use of ICPs for embedded network gate way meters and for a portion of consumption to be calculated by subtraction from the gate way meter (where applicable).

- d. **Data Management:** the accountability and responsibilities of reconciliation participants to be confirmed and made more explicit by deleting the term 'data collector' and replacing the term 'data administrator' with "reconciliation participant" in the Rules. While the underlying functions of the data administrator and data collector will still remain, the overall responsibility for the end-to-end process will now lie with the reconciliation participant. In order to ensure that a high level of retailer performance is maintained, the reconciliation participant will need to be certified in order to undertake the data administration functions (this will be the case whether the reconciliation participant performs the data administrator functions or contracts an external party to perform the data administrator functions).

However, the submissions identified a need for clarity around the issue of who would need to be certified where a reconciliation participant requiring certification engaged a contractor. To address this issue, a general agency rule has been drafted. The effect of this rule is that a reconciliation participant who engages an agent to act on its behalf remains responsible for all matters related to certification, irrespective of whether or not those obligations are discharged by an agent or not. The intention is that this requirement will ensure those reconciliation participants requiring certification will be forced to implement stringent controls in any contractual arrangement they have with an agent.

- e. **Revisions:** the revision cycle duration be shortened (by deleting the last two washups) resulting in the maximum time elapsed before final revisions becoming 14 months after the month of electricity consumption, rather than the current 24 month cycle. Reconciliation participants will have the ability to request a one-off revision of months 18 and 24 data for six months after the effective date, provided the Board gives its consent.
- f. **UFE:** the following principles for allocation of UFE have been adhered to;
  - i. UFE be allocated to *all* purchasers;
  - ii. the allocation methodology be relatively simple; and
  - iii. the quality of a retailer's submission data be assessed (consistent with the goal of reducing UFE).

The recommended process includes the following key mechanisms to achieve the above objectives:

- i. a scaling mechanism to adjust non submitted information (ICP-days scaling);
- ii. calculation based on differences between billed and submitted quantities (scorecard calculation and application); and
- iii. market-share based allocation.

This approach recognises that the registry data, which indicates the NSP that an ICP is supplied from, is indicative rather than wholly accurate. What can be taken as accurate though is to which group of NSPs, or “balancing area”, an ICP belongs. Consequently, a new "layer" has been introduced to the reconciliation process, which has the initial stages of UFE calculation and allocation performed on a balancing area basis. This allows "true" or core UFE to be identified, without the influence of any ICP-NSP misallocation. This also resolves how to accommodate the switching of ICPs between GXPs.

The proposed process that the reconciliation manager will use for converting reconciliation input data into balanced and fully reconciled output data is summarised in the following steps:

- i. receive non half hour (NHH) and half hour (HH) submission information, together with supporting electricity supplied quantities and other relevant data from reconciliation participants;
  - ii. adjust, where required, for missing ICP days;
  - iii. adjust submitted HH volumes for losses;
  - iv. determine profile shapes and apply to NHH volumes;
  - v. adjust profiled NHH volumes for losses;
  - vi. calculate scorecard values (in preparation for combining with market share data);
  - vii. calculate core network-area UFE;
  - viii. allocate core UFE to all purchasers using market share values (modified where relevant by scorecard ratios);
  - ix. separately finalise allocation of the fully adjusted volumes for those large ICPs identified as being dedicated to a specific GXP;
  - x. re-distribute volumes between GXPs, within balancing areas to account for ICP-GXP misallocations; and
  - xi. provide the allocated totals to clearing and settlement for invoicing.
- g. **Terminology** - The ECRPT sought to create a more coherent set of rules and therefore identified a number of terms in the Rules that required attention. The following changes have been recommended:
- i. *Participant terminology*- A fundamental alteration to the Rules relates to how to describe participants involved with the

reconciliation process. The term “reconciliation participant” has been introduced to replace the use of various terms such as “retailer”, “purchaser”, “grid owner”, and “generator”. This new term is all-encompassing with respect to those participants involved in the reconciliation process, and aims to reduce the confusion and complexity that currently exists.

- ii. *Consumption terminology*- An issue regarding metering terminology was raised in both the workshops and submissions received. The resulting consumption terminology review focused on ensuring that the adopted terminology fully encompassed all technical aspects of the reconciliation requirements. The major change involves the introduction of two new definitions, “volume information” and “submission information” which have replaced the existing terms “metering information” and “consumption information” in part A. These new definitions are used to describe the information used at different stages of the reconciliation process. The term “raw meter data” has been retained and the terms “meter reading”, “validated meter reading”, “estimated reading”, and “permanent estimate” have been introduced.
  - iii. *Connection terminology*- The ECRPT specifically noted the need for clarification of terminology with respect to grid points and connection types and proposed the term grid connection point (GCP) to replace the terms grid exit point (GXP) and grid injection point (GIP). A number of submitters queried the use of this term and as a result of the review of submissions, the existing terminology in the Rules has been retained, with the proposed term GCP replaced with the term NSP only with respect to the new Part J. This provides a more accurate description of the physical reality of such a connection and the need to accommodate the flow of electricity into and out of a network from the reconciliation perspective.
  - iv. *Terminology generally*- An in-depth review of the existing rules also revealed a number of inconsistencies between existing terms, and an apparent misuse of terms. Various parts of the Rules do not always adopt consistent terminology, and in some areas a term may have a different meaning across different rules. In cases where it was possible, revised terminology has been suggested, and definitions have been altered or deleted.
- h. **Unmetered load**- The ECRPT identified three situations where management of unmetered load (UML) is problematic and needed to be changed. These were the:
- i. tracking of changes to "standard" UML, especially over the period of a switch;
  - ii. management of shared UML; and
  - iii. management of streetlights.

However, a considerable number of negative submissions were received and these areas were reviewed again in great detail. As a result of this review:

- i. extra information on UML is to be held on the registry, including some to be provided by distributors;
  - ii. a new mechanism to manage shared UML was developed; and
  - iii. the suggested solution for the specific case of streetlights was extended to cover all types of distributed UML.
- i. **Registry** - The ECRPT proposed a number of new registry fields and the RIPT developed a redrafted version of schedule E2 of the Rules. This had been omitted from the version of the draft Rules in the initial consultation package, and many submissions requested its reinstatement. This has been done<sup>9</sup>, and further extended to account for:
- i. the changes to the management of UML proposed above, in response to further work the RIPT completed on losses;
  - ii. the management of NSPs; and
  - iii. the deletion of embedded generation NSPs, which have been replaced by ICPs (being bi-directional).

In addition, a rule has been inserted stating that the registry is the prima facie database of record. This is consistent with the intent of the ECRPT report.

- j. **Transition**- Transitional rules have been included in the proposed reconciliation rules. These are needed to give effect to the expectation of the Commission (as outlined in the ECRPT report) that the wash up revisions reconciled after the effective date, and relating to 14 months of consumption periods<sup>10</sup> prior to the effective date, will apportion unaccounted for electricity (UFE) to the relevant retailer.

## 81 Statement of the reasons for the proposal

8 The reasons for the proposed rule amendments are set out below.

9 It has been widely acknowledged by the industry for some years that the reconciliation rules are confusing, open to numerous interpretations, and no longer adequately reflect best reconciliation practice. The current reconciliation rules create uncertainty and destroy value. Therefore, with the proposed new suite of reconciliation rules, the Commission seeks to establish a coherent and transparent reconciliation process that clearly sets out the expectations to be placed on industry participants, and encourages those participating in the reconciliation process to improve their systems and processes in order to:

- a. improve the quality of data that goes into the reconciliation process; and
- b. actively monitor and improve their performance throughout the reconciliation process over time.

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<sup>9</sup> Some of the proposed changes have been relocated into the main Part E as they had wider ramifications than the context of just Part E2.

<sup>10</sup> Potentially up to 24 months with Board approval

10 The proposed rule changes provide more clarity around the reconciliation process, remove ambiguity about what actions the reconciliation rules actually require and set a platform for future enhancements, should they be required.

## **82 Identification and assessment of reasonably practicable options**

### ***Reasonably practicable options***

11 Section 172F(1) of the Act requires the Commission to seek to identify all reasonably practicable options for achieving the objective of the rule changes. As set out above, the proposal outlines a way forward that enhances and maintains the quality of the data in the reconciliation process and achieves more visibility and accountability regarding industry processes and procedures. This proposal is expected to improve the efficiency and effectiveness of the reconciliation process by more accurately allocating electricity volumes to purchasers and ensuring that purchasers face the true cost of electricity.

12 The Commission has identified three reasonably practicable options for achieving the objective of the rule change. The reasonably practicable options for achieving the objective of the rule changes are discussed below.

- a. maintaining the status quo (i.e. no rule changes);
- b. the suite of rule changes developed for the first round of consultation; and
- c. the suite of rule changes developed for the second round of consultation (including the transitional rules).

### ***Assessment***

13 Section 172F(1) of the Act requires the Commission to assess:

- a. the costs and benefits of each reasonably practicable option, including the proposal;
- b. the extent to which the objective would be promoted or achieved by each option; and
- c. any other matters that the Commission considers relevant.

14 Table 1 sets out the Commission's assessment of the proposal and the reasonably practicable options, having regard to the purpose and objectives of the proposal, outlined in paragraph 4.

Aspect	Proposal	Practicable Options		
		Status quo	First round of consultation rules	Second round of consultation rules (including transitional rules)
Costs	<ul style="list-style-type: none"> <li>Additional service provider costs will be incurred (not quantified until the tender responses are in).</li> <li>Costs to market participants of upgrading internal systems to support the new reconciliation requirements.</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing cost of unaccounted for electricity (passed through to consumers).</li> <li>Barriers to entry due to ambiguous rules and lack of understanding of participants' duties and obligations.</li> </ul>	<ul style="list-style-type: none"> <li>Additional service provider costs will be incurred (not quantified until the tender responses are in).</li> <li>Costs to market participants of upgrading internal systems to support the new reconciliation requirements.</li> </ul>	<ul style="list-style-type: none"> <li>Additional service provider costs will be incurred (not quantified until the tender responses are in).</li> <li>Costs to market participants of upgrading internal systems to support the new reconciliation requirements.</li> </ul>
Benefits	<ul style="list-style-type: none"> <li>Reduced administrative costs incurred from more efficient processing.</li> <li>Substantial reduction in level of unaccounted for electricity.</li> <li>Improving the Rules through the clear statement of the reconciliation process.</li> <li>Clarification of participants' duties and obligations.</li> <li>The new process, and the data transparency associated with it, is expected to more appropriately assign electricity volumes to</li> </ul>	<ul style="list-style-type: none"> <li>No benefits identified.</li> </ul>	<ul style="list-style-type: none"> <li>Reduced administrative costs incurred from more efficient processing;</li> <li>Substantial reduction in level of unaccounted for electricity.</li> <li>Improving the Rules through the clear statement of the reconciliation process;</li> <li>Clarification of participant's duties and obligations.</li> </ul>	<ul style="list-style-type: none"> <li>Reduced administrative costs incurred from more efficient processing;</li> <li>Substantial reduction in level of unaccounted for electricity.</li> <li>Improving the Rules through the clear statement of the reconciliation process;</li> <li>Clarification of participant's duties and obligations.</li> </ul>

	<p>purchasers.</p> <ul style="list-style-type: none"> <li>• This will contribute towards the delivery of more appropriate price signals to end consumers and facilitate more effective competition.</li> <li>• Produce accurate, complete and timely information in a cost-effective manner.</li> <li>• Increase in the visibility and accountability of industry processes and procedures to improve the quality of data that goes into the reconciliation process; and actively monitor and improve performance throughout the reconciliation process over time.</li> </ul>		<ul style="list-style-type: none"> <li>• The new process, and the data transparency associated with it, is expected to more appropriately assign electricity volumes to its purchasers.</li> <li>• This will contribute towards the delivery of more appropriate price signals to end consumers and facilitate more effective competition.</li> <li>• Produce accurate, complete and timely information in a cost-effective manner.</li> <li>• Increase the visibility and accountability of industry processes and procedures to improve the quality of data that goes into the reconciliation process; and actively monitor and improve performance throughout the reconciliation process over time.</li> </ul>	<ul style="list-style-type: none"> <li>• The new process, and the data transparency associated with it, is expected to more appropriately assign electricity volumes to its purchasers.</li> <li>• This will contribute towards the delivery of more appropriate price signals to end consumers and facilitate more effective competition.</li> <li>• Produce accurate, complete and timely information in a cost-effective manner.</li> <li>• Increase the visibility and accountability of industry processes and procedures to improve the quality of data that goes into the reconciliation process; and actively monitor and improve performance throughout the reconciliation process over time.</li> </ul>
Objectives	The new suite of reconciliation rules seeks to establish a coherent reconciliation process that clearly sets out the	The objective of the proposal would not be met by maintaining the status	This option would go someway to meeting the objectives of the proposal,	This option meets the objectives of the proposal. The Commission

	<p>expectations to be placed on industry participants, and whose transparency encourages those participating in the reconciliation process to improve their systems and processes, in order to minimise errors.</p> <p>The expectation is that the transparency inherent in the new approach will provide the right drivers on all participants (though particularly retailers) to:</p> <ul style="list-style-type: none"> <li>• improve the quality of data that goes into the reconciliation process; and</li> <li>• actively monitor and improve their performance throughout the reconciliation process over time.</li> </ul> <p>The proposed rule changes provide more clarity around the reconciliation process, remove ambiguity about what actions the reconciliation rules actually require and set a platform for future enhancements, should they be required.</p>	<p>quo.</p>	<p>however the first round of consultation on this showed that the rules themselves were not complete and therefore the objectives of the proposal would not be met.</p>	<p>considers the benefits of the updated proposal as a package to be greater than the status quo.</p>
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### *Summary of the assessment*

- 15 The Commission considers that the most reasonably practicable option for achieving the objective of the proposed rule change is the proposal outlined in this paper. The proposal outlined in the first and second consultation documents would reap similar benefits and face similar costs, however, consultation on this showed that the rules themselves were not complete, therefore neither the first nor second consultation sets of rules would be appropriate. The Commission considers the benefits of the updated proposal as a package to be greater than the status quo.
- 16 If the reconciliation rules are not amended (i.e. the status quo is maintained) the objective of this proposal will not be promoted or achieved. Accordingly the Commission considers that the objective would only be promoted or achieved by the proposal outlined in this paper.
- 17 While additional costs will result from the suite of rule changes (in the form of additional service provider costs and costs incurred by retailers in implementing the new reconciliation process), these will be outweighed by substantial benefits. These benefits emerge from reduced administrative costs incurred from more efficient processing and from a substantial reduction in the level of unaccounted for electricity.
- 18 The proposed suite of reconciliation rule changes has the potential to provide significant benefits to the industry by improving the Rules through the clear statement of the reconciliation process (including, for the first time, profiling related rules), and the associated clarification of participants' duties and obligations. In particular, the new process, and the data transparency associated with it, is expected to more appropriately assign electricity volumes to purchasers.
- 19 Based on information provided by retailers, the ECRPT undertook a cost/benefit analysis of the overall approach it developed. This was compared to the cost/benefit of the status quo. While it was determined that there were costs associated with the new system expected to be required by the reconciliation service provider, and costs associated with retailers' implementation and running of the new approach, these were outweighed by the benefits of reduced administrative costs associated with rectifying reconciliation problems, and the reduction in the costs of electricity allocated to the incumbent or independent retailers for which there were no associated sales.
  - a. The net benefits to the industry of the proposal over the status quo were around \$3.7 million per annum.
  - b. In considering the implementation of the proposal, the net benefit of submitting reconciliation submission information in either an aggregated or disaggregated form was analysed. The analysis concluded that the aggregated form provided a positive net benefit of \$300,000.

Since the costs and benefits were quantified and the analysis carried out, there have been changes that would reduce the cost of the status quo because systems have been improved. However, the level of UFE and the

cost of misallocation, lack of transparency and the need to audit reconciliation input have not decreased to the extent that the status quo would be acceptable.

### **Other means to achieve the objective**

- 20 The Commission has considered whether the objective of the proposal is likely to be satisfactorily achieved by any reasonably practicable means other than the proposed rule changes (for example, by education, information, or voluntary compliance).
- 21 The changes to the reconciliation process (such as the removal of incumbency and the term data administrator, the accommodation of embedded generation and the incorporation of a compliance regime) are fundamental and could not reasonably be achieved by any mechanism other than rule changes.
- 22 The rules, as drafted, provide a set of directions regarding the obligations of participants in the reconciliation process. In doing so, they introduce the new concepts set out in the ECRPT report, correct previous errors, and seek to eliminate areas where different interpretations have resulted in poor reconciliation outcomes. In many instances, the fundamental nature of the changes set out in the proposed rules is at odds with the existing rules and their objective would be impossible to achieve other than by new rules.
- 23 In addition, the certainty expected to result from the clarity of a comprehensive set of reconciliation rules is anticipated to deliver greater benefits than can be sustained via the use of the alternatives.
- 24 Some aspects of the revised approach could theoretically be achieved by improved information and education, but this method is not costless either for the Commission or participants. Neither will it contribute towards maintaining the overall integrity of the reconciliation process as sought from their insertion in the rules.
- 25 Education and information is expected to have a significant role to play in the new reconciliation process but only once the base 'platform' of rules and the obligations that they imply has been implemented.
- 26 On balance, it is considered that the objective of the reconciliation process rule changes cannot be achieved simply through powers of persuasion and promotion. The changes are fundamental to the process of allocating electricity volumes generated to purchasing retailers and are unlikely to be satisfactorily achieved by any reasonable practicable means other than the making of rules.