



Final Report

Review of the Electricity Wholesale Contract Regulatory Instrument

December 2016

Printed December 2016
Office of the Tasmanian Economic Regulator
Level 3, 21 Murray Street, Hobart TAS 7000
GPO Box 770, Hobart TAS 7001
Phone: (03) 6166 4422

ISBN 978-0-7246-5435-2

Copyright

© Office of the Tasmanian Economic Regulator

TABLE OF CONTENTS

| | |
|--|-----------|
| GLOSSARY & ACRONYMS | ii |
| SUMMARY OF THE REGULATOR’S DECISIONS | 1 |
| 1 INTRODUCTION..... | 4 |
| 1.1 BACKGROUND..... | 4 |
| 1.2 WHOLESale CONTRACT REGULATORY INSTRUMENT | 6 |
| 1.3 SUPPORTING REGULATORY ARRANGEMENTS | 9 |
| 1.4 OBJECTIVE OF THE INVESTIGATION | 9 |
| 1.5 SCOPE | 10 |
| 2 INVESTIGATION APPROACH..... | 11 |
| 2.1 LEGISLATIVE REQUIREMENTS | 11 |
| 2.2 REGULATOR’S APPROACH..... | 13 |
| 3 ISSUES | 15 |
| 3.1 WHOLESale CONTRACT REGULATORY INSTRUMENT | 16 |
| 3.2 WHOLESale CONTRACT GUIDELINE..... | 32 |
| 3.3 STATEMENT OF REGULATORY INTENT..... | 35 |
| 4 ATTACHMENTS | 40 |
| 4.1 SUMMARY OF THE REGULATOR’S OBLIGATIONS UNDER THE WHOLESale CONTRACT REGULATORY FRAMEWORK..... | 40 |
| 4.2 SCHEDULE 1 OF THE EXISTING INSTRUMENT | 44 |
| 4.3 SCHEDULE 1 OF THE NEW INSTRUMENT | 46 |

GLOSSARY & ACRONYMS

“**Act**” means the *Electricity Supply Industry Act 1995*.

“**Approved financial risk contract**” means those contracts listed under clause 3 of the **Instrument**.

“**Authorised Retailer**” has the same meaning as in the **Instrument**.

“**Baseload \$300 Cap Contract**” has the same meaning as in the **Instrument**.

“**Baseload Swap Contract**” has the same meaning as in the **Instrument**.

“**Compliance Enforcement Policy**” means the *Compliance Enforcement Policy, Version 2, July 2015* issued by the **Regulator** and as revised from time to time.

“**Electricity Supply Industry Performance and Information Reporting Guideline**” means the *Electricity Supply Industry Performance and Information Reporting Guideline, Version 2.3, September 2014* issued by the **Regulator** and as revised from time to time.

“**Exceptional circumstances event**” has the same meaning as in the **Guideline**.

“**Guideline**” means the *Electricity Wholesale Contract Guideline, Version 2.0, December 2016*.

“**Hydro Tasmania**” means Hydro-Electric Corporation (ARBN 072 377 158).

“**Hydro Yield**” has the same meaning as in the **Instrument**.

“**Instrument**” means the wholesale contract regulatory instrument that specifies the regulated contracts **Hydro Tasmania** must offer to **Authorised Retailers**. The instrument contains the approvals:

(i) made by the Minister for Finance on 29 July 2013 (as amended from time to time), in accordance with sections 43G and 43O of the *Electricity Supply Industry Act 1995* and Regulation 20 of the *Electricity Supply Industry (Pricing and Related Matters) Regulations 2013*, having taken into account the principles set out in section 43H of the *Electricity Supply Industry Act 1995*; or

(ii) made by the Regulator (as amended from time to time), in accordance with section 43G of the *Electricity Supply Industry Act 1995*, having taken into account the principles set out in section 43H of the *Electricity Supply Industry Act 1995*.

“**Load Following Swap Contract**” has the same meaning as in the **Instrument**.

“**Peak Period Swap Contract**” has the same meaning as in the **Instrument**.

“**Quarter**” has the same meaning as in the **Instrument**.

“**Regulated weekly offer contract prices**” are prices calculated in accordance with the approved methodology under Part 3 of the **Instrument** in respect of **Approved**

financial risk contracts, which includes lower prices that may be offered at **Hydro Tasmania's** discretion, in accordance with Clause 6 of the **Instrument**.

“Regulator” means the Regulator established under the **Act**.

“Regulatory Reporting Guideline” means the *Regulatory Reporting Guideline, Version 3, July 2014* issued by the **Regulator** and as revised from time to time.

“Statement” means the *Statement of Regulatory Intent, Version 2.0, December 2016*.

“Volume scaling” has the same meaning as in the scaling rules set out in clause 27 of the **Instrument**.

SUMMARY OF THE REGULATOR'S DECISIONS

The Regulator has made the following decisions in this Final Report:

| Final Report reference | Regulator's decision |
|--|--|
| <i>Wholesale Contract Regulatory Instrument</i> | |
| 3.1.1 | The Regulator has decided to maintain the current market-based wholesale regulation framework. |
| 3.1.2 | The Regulator has decided not to make any changes to the Instrument in response to the current level of competition in the small customer segment of the Tasmanian electricity market. |
| 3.1.3 | In accordance with the making of the <i>Electricity Supply Industry (Pricing and Related Matters) Amendment Regulations 2016</i> , the new Instrument will commence on 1 January 2017 and the existing Instrument will cease to be in force on 31 December 2016. |
| 3.1.4 | The Regulator has decided: (a) to set the term of the new Instrument to align with a financial year basis rather than a calendar year basis as is currently the case under the existing Instrument; and (b) based on the new Instrument commencing on 1 January 2017, a 7.5 year term so that the new Instrument expires on 30 June 2024. |
| 3.1.5 | The Regulator has decided to retain the current regulated contract types. |
| 3.1.6 | The Regulator has decided that the new Instrument not include the requirement for regulatory approval to be granted where parties wish to use either an existing Schedule or negotiate their own Schedule instead of using the Hydro Tasmania Schedule in the Instrument. The Regulator has also decided that, under the new Instrument, Authorised Retailers will be required to provide a letter notifying the Regulator that they have chosen to use an alternative Schedule to the Hydro Tasmania Schedule. |
| 3.1.7 | The Regulator has decided to retain the current methodologies for calculating each of the Peak Period Swap Contract, Baseload Swap Contract and Load Following Swap Contract prices. |
| 3.1.8 | The Regulator has decided to continue with the current methodology for determining the maximum Baseload \$300 Cap Contract price but will review the cap price inputs. |
| 3.1.9 | The Regulator has decided that the new Instrument will incorporate Volume scaling provisions which are based on each retailer's proportion of the small customer load thereby ensuring there is sufficient volume of regulated contracts to enable retailers serving the small customer market to hedge their small customer load. |

| | |
|-------------------------------------|---|
| 3.1.10 | <p>The Regulator has decided to review all inputs at least annually on the basis of the schedule outlined in Table 3.2 of this Final Report.</p> <p>The Regulator has decided it will consult publicly during the first Quarter of the 2017 calendar year on the Regulator’s proposed approach to updating the Schedule 1 values.</p> <p>The Regulator has amended the date for Construction Quarter in Schedule 1 of the Instrument to “2026”, has added Construction Quarter to Table 6 in Schedule 1 and has identified which paragraph in the definition of Construction Quarter the date applies to.</p> <p>The Regulator will require Hydro Tasmania to audit the Wholesale Pricing Model both specifically, in relation to the Construction Quarter, and generally, to ensure that the Model continues to operate as intended following the revisions to the Instrument.</p> <p>The Regulator has decided not to update the Construction Quarter in the existing Instrument to “2026”.</p> |
| 3.1.11 | <p>The Regulator has decided to amend Clauses 22.1 and 22.4 of the Instrument to enable Hydro Tasmania to change all traffic light conditions to red for all Quarters once Hydro Tasmania and Authorised Retailers have been notified that, in the Regulator’s opinion, a supply disruption event has occurred.</p> <p>The Regulator has also decided that traffic light conditions may remain red until the Regulator advises Hydro Tasmania and Authorised Retailers otherwise.</p> |
| 3.1.12 | <p>The Regulator has decided to make minor changes to the Instrument to remove redundant references, update out-of-date references and replace references to ‘oil-fired peaking plant’ with references to ‘gas-fired peaking plant’.</p> <p>The Regulator has also decided to amend Clause 2.4 of the Instrument to include “dates” in the list of values that the Regulator may change.</p> |
| Wholesale Contract Guideline | |
| 3.2.1 | <p>The Regulator has decided to amend the Guideline to add a clause similar to Clause 3.5 in Version 1 of the Guideline (December 2013) (exceptions to the standard regulated weekly offer contract process) to allow for the possibility of Hydro Tasmania instigating a trading halt and not offering Regulated weekly offer contract prices.</p> <p>The Regulator has also decided to require Hydro Tasmania to offer make-up volumes in the event that Hydro Tasmania instigates a trading halt and does not offer Regulated weekly offer contract prices.</p> |
| 3.2.1.1 | <p>The Regulator has decided to amend the Guideline to require Hydro Tasmania to:</p> <ul style="list-style-type: none"> ▪ publish current and past prices and ‘Forecast current yield’ values from 1 January 2014; |

| | |
|---------------------------------------|---|
| | <ul style="list-style-type: none"> ▪ maintain and publish a database of past prices and ‘Forecast current yield’ on its website; and ▪ to clearly indicate, on its website, the date that updates have been made to the Wholesale Pricing Model. <p>The Regulator has also decided to amend the Guideline to commit the Regulator to publishing details of any changes made to source data on its website.</p> |
| 3.2.2 | The Regulator has decided not to make any changes to the regulated weekly offer contract process. |
| 3.2.3 | The Regulator has decided to make a number of changes to the Guideline to correct minor errors and to improve clarity and readability. |
| Statement of Regulatory Intent | |
| 3.3.1 | <p>The Regulator has decided:</p> <p>(a) to remove the current reference, in the Statement, to the Regulator instructing Hydro Tasmania to set all Regulated weekly offer contract prices at \$300/MWh;</p> <p>(b) to add the following criteria to the Statement and assess the Regulator’s response to the supply disruption event against these criteria to ensure that the response:</p> <ul style="list-style-type: none"> (i) is transparent and provides regulatory certainty; (ii) has benefits to the current Wholesale Regulatory Framework which outweighs the costs of changing the Framework; (iii) does not have a negative impact on the efficiency of the Tasmanian Wholesale Electricity derivatives market; and. <p>(c) if a supply disruption event occurs in the future, to adopt the following process:</p> <ul style="list-style-type: none"> (i) the current regulated weekly offer contract process will continue to operate unless advised otherwise; (ii) the Regulator will contact all current market participants to seek their views as to the appropriate response to the event; (iii) in its deliberations, the Regulator will apply the criteria noted in (b)(i)-(iii) inclusive above to assess the most appropriate course of action to take in response to the event. |
| 3.3.2 | <p>The Regulator has decided to include a schedule in the Statement in relation to the review frequency for the inputs contained within Schedule 1 of the Instrument.</p> <p>The Regulator has also decided to amend the schedule in the Statement to recognise that AEMO may publish updated data on a more frequent basis than annually.</p> |
| 3.3.3 | The Regulator has decided to make a number of changes to the Statement to correct minor errors and to improve clarity and readability. |

1 INTRODUCTION

1.1 Background

1.1.1 Wholesale electricity market in Australia

The Australian wholesale electricity market comprises a physical market for electricity and an associated financial derivatives market.

The physical market, known as the National Electricity Market (NEM), is a wholesale electricity spot market in which generators sell electricity and retailers buy electricity to on-sell to consumers. The Australian Energy Market Operator (AEMO) manages this exchange through a centrally coordinated dispatch process where supply and demand are met instantaneously, in real time.

The electricity spot market is extremely volatile due to a number of factors including available capacity and demand, the need to continuously and instantaneously match demand and supply, unexpected generator outages and network constraints, and the weather. This volatility exposes participants in the NEM to considerable financial risks.

In order to manage the volatility of these financial risks, generators and retailers negotiate financial contracts (also known as derivative or hedging contracts) that lock in a price for a specified volume of electricity bought in the future. This process is conducted independently of the NEM and is known as a derivatives market. In Australia electricity derivatives are publically traded on ASX Energy market and as over-the-counter products.

Prices for derivative contracts depend on:

- the period of the contract;
- generators' and retailers' appetite for risk; and
- each party's view on the likely spot market prices over the period of the contract.

Regulated weekly offer contract prices generally include a premium for risk over the expected spot market price. A NEM participant may therefore choose to retain some exposure to the spot market. The level of exposure will depend on the entities' appetite for risk and its expectation of future market conditions.

1.1.2 Wholesale electricity market in Tasmania

In Tasmania, in addition to the derivatives contracts negotiated by NEM participants (as outlined in Section 1.1.1.1), Authorised Retailers operating in the small customer market in Tasmania have access to a set of regulated derivatives contracts provided for in the Act and approved by the Regulator.

Wholesale price regulation (specifically, the requirement for Hydro Tasmania to offer prices for a set of regulated derivative products in addition to existing non-regulated derivative contracts) was introduced in Tasmania on 1 January 2014. Regulation was intended to assist retailers in mitigating against the contracting risks associated with Hydro Tasmania's dominance in the Tasmanian wholesale market and to reduce the risk faced by Tasmanian market participants to a level comparable with that facing retailers in other regions of the NEM. Furthermore, regulation was intended to facilitate the introduction of full retail competition on mainland Tasmania and to provide certainty for retailers entering the Tasmanian electricity market.

The Regulator is responsible for regulating Hydro Tasmania's wholesale contracting activity and approves the types of regulated derivatives contracts offered and the prices at which the contracts are offered and monitors the sale of these contracts. These arrangements are part of the wholesale regulatory framework.

1.1.3 Tasmanian wholesale regulatory framework

The wholesale regulatory framework comprises a range of legislative and regulatory instruments including the:

- Act;
- *Electricity Supply Industry (Pricing and Related Matters) Regulations 2013* (the Pricing Regulations);
- Instrument;
- Guideline;
- Statement; and
- Hydro Tasmania's Electricity Generation Licence.

Additional supporting regulatory instruments include the Regulator's *Compliance Enforcement Policy* (Version 2, July 2015) (as amended from time to time), *Regulatory Reporting Guideline* (Version 3, July 2014) (as amended from time to time) and *Electricity Supply Industry Performance and Information Reporting Guideline* (Version 2.3, September 2014) (as amended from time to time).

In accordance with the framework, the Regulator is responsible for:

- administering and monitoring the pricing of regulated wholesale derivative contracts;
- investigating and determining future wholesale contract pricing instruments; and
- collecting information from Hydro Tasmania to support the operation of the framework and the development of full retail competition.

A full summary of the Regulator's obligations under the wholesale regulatory framework is provided at Attachment 4.1 to this Final Report.

1.2 Wholesale Contract Regulatory Instrument

The Instrument was made on 29 July 2013, and outlined, in detail, how the requirements set out in Part 3, Division 4A of the Act were to apply in practice. The Instrument was subsequently amended by the Minister for Finance on 6 November 2013 to incorporate changes identified, after the making of the Instrument in July 2013, by the Department of Treasury and Finance.

Part 3, Division 4A of the Act relates to the regulation of wholesale electricity derivative contracts and specifies the ways in which the Regulator is to regulate and monitor Hydro Tasmania's contracting activities in the Tasmanian wholesale electricity market. Section 43G of the Act requires the Regulator to approve:

- the types of derivative contracts that Hydro Tasmania must offer as Approved financial risk contracts (eg a Load Following Swap Contract);
- the standard form(s) (terms and conditions) for each Approved financial risk contract type;
- the methodology for determining the prices for each Approved financial risk contract type;
- the periods for which Approved financial risk contracts are to be offered; and
- the volume of Approved financial risk contracts that Hydro Tasmania must offer.

The Regulator's decision on each matter is specified in the Instrument, and is referred to as an 'approval'.

Part Two of the Instrument contains the four financial risk contracts approved by the Regulator under section 43G(1)(a) of the Act.

The contracts are as follows:

- Baseload Swap Contract;
- Peak Period Swap Contract;
- Baseload \$300 Cap Contract; and
- Load Following Swap Contract.

The first three contracts types are based on futures contract available on the ASX Energy market, while the Load Following Swap Contract is an "over the counter" (OTC) product. The contracts are designed to manage the financial risks faced by retailers when retailing electricity to small customers in Tasmania.

With the exception of the Load Following Swap Contract the Regulator can, under the Act, revoke an approved contract type if it no longer meets the principles in section 43H(1).

The approval of a regulated Load Following Swap Contract is mandatory as retail prices are linked to the regulated Load Following Swap Contract.

Figure 1 below provides an explanation of the four regulated contract types.

Part Two of the Instrument also contains the standard forms for each of the approved contracts noted in (a) above. The following standard forms were approved under section 43G(1)(b) of the Act:

- International Swaps and Derivatives Association (ISDA) 2002 Master Agreement;
- the Hydro Tasmania Schedule (for each Authorised Retailer); and
- a Confirmation (for each contract type).

These approved standard forms are generally similar to those offered for the types of contracts used in the derivatives market associated with the NEM and are hierarchical in nature.

The ISDA Master Agreement is a pro-forma high level agreement used to document OTC derivative agreements. It sets out general terms and conditions necessary to properly allocate the risks of the transactions between the parties but does not contain any commercial terms specific to individual transactions. Each time that a transaction is entered into, the terms of the master agreement do not need to be re-negotiated and apply automatically.

The parties add to or modify the terms of the ISDA Master through the use of a Schedule to the ISDA Master Agreement. The Schedule includes, amongst other things, clauses dealing with, credit, termination, the delivery of documents and addresses for the service of notices. The Confirmation sets out details specific to individual transactions entered into under the Schedule.

Section 43G(1)(c) of the Act refers to the methodology for calculating the price of each of the approved contracts with the approved methodology contained in an approval in Part Three of the Instrument.

As required under sections 43G(1)(d) and (e) of the Act, Part Four of the Instrument specifies the forward period over which the approved contracts listed in Part Two of the Instrument are to be offered together with a methodology for determining the minimum volume of those contracts that Hydro Tasmania must offer.

In accordance with the Act and the Pricing Regulations, the Regulator is responsible for administering the Instrument and may amend the approvals contained within the Instrument by conducting a pricing investigation.

Figure 1: Explanation of regulated contract types**Baseload Swap Contract & Peak Period Swap Contract**

These swap contracts (also known as ‘contracts for differences’) fix the cost of electricity for a purchaser (eg a retailer) and a seller (eg a generator) for a defined volume of energy. Under this contract, if the spot price is greater than the agreed Regulated weekly offer contract price, the seller pays the difference between the spot and Regulated weekly offer contract price to the purchaser for a defined volume of energy. If the spot price is less than the agreed Regulated weekly offer contract price, the purchaser pays the difference between the two prices for the defined volume of energy to the contract seller.

A Baseload Swap Contract covers a set volume of electricity for every half hour of each 24 hour period, seven days a week for a calendar Quarter.

A Peak Period Swap Contract covers a set volume of electricity for every half hour between 7am and 10pm Monday to Friday for a calendar Quarter.

Baseload \$300 Cap Contract

A cap contract (also known as an options contract) specifies two prices:

- an agreed strike price: the spot price at which the cap applies ie \$300/MWh); and*
- an option fee: the premium or price payable to the seller for the contract itself.*

The cap contract only comes into effect if the spot price, for a specified volume of electricity reaches or exceeds \$300/MWh. If the spot price exceeds \$300/MWh, the seller of the cap (the generator) must pay, to the buyer of the cap (the retailer), the difference between \$300/MWh and the spot price for a specified volume of electricity. Cap contracts help protect a retailer from high spot prices.

Load Following Swap Contract

Load Following Swap Contracts are generally structured to meet an individual retailer’s load profile and tend to be more expensive but allow the purchaser to manage ‘volume risk’ (the risk that the retailer’s customers’ demand is higher than the retailer expected, requiring the retailer to pay spot prices for the additional electricity required to meet that demand) as well as ‘price risk’ (the risk that the spot price is higher than the retailer expected).

In Tasmania, the regulated Load Following Swap Contract is a contract that is based on the Tasmanian Net System Load Profile (NSLP) as determined by AEMO. The NSLP is an approximation of Tasmanian load after subtracting the load from all customers with half hour meters. It therefore represents the load profile for all small customers in Tasmania. Retailers may still be exposed to volume risk if their customers’ actual usage is greater than that allowed for in the regulated Load Following Swap Contract.

In making and amending each approval, the Regulator must take into account the following principles, in section 43H of the Act:

- Authorised Retailers should have a choice of contract types to enter into with Hydro Tasmania;
- the types of contracts and standard form of those contracts should, where reasonably practicable, be of a type used in the NEM; and
- the methodology for determining the prices of Hydro Tasmania's regulated weekly offer contracts should reflect Victorian contract prices, adjusted to take into account the supply/demand balance in Tasmania.

1.3 Supporting Regulatory Arrangements

The Instrument is supported by a number of supplementary documents.

The Regulator's Guideline sets out Hydro Tasmania's responsibilities in relation to regulated electricity wholesale market contracting and also sets out the regulated weekly offer contract process, consistent with the requirements of the Instrument.

The Regulator is responsible for monitoring and reporting on Hydro Tasmania's compliance with the Instrument and the Guideline with compliance enforce specified in the Regulator's *Compliance Enforcement Policy*.

Furthermore, in accordance with the Regulator's *Regulatory Reporting Guideline*, regulatory audits of the regulated weekly offer contract and Volume scaling process are conducted on a periodic basis to ensure that those processes comply with the requirements set out in the relevant regulatory document.

The Regulator has also released a *Statement of Regulatory Intent* which outlines the process the Regulator will undertake with regards to:

- Hydro Tasmania failing to correctly apply the approved pricing methodology;
- a supply disruption event; and
- updating the input values in the Model.

The Regulator has also developed a set of performance indicators to support the wholesale regulatory framework. These indicators are reflected in Section 8 of the Regulator's *Electricity Supply Industry Performance and Information Reporting Guideline* (Version 2.3, September 2014).

1.4 Objective of the investigation

The objective of the pricing investigation was to investigate whether the approvals made under section 43G of the Act:

- are delivering outcomes reflective of an efficient, effective competitive market;
- are facilitating this process as effectively and as efficiently as possible; and
- continue to reflect the requirements of section 43H of the Act.

The investigation also took account of the design principles that informed the development of the initial wholesale regulatory framework, including that:

- market participants should have confidence that they can manage their wholesale risks appropriately in Tasmania;
- the risks of operating in the Tasmanian market should be no greater than those in other jurisdictions in the NEM;
- market participants should have flexibility to manage wholesale market risk using similar business models to those used in other NEM jurisdictions; and
- the framework should recognise the interaction between spot and contract markets without creating unintended incentives or consequences.

In performing its functions under the Act, the Regulator's objectives include, more generally:

- (i) the promotion of efficiency and competition in the electricity supply industry; and
- (ii) the establishment and maintenance of an efficient system of electricity generation, transmission, distribution and supply.

1.5 Scope

The investigation considered issues relating to the Instrument, the Statement and the Guideline.

2 INVESTIGATION APPROACH

2.1 Legislative Requirements

Since 1 January 2014, the Regulator has been responsible, under the Act, for:

- administering wholesale contract pricing, including monitoring Hydro Tasmania's compliance with the Instrument and investigating Hydro Tasmania for suspected non-compliance if necessary;
- investigating and determining future wholesale contract pricing instruments (the existing Instrument was made by the then Minister for Finance on 6 November 2013 and was intended to be in effect for the period 1 January 2014 to 31 December 2018); and
- collecting a range of information from Hydro Tasmania, and making public some of this information, to support the operation of the wholesale contract regulatory framework and the development of competition more broadly.

The Regulator may also determine the prices for regulated contracts in the event that Hydro Tasmania does not comply with its statutory obligations or if a supply disruption event occurs.

The Regulator also has the power under the Act to obtain any information from Hydro Tasmania that the Regulator considers necessary to administer the wholesale contract regulatory framework.

As noted in Section 1.2 of this Final Report, and in accordance with section 43G of the Act, the Instrument contains approvals in relation to the types of regulated contracts, the standard form(s) for each regulated contract type, the methodology for determining the prices for each regulated contract type, the forward period over which regulated contracts are to be offered and the volume of regulated contracts that Hydro Tasmania must offer.

The Regulator is required, by Regulation 21 of the Pricing Regulations, to conduct a pricing investigation prior to making or revoking an approval under section 43G of the Act.

The Pricing Regulations also require the pricing investigation to be conducted prior to the expiry of the Minister for Finance's existing approval.

In making an approval under section 43G of the Act, the Regulator is required, in accordance with section 43H, to take the following principles into account:

43H. Principles to be taken into account in approvals

(1) In determining whether to approve a type of contract under section 43G(1), the Regulator must take into account the following principles:

(a) the principle that authorised retailers should have a choice of different types of contracts to enter into with the Hydro-Electric Corporation;

(b) the principle that a type of contract ought to be, as far as reasonably practicable, of a type of contract generally used in the national electricity market.

(2) In determining whether to approve a standard form under section 43G(1) in relation to a type of contract to be specified in an approval, the Regulator must take into account the following principles:

(a) the principle that the terms and conditions of the approved standard form should be generally similar to those offered in contracts, of the type of contract, used in the national electricity market;

(b) the principle that the total period referred to in section 43G(1)(d) should be of a duration similar to that generally used, for the purpose specified in that paragraph, in contracts in the national electricity market.

(3) In determining whether to approve a methodology to be used for the calculation of prices in contracts that are in an approved standard form in relation to an approved type of contract, the Regulator must take into account the principle that –

(a) prices in such contracts should be based upon the price in contracts that –

(i) relate to managing the financial risks associated with the wholesale purchase of electricity in the Victorian region of the national electricity market; and

(ii) are of the approved type of contract –

as adjusted to accommodate any estimation by the Regulator of the effect of the difference between the supply of, and demand for, electricity in Tasmania after the approval is made; and

(b) prices in such contracts should reflect the risks, to an authorised retailer that enters into a contract that is in an approved standard form in relation to an approved type of contract, of variations in the demand for, or supply of, electricity in Tasmania that the retailer is required to provide under standard retail contracts with small customers.

Under section 43G(9) of the Act an approval made under section 43G(1) remains in force for the period determined in accordance with the regulations.

In this regard, Regulation 24(2) of the Pricing Regulations provides for an approval made under section 43G of Act remaining in force until it is revoked or ceases to be in force under Regulation 20.

Under Regulation 20(2), the initial approvals made by the Minister under Regulation 20(1) remain in force for the period specified in the approval.¹

In summary, the Act and the Pricing Regulations do not permit the expiry date of the existing Instrument to be extended beyond the specified expiry date of 31 December 2018 (see Clause 1(b) of the Instrument). Furthermore, as explained above, the Regulator is required to conduct an investigation before making or revoking an approval.

2.2 Regulator's Approach

As noted in section 2.1, under Regulation 21 of the Pricing Regulations, the pricing investigation must be completed before the expiry of the existing Instrument on 31 December 2018. However, the Regulator decided to conduct and complete the investigation and make the necessary approvals well before the Instrument's expiry date.

The Regulator took this decision to provide market participants with as much certainty as possible and in response to concerns raised by market participants about the potential impact on their respective forward contracting activities in the event that the approvals were made closer to the expiry date of the existing Instrument.

The major tasks undertaken during the course of the investigation are outlined in Table 2.1.

Table 2.1 Investigation timeline

| Task description | Date |
|---|-----------------|
| Issues Paper released for public consultation | December 2015 |
| Public consultation on Issues Paper closes | 22 January 2016 |
| Workshop held with representatives from Hydro, Aurora, ERM Power, Department of State Growth and the Department of Treasury and Finance to identify and discuss issues and provide feedback on the Regulator's proposals to address the identified issues | 15 July 2016 |
| Regulator releases its Draft Report for public consultation. The report addresses issues raised in response to the Issues Paper and issues which were discussed during the 15 July 2016 workshop | 19 August 2016 |

¹ The Regulations were amended in November 2016 to allow for an approval made by the Minister cease to be in force when an approval made by the Regulator comes into force (provided the Minister's approval has not already expired). For further information see the discussion in Section 3.1.4 of this Final Report.

| | |
|--|-------------------|
| Public consultation on the Draft Report ends | 23 September 2016 |
| Regulator releases Draft Instrument, Draft Statement and Draft Guideline for public consultation | 21 October 2016 |
| Public consultation on the Draft Instrument, Draft Statement and Draft Guideline ends | 11 November 2016 |
| Regulator releases its Final Report (together with the final Instrument, final Statement and final Guideline) and makes the section 43G approvals to apply from 1 January 2017 | 21 December 2016 |

3 ISSUES

The Regulator released an Issues Paper in December 2015 to provide context for, and stimulate discussion about, the scope of the proposed investigation in relation to its review of the Instrument.

The Issues Paper also included a set of evaluation criteria that the Regulator will take into account when reviewing the “approvals’ in section 43G of the Act. The evaluation criteria are as follows:

- **Accountability/transparency:** the framework includes a clear demarcation of roles and process and allows for open decision making based on accurate information. The framework includes a process for appropriate review.
- **Simplicity/clarity:** information is clear, simplistic and accessible and provided to stakeholders on a timely basis.
- **Consistency/predictability:** the process creates regulatory certainty across market participants (consistency in decision making, the application of rules and the engagement of stakeholders) and thus facilitates planning by market participants.
- **Consultative:** the regulatory process credibly satisfies the demands of both consumers and investors and encourages stakeholder participation.
- **Effectiveness:** the regulatory process produces outcomes reflective of competitive market outcomes and provides sufficient certainty for new and existing market retailers.
- **Flexibility:** the regulatory process is appropriate for the stage of development in the market and the regulatory framework is capable of responding to change of circumstance in an appropriate manner.
- **Independence:** the regulatory process is administered independently and in line with statutory requirements.

Following public consultation on the Regulator’s Issues Paper, the Regulator addressed the issues raised in submissions on the Issues Paper in a Discussion Paper which formed the basis for an agenda for a workshop held on 15 July 2016. The workshop was attended by staff from the Office of the Tasmanian Regulator (OTTER), Department of State Growth and Department of Treasury and Finance as well as current participants in the Tasmanian small customer retail electricity market (Hydro Tasmania, ERM Power and Aurora Energy).

The issues raised in the Discussion Paper, together with stakeholder submissions on the Draft Report, Draft Instrument, Draft Guideline and Draft Statement form the basis for this Final Report. Issues relating to the Instrument including comments made by workshop participants, are discussed in Section 3.1 of this Final Report, while issues

relating to the Guideline and Statement, including comments by workshop participants, are discussed in Sections 3.2 and 3.3 of this Final Report respectively.

3.1 Wholesale Contract Regulatory Instrument

3.1.1 Market-based wholesale regulation framework

The Issues Paper sought views from stakeholders as to whether the Government should consider adopting a non-market based solution in which prices are prescribed in legislation. There were no submissions supporting a move away from the current market-based approach.

In the sole submission received on the Regulator's Draft Report in relation to this issue, Hydro Tasmania supported the Regulator's proposal.

In the absence of any stakeholders expressing opposition to continuing with a market-based framework and noting that the current approach provides certainty for market participants, the Regulator has decided to maintain the current market-based framework.

The Regulator has decided to maintain the current market-based wholesale regulation framework.

3.1.2 Wholesale contract regulation and increasing competition in the small customer market

The Issues Paper asked whether market participants considered that the Instrument and wholesale regulatory framework supported the Regulator's objectives under the Act of promoting efficiency and competition in the electricity supply industry.

In its submission on the Issues Paper, Aurora Energy considered that the Instrument addresses some barriers to entry and that the Instrument is utilised by retailers serving the small business sector.

The Tasmanian Small Business Council (TSBC) considered that the wholesale regulatory arrangements, which include the Instrument, have failed to achieve the objective of encouraging the entry of new retailers into the Tasmanian small customer electricity market. Furthermore, the TSBC stated that with the virtual absence of competition, businesses have little or no choice of electricity retailer and price competition is extremely limited. Therefore, the significant discounts available to small businesses in other NEM jurisdictions do not exist in the Tasmanian electricity market.

However, workshop participants were of the view that the current lack of competition in the small customer market was unlikely to be caused, or resolved, solely by the Instrument.

Having regard to the Regulator's legislative objectives of promoting efficiency and competition in the electricity supply industry in Tasmania, the Regulator is mindful of the impact any changes to the Instrument may have on the development of retail competition.

In this regard, in a recent report, the Australian Energy Market Commission (AEMC) noted that on average, retailers considered entry and expansion in Tasmania to be the most difficult of all jurisdictions except regional Queensland. They identified significant impediments including the structure and size of the wholesale market and price regulation.²

In relation to wholesale market conditions and access to hedging products the AEMC noted that:

Retailers consistently mentioned tightening wholesale market conditions as a barrier to entry. This was particularly the case in South Australia and Queensland but also the case in States such as Tasmania and the Australian Capital Territory.

In Tasmania, retailer responses suggested that wholesale market conditions are difficult due to the:

- small demand base in the jurisdiction;
- structure of the wholesale market, with Hydro Tasmania being the only generator in the market;
- reliance on a single physical link to Victoria (the Basslink), which failed in late 2015; and
- inability of retailers to rely on interregional hedges to cover their wholesale positions.

Access to hedging products has also been a particularly important barrier in Queensland and Tasmania³.

The Regulator notes while the AEMC referred to hedging issues, it did not specifically refer to the Instrument. The Regulator also notes that the AEMC raised other issues outside the scope of the Instrument such as market size and NEM interconnector arrangements.

In the sole submission received on the Regulator's Draft Report in relation to this issue, Hydro Tasmania expressed its support for the Regulator's proposal.

The Regulator has therefore decided not to make any changes to the Instrument to relation to this issue.

The Regulator has decided not to make any changes to the Instrument in response to the current level of competition in the small customer segment of the Tasmanian electricity market.

² AEMC, *Final Report, 2016 Retail Competition Review, 30 June 2016, Page 28.*

³ *Ibid*, Pages 97-8.

3.1.3 Commencement of the new Instrument

An issue identified at an early stage of the Regulator’s review related to managing the transition between the existing and new instruments.

Submissions from both Aurora Energy and Hydro Tasmania in response to the Issues Paper called for a smooth transition between the existing and new instruments.

Aurora Energy stated at the workshop that it considered contracts entered into prior to the expiry of the existing Instrument should remain in force notwithstanding that those contracts are not concluded until after the expiry of the existing Instrument. On this point the Regulator notes that section 43G(10) of the Act states that [emphasis added]:

(10) The making of an approval under subsection (1) or a revocation under subsection (4) of such an approval does not affect the validity or operation of a contract, in an approved standard form, that was entered into before the approval or revocation came into force.

Hydro Tasmania also noted at the workshop that a situation whereby it would be subject to contracts for the same period but under different instruments would allow for arbitrage opportunities in that market participants would be aware of price trends and could choose which instrument to buy under (and when to buy) as soon as the new pricing methodology was finalised (expected in December 2016). Hydro Tasmania considered that the availability of these opportunities had the potential to change buyer behaviour.

To address these issues, Hydro Tasmania proposed that:

- the existing Instrument is amended so that Hydro Tasmania is only required to offer contracts which mature up to the last Quarter of the existing Instrument (ie Quarter 4, 2018); and
- Hydro Tasmania should then be permitted to offer contracts under the new Instrument for Quarters commencing 1 January 2019 as shown in the diagram in Attachment 4.4 of the Draft Report.

The adoption of Hydro Tasmania’s proposal would, as the Regulator understands it, have removed potential arbitrage opportunities. However, further amendments would be required to the existing Instrument to progressively reduce the number of Quarters that Hydro Tasmania was required to make regulated weekly offers.

In its Draft Report, the Regulator noted that retailers would have the option of entering into contracts under the existing Instrument or defer contracting until Quarter 1, 2019 (see Attachment 4.3 of the Draft Report). While recognising that adopting this approach may provide retailers with arbitrage opportunities, the Regulator also noted that this approach would provide retailers with certainty as to the arrangements that will be in place into the future. Adopting this approach would also meet the accountability/transparency and consistency/predictability evaluation criteria set out in page 18 of this Final Report. This approach would, however, require Hydro Tasmania to manage contractual arrangements under both the existing

Instrument and the new Instrument for seven Quarters. That is, when the new Instrument became effective on 1 January 2019 as originally intended, Hydro Tasmania would only have been able to offer contracts under the new Instrument from the second Quarter in 2019.

In summary, in its Draft Report, the Regulator proposed that the transition between the existing Instrument and the new Instrument should occur as outlined in Attachment 4.3 of that Report ie retailers would have the option of contracting under either the existing Instrument or the new Instrument and there would be seven Quarters during which Hydro Tasmania was subject to contracts entered into under different Instruments as shown in the diagram in that attachment.

In its subsequent submission on the Regulator's Draft Report, Hydro Tasmania proposed that the existing Instrument should be revoked on 31 December 2016 and the new Instrument should become effective from 1 January 2017.

After considering the relative advantages and disadvantages of the various options for transitioning from the existing Instrument to the new Instrument, the Regulator decided that the best course of action was for the new Instrument to come into force on 1 January 2017 with the existing Instrument ceasing to be in force as of 31 December 2016.

However, under Regulation 20(2) of the Pricing Regulations, the Minister for Finance's approval (and therefore the existing Instrument) did not expire until 31 December 2018.

To achieve the desired outcome, the Regulator sought the Government's support to amend the Regulations. The required amendments were approved on 7 November 2016 and gazetted on 16 November 2016.⁴

The adoption of this approach has also meant that the originally identified requirement to amend the existing Instrument to incorporate changes that were to be included in the new Instrument (see Section 3.1.14 of the Regulator's Draft Report) is no longer relevant.

In accordance with the making of the *Electricity Supply Industry (Pricing and Related Matters) Amendment Regulations 2016*, the new Instrument will commence on 1 January 2017 and the existing Instrument will cease to be in force on 31 December 2016.

3.1.4 Term of the Instrument – basis and duration

The Issues Paper asked stakeholders if the term of the existing Instrument (five years) was an appropriate term for the new Instrument and whether market participants would prefer the term of the new Instrument to reflect financial years (the term of the existing Instrument is based on calendar years).

⁴ *Electricity Supply Industry (Pricing and Related Matters) Amendment Regulations 2016* [S.R. 2016, No. 93].

In their respective submissions on the Issues Paper, both Hydro Tasmania and Aurora Energy supported the Instrument applying for a longer term and aligning the term of the Instrument with standing offer price determination regulatory periods which are currently in financial years. In its submission, the TSBC suggested that the Instrument should be reviewed after three years.

At the July 2016 workshop, Aurora Energy reiterated its support for aligning the term of the Instrument with standing offer price determination regulatory periods so as to prevent the misalignment that would occur if the existing Instrument ended on 31 December 2018 but the standing offer price determination regulatory period ends six months later on 30 June 2019.

Adopting a financial year basis, rather than a calendar year basis for the new Instrument was also supported by other workshop participants.

In its Draft Report, the Regulator proposed aligning the term of the new Instrument to a financial year basis and proposed a 3.5 year term so as the new Instrument expired on 30 June 2022⁵ to coincide with the end of the standing offer price determination on that date. Both Hydro Tasmania and Aurora Energy supported the proposed move to a financial year basis for the new Instrument.

Noting the support from stakeholders, the Regulator has decided to set the term of the new Instrument to align with a financial year basis.

However, while Hydro Tasmania supported the proposed 3.5 year term, Aurora Energy, considered the proposed term too short to provide sufficient certainty to market participants and, instead, recommended a 6.5 year term to align with the expiry of the standing offer price determination on 30 June 2025 (the current determination expires on 30 June 2019 and, assuming a three year regulatory period, the next determination would expire on 30 June 2022).

Having considered Aurora Energy's arguments, the Regulator does not see any advantage in aligning the Instrument's expiry with the end date of the standing offer price determination in force at the time. There is a clear and legislated link between the wholesale prices calculated in accordance with the Instrument and standing offer prices. However, the Wholesale Electricity Price, while based on the regulated wholesale product, the Load Following Swap Contract, is calculated independently from the operation of the Instrument as part of the annual standing offer price approval process such that aligning the expiry dates of the instrument and the standing offer price determination is unnecessary.

Additionally as was the case for this investigation, to provide certainty to market participants, the Regulator intends conducting an investigation into the new Instrument well before its expiry. In practice, this means that the new Instrument will run for approximately 5.5 years from 1 January 2017 (See Section 3.1.3 of this Final Report) until 30 June 2022 before being superseded by a new instrument.

⁵ This term and expiry date was based on the new Instrument commencing on 1 January 2019 ie prior to the Amendment Regulations being made and the new Instrument coming into force on 1 January 2017.

The Regulator has therefore decided to set the term of the new Instrument as 7.5 years.

The Regulator has decided:

- (a) to set the term of the new Instrument to align with a financial year basis rather than a calendar year basis as is currently the case under the existing Instrument; and
- (b) based on the new Instrument commencing on 1 January 2017, to adopt a 7.5 year term so that the new Instrument expires on 30 June 2024.

3.1.5 Regulated contract types

The current range of regulated products are outlined in Section 1.2 of this Final Report.

The Issues Paper sought comments on whether the range of regulated products that are available to market participants was appropriate.

In their respective submissions both Aurora Energy and Hydro Tasmania indicated that they were satisfied with the types of contracts available. However, in its submission, the TSBC stated that the current range of contracts was not achieving the desired outcome of increasing competition and that a more diverse range of contracts is required.

The TSBC's submission stated that it considers the current range of regulated products combined with the lack of an "margin products" (available in other NEM jurisdictions through products available on the ASX Energy) is too limiting with retailers seeking other hedging products having to enter into unregulated contracts with Hydro Tasmania.

The TSBC also considered that a greater range of regulated products will create greater liquidity in the Tasmanian wholesale financial contract market. The TSBC also contended that the regulated contracts are inconsistent with the evaluation criteria outlined in the Issues Paper (reproduced in Section 3 of this Report) as the contracts are subject to Hydro Tasmania's credit policy which is not publically available.

Hydro Tasmania stated at the workshop that it also offered a range of unregulated products and did not see any benefit in being required to offer additional regulated contract types given the active unregulated market. Hydro Tasmania also noted that the introduction of additional regulated contract types could have unforeseen negative consequences.

The retention of the current regulated contract types was supported by other workshop participants.

Regulated base load, Peak Period Swap Contracts and regulated \$300 Baseload Cap Contracts are based on products available to market participant in other NEM jurisdictions with the fourth product, a Load Following Swap Contract, an

over-the-counter product. The Regulator understands that, during the then Government's development of the wholesale regulatory framework during 2013, these products were considered to be adequate to achieve the objective of retailers operating in Tasmania facing a similar level of risk to those operating in other NEM jurisdictions.

The decision to increase the range of regulated products would need to factor in the cost of offering additional products. The Regulator understands that the ASX Energy does not offer Tasmanian products due to a lack of demand. Additionally, over-the-counter products that include a margin component are complex and therefore would be costly both to develop and maintain.

As market participants have not requested a wider range of regulated products the Regulator proposed, in its Draft Report, retaining the current regulated contract types.

In their respective submissions on the Regulator's Draft Report, both Hydro Tasmania and Aurora Energy supported the Regulator's proposal. Given the support from stakeholders, the Regulator has decided to retain the current regulated contract types.

The Regulator has decided to retain the current regulated contract types.

3.1.6 Use of existing Schedule as an alternative to the Hydro Tasmania Schedule

The current approved standard forms are outlined in Section 1.2 of this Final Report.

Under the current Instrument, parties wishing to either use an existing Schedule or negotiate their own Schedule instead of using the Hydro Tasmania Schedule in the Instrument, must seek the Regulator's approval of the alternative Schedule. An alternative Schedule is referred to in the Instrument as a "separate standard form".

The ability to use a "separate standard form" was included in the Instrument to provide new retailers with a choice of using the Hydro Tasmania Schedule, an existing Schedule or negotiating their own Schedule.

In its submission to the Issues Paper, Hydro Tasmania suggested that a letter from the retailer to the Regulator requesting they be allowed to use their existing Schedule should suffice. The TSBC's submission supported retailers not being required to use the Hydro Tasmania Schedule and did not see the need for the Regulator to approve the use of an alternative Schedule. Workshop participants supported Hydro Tasmania's proposal.

Retailers entering into wholesale financial contracts with Hydro Tasmania are wholesale electricity market participants who are aware of the risks of operating in the wholesale electricity market. The Regulator therefore considered the requirement for regulatory approval where both parties agree to use a Schedule other than the Hydro Tasmania Schedule is administratively burdensome and serves no purpose. The Regulator did however propose, in its Draft Report, that retailers be required to notify the Regulator that they had chosen to use an alternative Schedule to the Hydro Tasmania Schedule.

In its submission on the Regulator’s Draft Report, Hydro Tasmania supported the Regulator’s proposal.

The Regulator has therefore decided to remove the requirement to obtain regulatory approval to use an alternative Schedule and to require retailers to notify the Regulator that they had made that choice.

The Regulator has decided that the new Instrument not include the requirement for regulatory approval to be granted where parties wish to use either an existing Schedule or negotiate their own Schedule instead of using the Hydro Tasmania Schedule in the Instrument.

The Regulator has also decided that, under the new Instrument, Authorised Retailers will be required to provide a letter notifying the Regulator that they have chosen to use an alternative Schedule to the Hydro Tasmania Schedule.

3.1.7 Peak Period Swap Contracts, Baseload Swap Contract and Load Following Swap price calculations

In its Issues Paper, the Regulator sought feedback from stakeholders on the calculation of Peak Period Swap Contracts, Baseload Swap Contracts and Load Following Swap Contract prices.

In its submission on the Issues Paper, Hydro Tasmania contended that the correlation between Tasmanian regulated Baseload Swap Contract prices and the prices in other states demonstrated that the Instrument delivers very reasonable outcomes.

In its submission on the Issues Paper, TSBC expressed concern that the prices calculated for both Peak Period Swap Contracts and Baseload Swap Contracts are significantly higher than in Victoria and the difference has increased over time. The TSBC also noted that the December 2015 Issues Paper did not explain why this is the case.

Aurora Energy’s submission stated that it considered that the current methodologies were operating appropriately.

The prices for the regulated products are determined using an Excel model that reflects the inputs and calculation methodology specified in the Instrument. Tasmanian prices are based on Victorian futures prices adjusted for a number of factors including the inflows into Hydro Tasmania’s storages, transport costs across Bass Strait via Basslink, forecast load. Tasmanian prices also factor in the cost of meeting peak demand through the construction of a new gas-fired peaking plant. The inputs and calculation methodology has resulted higher prices for Peak Period Swap Contracts and base load swaps than in Victoria but there is no evidence that the difference has increased over time.

As the Regulator has not received support for the adoption of any alternative methodologies to calculate the Peak Period Swap Contract, Baseload Swap Contracts and Load Following Swap Contract prices, the Regulator has decided to continue to apply the current methodologies.

The Regulator has decided to retain the current methodologies for calculating each of the Peak Period Swap Contract, Baseload Swap Contract and Load Following Swap Contract prices.

3.1.8 Calculation of maximum Baseload \$300 Cap Contract price

The prices for regulated Baseload \$300 Cap Contracts for Tasmania are significantly higher than the Victorian Baseload \$300 Cap Contracts available on the ASX Energy market.

The maximum Baseload \$300 Cap Contract price is based on Victorian cap futures prices, Tasmanian load, inflows, and the cost of a new gas (or possible oil) peaking plant. The timing of the construction and the cost of the construction and operating a gas peaking plant are the major factors determining the regulated cap price, which has an impact on the remaining three Regulated weekly offer contract prices.

The inputs associated with the cost and timing of a new gas-fired peaking plant are static inputs in Schedule 1 of the Instrument (see Table 6 in Attachment 4.2 to this Final Report).

In their respective submissions on the Issues Paper both Hydro Tasmania and Aurora Energy supported maintaining the current methodology for determining the cap price. In particular, Aurora Energy referred to the consistent outcomes delivered by the operation of the Instrument while Hydro Tasmania's submission noted that:

The current methodology is theoretically sound because the physical way of backing a cap product is to have an open cycle gas turbine which is the methodology embodies in the Instrument currently.⁶

Hydro Tasmania's submission on the Issues Paper also noted that the Instrument needs to be considered as a whole as the inter-connected nature of the Instrument meant that amending one component of the pricing methodology may have unintended flow-on effects to other parts of the Instrument.

At the 15 July 2016 workshop, Hydro Tasmania stated that, while cap prices may be calculated differently in other jurisdictions, Tasmanian cap prices were similar to those in other smaller jurisdictions (eg South Australia and Queensland) where there is competition. In Hydro Tasmania's opinion, the cap prices reflect what prices would be if there was more competition in Tasmania.

Aurora Energy also stated at the workshop that the implications of any changes to the Instrument should be carefully considered as they may compromise regulatory certainty.

Workshop participants did not provide or support an alternative method for determining cap prices but supported a review of the cap price inputs.

⁶ Hydro Tasmania, Submission on the Issues Paper in relation to the Review of the Wholesale Contract Regulatory Instrument, page 5.

In its submission on the Issues Paper, the TSBC's supported a detailed review of the Baseload \$300 Cap Contract price and the other regulated contracts. In particular, the TSBC considers that the contracts may be priced at a level that is unreasonable and unrepresentative of how markets determine prices thereby discouraging smaller retailers who use these products as their primary financial risk management tool. TSBC also states that the current inputs values are likely to be out of date. The TSBC also noted that the single regulated \$300 cap could be too limiting and adding other products would improve market participants' ability to manage their risks.

In its Draft Report, the Regulator proposed to continue with the current methodology for determining the price of Baseload \$300 Cap Contracts. In its submission on the Regulator's Draft Report, Hydro Tasmania supported the Regulator's proposal.

In the absence of an alternative method of determining the price of Baseload \$300 Cap Contracts being suggested by stakeholders, the Regulator has decided to continue with the current methodology. The Regulator will, however, review the cap price inputs (see Section 3.1.10 of this Final Report for a discussion on the input updating process).

The Regulator has decided to continue with the current methodology for determining the maximum Baseload \$300 Cap Contract price but will review the cap price inputs.

3.1.9 Regulated weekly offer contract process and limits, Volume scaling rules and calculations

The Instrument outlines the weekly volume offer process and sets out the formulae for determining the traffic light conditions and calculating the corresponding volume limits. The regulated weekly offer contract process is set out in detail in the Guideline.

The Issues Paper sought feedback from stakeholders regarding the regulated weekly offer contract process and limits, Volume scaling rules and calculations.

In its submission on the Issues Paper, Hydro Tasmania suggested that, as there was one dominant retailer in the small customer market, it may be more appropriate if Volume scaling was based on all customer numbers rather than the number of small customers alone.

At the workshop, Aurora Energy stated that, as the Instrument was designed to protect retailers serving the small customer market, it considered that the Volume scaling is working as intended ie ensuring there is sufficient volume of regulated contracts to enable retailers serving the small customer market to hedge their small customer load. Aurora Energy also noted that changing Volume scaling from being based on customer numbers to small customer load would disadvantage retailers with a high proportion of residential customers (relatively small loads) and benefit retailers who serve only business customers (ie customers with relatively larger loads).

However, ERM Energy expressed a contrary view at the workshop and suggested that Volume scaling should be based on customer load rather than customer numbers.

The Overview of Part 4 on page 29 of the Instrument states that:

A priority allocation is made to Authorised Retailers who serve Small Customers, based on the share of the Small Customer market (in terms of the number of Small Customers) that they supply.

However, the Regulator notes that the physical and financial electricity markets are based on the volume of electricity sold ie load.

The Regulator also notes that the Volume scaling arrangements were designed with the expectation that, initially, there would be two retailers operating in the Tasmanian retail market and customers (and therefore the approximate load) would be allocated equally between each retailer.

However, this situation would have been unlikely to remain intact for long once customers (and their associated load) began switching between retailers.

In its Draft Report the Regulator therefore proposed that each retailer's proportion of the small customer load was a more appropriate basis for Volume scaling than an allocation based on customer numbers. In its submission on the Regulator's Draft Report, Hydro Tasmania supported the Regulator's proposal.

The Regulator has, therefore, decided to incorporate Volume scaling provisions which are based on each retailer's proportion of the small customer load.

The Regulator has decided that the new Instrument will incorporate Volume scaling provisions which are based on each retailer's proportion of the small customer load thereby ensuring there is sufficient volume of regulated contracts to enable retailers serving the small customer market to hedge their small customer load.

3.1.10 Values determined by the Regulator

General

Schedule 1 of the Instrument lists inputs set by the Regulator. These inputs include amounts, rates, and percentages that are used in the calculations outlined in the Instrument (Schedule 1 of the existing Instrument is reproduced in Attachment 4.2 to this Final Report).

In its Issues Paper, the Regulator sought feedback from stakeholders regarding the validity of the values currently listed in Schedule 1 of the Instrument together with the validity of the assumptions adopted for, and the associated sources of, those values.

In its submission on the Issues Paper, Hydro Tasmania suggested that the Regulator should commit to review, at least annually, values as they may no longer be current eg new committed wind generation. Hydro Tasmania also suggested that other variables, which do not vary over time, should be reviewed by the Regulator on the request of a market participant.

There was general agreement among workshop participants that the inputs should be reviewed annually with ERM stating that, due to the volatility in gas prices, the Tasmanian cap value inputs should be updated every six months.

Aurora Energy expressed concern at the workshop about the Regulator updating inputs in the existing Instrument due to Aurora Energy having already entered into forward contracts based on the assumption that the values outlined in the existing Instrument would not be changed.

At the workshop Hydro Tasmania also suggested that not all inputs should be updated at once and that inputs could be updated on a rolling basis over two years.

Clause 4.2 of the April 2014 version of the Statement describes the process for updating the inputs in Schedule 1 of the existing Instrument. At present, the review of one or more inputs relies on one or more of the Regulator, Hydro Tasmania, an Authorised Retailer or other stakeholder requesting a review.

However, the Regulator considers market participants are incentivised to request an update of the inputs only where the updated values are to their benefit. To provide greater transparency and provide all current and potential market participants with greater certainty while ensuring that all parties in the small customer electricity market are protected, the Regulator considered that a formal input review schedule should be included in the input review process.

In Section 3.1.10 of its Draft Report, the Regulator proposed the following input review schedule:

Table 3.1 Proposed input review schedule (Regulator’s Draft Report)

| Schedule 1 - Inputs set by Regulator | Review Frequency |
|---|------------------|
| Table 1 Off-Peak Cap Values | Annual |
| Table 2 Absolute Minimum Capacity Offer Volume | Annual |
| Table 3 Supplementary Offer Volumes, Headroom Buffers and Reserved Percentage | Annual |
| Table 4 Marginal Loss Factors | Annual |
| Table 5 New Committed Wind Generation | Annual |
| Table 6 Calculation of Tasmanian Cap Values | |
| Costing Quarter | Annual |
| Economic Life | Annual |
| Forecast Inflation Rate | Quarterly |
| Nominal Post Tax Debt Cost | Quarterly |
| Pre-Tax Real WACC | Quarterly |
| Real Annual Operating Cost | Annual |
| Real Total Capital Cost | Annual |
| Table 7 Contract premiums | Annual |

To promote transparency the Regulator also proposed linking inputs, where possible, to verifiable, independent third party data (for example, the Reserve Bank of Australia's quarterly consumer price index movements and AEMO's annual demand forecasts). The Regulator also proposed that inputs to be reviewed annually should be updated in July with the first date the revised inputs are applied being the first allocation date after AEMO published its National Electricity Forecasting Report.

In its submission on the Regulator's Draft Report, Hydro Tasmania stated that it saw little value in updating the Forecast Inflation Rate, the Nominal Post Tax Debt Cost and the Pre-Tax Real WACC more frequently than annually. Hydro Tasmania also suggested that the updates should be done after the Wholesale Electricity Price has been set so as to avoid standing offer price shocks. Hydro Tasmania also proposed that the Schedule 1 input updates should be effective in the same week as the AEMO demand forecasts are available ie the first annual update would occur in June 2017.

In its Draft Report submission, Aurora Energy considered that all inputs should be updated at the same time on an annual basis. Aurora Energy also suggested that the Regulator should specify the timing of the annual update and, in so doing, should have regard to the potential impact on standing offer prices.

In its Consultation Paper, the Regulator proposed updating all inputs, with the exception of the Forecast Inflation Rate, on an annual basis. The Regulator proposed updating the Forecast Inflation Rate on a quarterly basis.

In its response to the Regulator's Consultation Paper, Hydro Tasmania suggested using the CPI averaged over several years for the Forecast Inflation Rate. This was because Hydro Tasmania believes that a quarterly update of CPI is inconsistent with the use of the inflation rate in the Instrument, because it is used to inflate costs for gas plant construction over a period of several years, so Hydro Tasmania argued that using a volatile quarterly figure is not a sound approach. Hydro Tasmania instead suggested that an average figure over several years would be the most appropriate approach.

The Regulator agrees with Hydro Tasmania's argument that a quarterly Forecast Inflation Rate update is inconsistent with the use of the inflation rate in the Instrument. Upon further reflection, the Regulator also considers that updating all inputs on an annual basis would reduce administrative costs for both Hydro Tasmania and OTTER, reduce the risk of an error being introduced into the Instrument and remove the uncertainty frequent changes to inputs may have on prices.

The Regulator has, therefore, decided that the Forecast Inflation Rate be updated on an annual basis.

In its response to the Regulator's Consultation Paper, Aurora Energy also stated that the Regulator should provide more information as to the Regulator's approach to updating inputs in Schedule 1 and suggested consultation should occur with market participants on an approach to updating the inputs. The Minister for Energy's Office made a similar suggestion in discussions with OTTER staff.

In response to these suggestions the Regulator has decided that it will consult publicly on its intended approach to updating the Schedule 1 inputs and will release

a consultation paper during the first Quarter of the 2017 calendar year setting out the Regulator’s proposed approach.

Construction Quarter

In the Draft Instrument and Draft Statement released for consultation during October 2016, the Regulator proposed adding a new table, Table 8, to Schedule 1 of the Instrument in relation to the Construction Quarter.

Hydro Tasmania and Aurora Energy both noted in their respective responses to the Regulator’s Consultation Paper that the Regulator had proposed setting the Construction Quarter to “2022” rather than “2026”. Hydro Tasmania suggested that since the Construction Quarter in the Instrument is being specified, for the first time, in Schedule 1 of the Instrument it should be shown as “2026”. This is because, under the definition of Construction Quarter, failing the demonstrated need for a new entry inside ten years, the date should be ten years after the latest Electricity Statement of Opportunities (ESOO) from AEMO. AEMO last issued an ESOO in September 2016.

Similarly, in its response to the Regulator’s Consultation Paper in relation to the proposed changes to the Draft Instrument, Draft Statement and Draft Guideline, Aurora Energy argued that specifying a set value of “2022” for the Construction Quarter is contradictory and inconsistent with the application of that term within the Instrument, for similar reasons suggested by Hydro Tasmania in its submission. Aurora Energy also suggested that the Regulator did not have the discretion to update the value in late June/early July and that it must be updated on an annual basis upon the release of AEMO’s SOO which is usually in or around September. Aurora Energy also stated that if the Regulator decided to specify a set value for Construction Quarter, it should be set to “2026”.

Hydro Tasmania also noted in its submission that Regulator should indicate whether the Construction Quarter referred to paragraph (a) or (b) in the Definition of Construction Quarter in the Instrument.

However, noting that the Construction Quarter is an input to the calculation of the Tasmanian Cap Value, the Regulator considers it is more appropriate that Construction Quarter be added to an existing table, Table 6, in Schedule 1, which relates to the calculation of the Tasmanian Cap Value.

Noting the points raised above by both Hydro Tasmania and Aurora Energy, the Regulator has decided that the Construction Quarter in Table 6 of Schedule 1 will be shown as “2026” under the new Instrument and will identify which paragraph in the definition of Construction Quarter the year has been based on.

Schedule 1 of the new Instrument is reproduced as Attachment 4.3 to this Final Report.

Construction Quarter and the Wholesale Pricing Model

Following the end of consultation on the Draft Instrument, Draft Statement and Draft Guideline, Hydro Tasmania made the Regulator aware that, if the Construction Quarter is set to a value higher than “2025”, the Model will not calculate

prices correctly. Hydro Tasmania proposed that the error be corrected and that, in accordance with the Guideline, an audit be conducted of the Model. Hydro Tasmania also proposed that, at the same time, the audit should confirm that the Model continues to operate as intended following the incorporation of the proposed revisions to the Instrument. The Regulator agrees with Hydro Tasmania’s proposal and will have the Model audited.

Construction Quarter and the existing Instrument

Further to its Consultation Paper response, on 24 November 2016, Aurora Energy advised OTTER that, in its view, the Construction Quarter should be updated with immediate effect from its current value of “2022” to “2026”.

However, even if the Construction Quarter had been changed as soon as possible after the Regulator was made aware of this issue, it would result in, at best, only three additional data points in the Wholesale Electricity Price calculation reflecting the apparently lower price (ie the Construction Quarter will be set to “2026” upon commencement of the new Instrument on 1 January 2017 in any case).

Given that the new Instrument commences on 1 January 2017, making this change to the existing Instrument is unlikely to have a material impact on prices and, in the interests of maintaining a transparent investigation process, the Regulator has therefore decided that it will not update the Construction Quarter in the existing Instrument. The Construction Quarter will be updated when the new Instrument commences on 1 January 2017 and again when AEMO releases its next SOO, expected in July-August 2017.

Regulator’s decision on the Schedule 1 inputs review schedule

Noting the preceding discussion, the Regulator has decided on the input review schedule set out in Table 3.2.

Table 3.2 Regulator’s decision – Schedule 1 inputs review schedule

| Schedule 1 - Inputs set by Regulator | Review Frequency |
|---|-------------------------|
| Table 1 Off-Peak Cap Values | Annual |
| Table 2 Absolute Minimum Capacity Offer Volume | Annual |
| Table 3 Supplementary Offer Volumes, Headroom Buffers and Reserved Percentage | Annual |
| Table 4 Marginal Loss Factors | Annual |
| Table 5 New Committed Wind Generation | Annual* |
| Table 6 Calculation of Tasmanian Cap Values | |
| Costing Quarter | Annual |

| | |
|----------------------------|---------|
| Economic Life | Annual |
| Forecast Inflation Rate | Annual |
| Nominal Post Tax Debt Cost | Annual |
| Pre-Tax Real WACC | Annual |
| Real Annual Operating Cost | Annual |
| Real Total Capital Cost | Annual |
| Construction Quarter | Annual* |
| Table 7 Contract premiums | Annual |

* Data may be updated more frequently if AEMO publishes updated data (see Section 3.3.2 of this Final Report for further discussion on this issue).

The Regulator has decided to review all inputs with the exception of the forecast inflation rate at least annually on the basis of the schedule outlined in Table 3.2 of this Final Report.

The Regulator has decided it will consult publicly during the first Quarter of the 2017 calendar year on the Regulator’s proposed approach to updating the Schedule 1 values.

The Regulator has amended the date for Construction Quarter in Schedule 1 of the Instrument to “2026”, has added Construction Quarter to Table 6 in Schedule 1 and has identified which paragraph in the definition of Construction Quarter the date applies to.

The Regulator will require Hydro Tasmania to audit the Wholesale Pricing Model both specifically, in relation to the Construction Quarter and, generally, to ensure that the Model continues to operate as intended following the revisions to the Instrument.

The Regulator has decided not to update the Construction Quarter in the existing Instrument to “2026”.

3.1.11 Change in traffic light conditions in response to a supply disruption event

In relation to the Regulator’s Draft Report, Hydro Tasmania also suggested that, in the event of a supply disruption event, it should be able to set both energy and capacity traffic light conditions to red pending the Regulator’s decision as to an appropriate response to the supply disruption event.

The Regulator considers it prudent to allow Hydro Tasmania to change all traffic light conditions to red given the uncertainty that may surround a supply disruption event.

As part of Consultation on the Draft Instrument and Draft Statement, the Regulator subsequently proposed a number of changes to each of these documents to allow this to occur.

However, in its response to the Regulator’s Consultation Paper on the proposed changes to the Draft Instrument and Draft Statement, Hydro Tasmania noted that the wording in the Instrument did not match the wording in the Statement. Specifically, the Statement indicated that Hydro Tasmania would be permitted to set all traffic lights to red pending the outcome of the Regulator’s deliberations on the actions to take in response to the event. Conversely, the Instrument did not permit the traffic lights to be set to red until much later in the process when the Regulator had notified market participants that it proposed stepping in and fixing prices in response to the supply disruption.

The Regulator has, therefore, decided to amend the Instrument so that it aligns with the Statement which, as proposed, accurately reflects the Regulator’s intended approach.

The Regulator has also decided that traffic lights will continue to be set to red until the Regulator advises otherwise.

The Regulator has decided to amend Clauses 22.1 and 22.4 of the Instrument to enable Hydro Tasmania to change all traffic light conditions to red for all Quarters once Hydro Tasmania and Authorised Retailers have been notified that, in the Regulator’s opinion a supply disruption event has occurred.

The Regulator has also decided that traffic light conditions may remain red until the Regulator advises Hydro Tasmania and Authorised Retailers otherwise.

3.1.12 Miscellaneous amendments to the Instrument

During the course of its review the Regulator has identified that the following minor changes need to be made to the Instrument:

- replace references to ‘oil-fired peaking plant’ with references to ‘gas-fired peaking plant’; and
- amend Clause 2.3 to include “dates” in the list of values that the Regulator may change.

The Regulator has decided to make minor changes to the Instrument to remove redundant references, update out-of-date references and replace references to ‘oil-fired peaking plant’ with references to ‘gas-fired peaking plant’.

The Regulator has also decided to amend Clause 2.4 of the Instrument to include “dates” in the list of values that the Regulator may change.

3.2 Wholesale Contract Guideline

3.2.1 Insider trading

During the Basslink outage (for further details see Section 3.3.1 of this Final Report) Hydro Tasmania advised the Regulator that it was possible that circumstances may arise where Hydro Tasmania would consider itself in possession of “inside information” leading to the instigation of a trading halt for both regulated and unregulated contracts.

Initially the Regulator was of the opinion that, although Hydro Tasmania may have information that could potentially be deemed to be “inside information”, this would not impact on regulated prices as these are derived from inputs outside of Hydro Tasmania’s control.

Hydro Tasmania subsequently advised that the insider trading provisions in the *Corporations Act 2001* (Cwlth) apply more broadly than solely possessing information which may impact prices. Hydro Tasmania considers that the information has the potential to influence whether or not retailers enter into regulated contracts and, therefore, have a “material effect on the price or value”.

The Regulator initially raised concerns that it may be difficult to establish a process to investigate Hydro Tasmania’s compliance with its obligations under the wholesale regulatory framework in the event that Hydro Tasmania does not offer the Regulated weekly offer contract prices on the basis of being in possession of market sensitive information.

At the July 2016 workshop, Hydro Tasmania proposed that the Instrument and/or the Guideline be amended to account for the possibility of Hydro Tasmania instigating a trading halt.

Aurora Energy stated at the workshop that it would like to receive notification of a trading halt. However, the Regulator understands that, due to the nature of a trading halt and the associated legislation governing insider trading, Hydro Tasmania would be unable to inform market participants that a trading halt was in place due to insider trading.

Aurora Energy also stated that a make-up provision was needed particularly if a trading halt was called on the last trading day of a Quarter as retailers may miss their last chance to purchase contracts for the following Quarter.

Clause 3.5 of Version 1.0 of the Guideline (December 2013) provides that, where an “Exceptional circumstances event” occurs which results in Hydro Tasmania being unable to offer Regulated weekly offer contract prices (eg due to an information technology problem), Hydro Tasmania may defer the making of the regulated weekly pricing offers by one working day. Clause 3.5 also requires Hydro Tasmania to provide notice of the delay on its website and to advise the Regulator of the reasons for the occurrence of the event and the steps it has taken to remove or reduce the risk of the event recurring.

In its Draft Report, the Regulator proposed amending the Guideline to add a similar clause to allow for the possibility of Hydro Tasmania instigating a trading halt when it considers it is in possession of inside information. The Regulator also proposed requiring Hydro Tasmania to offer make-up volumes in the event that Hydro Tasmania instigates a trading halt and does not offer Regulated weekly offer contract prices.

In their respective submissions on the Regulator’s Draft Report, both Hydro Tasmania and Aurora Energy supported the Regulator’s proposals.

The Regulator has, therefore, decided to amend the Guideline to allow for the possibility of Hydro Tasmania instigating a trading halt and not offering Regulated weekly offer contract prices and to require Hydro Tasmania to offer make-up volumes in these circumstances.

The Regulator has decided to amend the Guideline to add a clause similar to Clause 3.5 in Version 1 of the Guideline (December 2013) (Exceptions to the standard regulated weekly offer contract process) to allow for the possibility of Hydro Tasmania instigating a trading halt and not offering Regulated weekly offer contract prices.

The Regulator has also decided to require Hydro Tasmania to offer make-up volumes in the event that Hydro Tasmania instigates a trading halt and does not offer Regulated weekly offer contract prices.

3.2.1.1 Availability and transparency of data

The Regulated weekly offer contract prices for each regulated contract type are calculated using an Excel model. A copy of the Excel model is available on Hydro's Tasmania's website as it was the Government's intention that any interested party would be able to use the model to calculate the Regulated weekly offer contract prices and, therefore, verify Hydro Tasmania's calculations.

However, in reality, it is unlikely that anyone could run the model without contacting either Hydro Tasmania or the Regulator to determine the applicable source data. Even where the data is publically available (for example, from AEMO) how the data is provided and what data is provided has changed since the model was created.

Additionally, forecast current Hydro Yield is calculated by Hydro Tasmania and only available for one week (as part of the regulated weekly price offer) ie the forecast current Hydro Yield is not publicly available once Hydro Tasmania publishes the following week's regulated prices.

Participants at the 15 July 2016 workshop were generally supportive of increased transparency although Hydro Tasmania expressed concern with regards to publishing commercially sensitive data. In its response to consultation on the proposed changes to the Draft Guideline, Hydro Tasmania expressed a preference to publish historical data from 1 January 2017 when the new instrument commences rather than from 1 January 2014 when wholesale regulation commenced.

However, the Regulator considers that, in the interests of providing greater transparency, it is highly desirable to make additional information relating to the operation of the Instrument and the wholesale regulatory framework publicly available. The Regulator will therefore require Hydro Tasmania to publish historical data from 1 January 2014. Hydro Tasmania subsequently advised the Regulator that it would publish the required historical data effective from 1 January 2017.

Also in the interests of providing greater transparency, the Regulator will also amend the Guideline to commit the Regulator to publishing, on its website, details of any changes made to source data.

The Regulator has decided to amend the Guideline to require Hydro Tasmania to:

- publish current and past prices and ‘Forecast current yield’ values from 1 January 2014;
- maintain and publish a database of past prices and ‘Forecast current yield’ values on its website; and
- to clearly indicate, on its website, the date that updates have been made to the Wholesale Pricing Model.

The Regulator has also decided to amend the Guideline to commit the Regulator to publishing details of any changes made to source data on its website.

3.2.2 Regulated weekly offers

The Instrument outlines the weekly volume offer process and sets out the formulae for determining the traffic light conditions and calculating the corresponding volume limits. The regulated weekly offer process is set out in more detail in Section 3 of the Guideline.

In response to the Issues Paper, Hydro Tasmania considered that the Regulator should allow Hydro Tasmania not to offer contracts under some well-defined situations and circumstances in preference to setting the price to \$300/MWh (particularly in the event of a supply disruption).

The Regulator has decided to make changes to the Guideline and Statement in respect to Hydro Tasmania not making the required regulated weekly offers during a trading halt or in the event of a supply disruption as outlined in Sections 3.2.1 and 3.3.1 respectively of this Final Report.

However, based on Hydro Tasmania’s submission on the Regulator’s Draft Report and previous discussions with other market participants, the Regulator has decided that no changes are required to be made to the regulated weekly offer process itself.

The Regulator has decided not to make any changes to the regulated weekly offer process.

3.2.3 Miscellaneous changes

The Regulator has also made a number of minor drafting changes to the Guideline to correct typographical and grammatical errors, and to clarify the intent of the relevant clauses in the Guideline.

3.3 Statement of Regulatory Intent

3.3.1 Supply Disruption Event

Under section 43M(2) of the Act, the Regulator may fix Regulated weekly offer contract prices if the Regulator is of the opinion that a “supply disruption event” has occurred.

The Act defines a supply disruption event as:

...an event (other than a drought) that, in the opinion of the Regulator, is likely to cause a prolonged interruption to a substantial quantity of the electricity that would otherwise be supplied under normal circumstances by Hydro Tasmania.

The definition of a supply disruption event excludes a drought in Tasmania as this is considered to be a normal commercial risk for Hydro Tasmania that is reflected in the methodology for pricing the regulated wholesale contracts.

In addition, the Regulator's Statement of Regulatory Intent (April 2014) provided that, when a supply disruption event has occurred, the Regulator will move to fix Regulated weekly offer contract prices at \$300/MWh to effectively suspend the regulated contract market until a further assessment of the situation is made.

On 22 December 2015, Basslink Pty Ltd announced that a fault had been identified in the Basslink electricity interconnector, resulting in a disruption to Basslink's electricity transmission service. Initially, Basslink advised that the outage would be for 60 days. This was subsequently extended on a number of occasions and the outage was not rectified until June 2016.

In response to the initial notification from Basslink, the Regulator undertook consultation with market participants during January 2016. During this consultation, market participants raised concerns about the increased uncertainty and the potential adverse impacts upon the efficient operation of the market of proceeding to set prices at \$300/MWh in the event that a supply disruption event was declared due to the Basslink outage.

Following further consultation with market participants, and having considered further delays in rectifying the Basslink outage, the Regulator resolved on 7 March 2016 that the Basslink outage met the relevant requirements of the Act and, therefore, constituted a supply disruption event. However, based on the feedback from market participants, the Regulator advised that it did not intend instructing Hydro Tasmania to set all Regulated weekly offer contract prices at \$300/MWh. In addition, the Regulator notified market participants that it had made no decision, at that stage, to exercise the legislative option to fix Regulated weekly offer contract prices using a different methodology to that which applied at that time.

The Regulator did, however, leave open the option of changing the above position if it was presented with sufficient arguments from market participants on the need to do so. No subsequent submissions were made by market participants and the Basslink outage was resolved in June 2016. The Basslink outage did not, therefore, have any impact on regulated electricity wholesale contracting arrangements.

In its submission to the Issues Paper, Hydro Tasmania considered that the Statement of Regulatory Intent should include a definition of "prolonged" and "substantial". The Regulator was, however, concerned about both the difficulty of clearly defining these terms and the potential loss of flexibility in the event that these terms are defined and, as a result, the Regulator's ability to respond to an, as yet, unknown scenario was restricted.

Hydro Tasmania also proposed linking the Basslink capacity input values in the Instrument to Basslink's actual capacity during an outage and rather than maintaining the existing values.

Hydro Tasmania proposed this approach because:

- there is no change to the methodology so pricing is still consistent with the Instrument;
- it is an understandable and predictable therefore provides certainty for participants;
- it maintains the integrity of the wholesale contract framework; and
- there is no change to the coding in the Model and therefore no potential for unforeseen consequences.

At the 15 July 2016 workshop, Hydro Tasmania reiterated its proposal that, in response to a Basslink outage, the model should be modified so that Quarters affected by the outage should reflect actual Basslink capacity values. Hydro Tasmania also proposed that when a supply disruption event occurs the regulated weekly process continues to operate for a given period (eg one month) while the Regulator consults on the most appropriate response to the supply disruption event.

Aurora Energy and Hydro Tasmania both agreed that the appropriate response to a supply disruption event depends on the nature of the event with Aurora Energy stating that, under some pre-defined events, the Regulator should be able to make a decision in a relatively short time period such as one week.

Noting the experience gained from the December 2015 – June 2016 Basslink outage and, in particular, the feedback provided by market participants during consultation in relation to the outage, the Regulator has concerns about the potential impact on the market if a supply disruption occurs in the future and the Regulator, as currently required under the Statement, instructs Hydro Tasmania to set all Regulated weekly offer contract prices at \$300/MWh. In its Draft Report, the Regulator proposed removing this requirement. In their respective submissions on the Regulator's Draft Report, both Hydro Tasmania and Aurora Energy supported the Regulator's proposals in this regard.

In the event of a future supply disruption event, the Regulator considered that there was merit in adopting a consultative process with market participants, prior to deciding on the appropriate course of action to take. The Regulator therefore proposed in its Draft Report that it would consult with market participants and introduce specific criteria to assist it in deciding on the appropriate course of action to take in response to a supply disruption event. In their respective submissions on the Regulator's Draft Report, both Hydro Tasmania and Aurora Energy supported the Regulator's proposals.

In its Draft Report, the Regulator also noted that it considered that there was merit in Hydro Tasmania's suggestion to link Basslink flows to the actual Basslink capacity values. However, the Regulator also sees value in this suggestion from a general

point of view rather than in the limited context of future Basslink outages and has therefore decided that it will consider the suggested approach when it consults publicly during the first Quarter of the 2017 calendar year, on its intended approach to updating the input values in Schedule 1 (as outlined in section 3.1.10 of this Final Report).

The Regulator has decided:

- (a) to remove the current reference, in the Statement, to the Regulator instructing Hydro Tasmania to set all Regulated weekly offer contract prices at \$300/MWh; and
- (b) to add the following criteria to the Statement and assess the Regulator's response to the supply disruption event against these criteria to ensure that the response:
 - (i) is transparent and provides regulatory certainty;
 - (ii) has benefits to the current Wholesale Regulatory Framework which outweighs the costs of changing the Framework;
 - (iii) does not have a negative impact on the efficiency of the Tasmanian Wholesale Electricity derivatives market; and
- (c) if a supply disruption event occurs in the future, to adopt the following process:
 - (i) the current regulated weekly offer process will continue to operate unless advised otherwise;
 - (ii) the Regulator will contact all current market participants to seek their views as to the appropriate response to the event;
 - (iii) in its deliberations, the Regulator will apply the criteria noted in (b)(i) – (iii) inclusive above to assess the most appropriate course of action to take in response to the event.

3.3.2 Updating Inputs in the Instrument

The Regulator has made a number of consequential amendments to the Statement to reflect the decisions outlined in section 3.1.10 of this Final Report.

In addition, in their respective responses to the Regulator's Consultation Paper on the Draft Instrument, Draft Guideline and Draft Statement, Hydro Tasmania and Aurora Energy both questioned limiting the update of inputs based on AEMO data to an annual basis given that AEMO often publishes updated data on a more frequent basis.

The Regulator acknowledges that AEMO may publish updated data and has revised the text in the final Statement to provide for Schedule 1 inputs, based on AEMO data, to be updated in response to AEMO providing both initial and updated data.

The Regulator has decided to include a schedule in the Statement in relation to the review frequency for the inputs contained within Schedule 1 of the Instrument.

The Regulator has also decided to amend the schedule in the Statement to recognise that AEMO may publish updated data on a more frequent basis than annually.

3.3.3 Miscellaneous changes

The Regulator has also made a number of minor drafting changes to the Statement to correct typographical and grammatical errors and to clarify the intent of the relevant clauses in the document.

4 ATTACHMENTS

4.1 Summary of the Regulator's obligations under the wholesale contract regulatory framework

| Instrument | Obligation |
|--|--|
| <i>ELECTRICITY SUPPLY INDUSTRY ACT 1995</i> | |
| 6(2) | <p>In exercising its powers and functions under the Act, the Regulator's objectives include:</p> <ul style="list-style-type: none"> ▪ the promotion of efficiency and competition in the electricity supply industry; ▪ the establishment and maintenance of an efficient system of electricity generation, transmission, distribution and supply; ▪ the establishment and enforcement of proper standards of safety, security, reliability and quality in the electricity supply industry; and ▪ the protection of the interests of electricity consumers. |
| 43G (1) | <p>Section 43G requires the Regulator to make approvals in relation to:</p> <ul style="list-style-type: none"> ▪ the types of contracts that Hydro Tasmania must offer as regulated contract products; ▪ the standard form(s) – including terms and conditions – for each regulated contract type; ▪ the methodology for determining the prices for each regulated contract type; ▪ the forward period over which regulated contracts are to be offered; and ▪ the volume of regulated contracts that Hydro Tasmania must offer. <p>Section 43G also provides for the Regulator to revoke an existing approval, after undertaking a process outlined in supporting regulations, if the Regulator considers that the approval no longer reflects the principles outlined in section 43H (see below).</p> |
| 43G (3) | Contract types - approved types of contract must include a Load Following Swap Contract. |
| 43G (4)&(5) | The Regulator may revoke an approval under section 43G(1) if it is of the opinion that the approval has ceased to reflect any of the principles specified in section 43H. |
| 43G (7) | Approvals and revocations must be made by the Regulator in accordance with the Regulations. |

| | |
|--|--|
| 43G (8) | (a) The Regulator must provide a copy of any approval/revocation to Hydro Tasmania and each authorised retailer in the state. (b) The Regulator must publish any approval/revocation made on its website. |
| 43G (9) | Any approval made by the Regulator under the Act remains in force for a period that is to be determined in accordance with the Regulations. |
| 43H | Section 43H outlines a number of principles that must be taken into account by the Regulator in making a section 43G approval. These principles include that: <ul style="list-style-type: none"> ▪ authorised retailers should have a choice of different contract types to enter into with Hydro Tasmania; ▪ the types of contracts and standard form of those contracts should, where reasonably practicable, be of a type used in the NEM; and ▪ the methodology for determining the prices of Hydro Tasmania’s regulated contracts should reflect Victorian contract prices, adjusted to take into account the supply/demand balance in Tasmania. |
| <i>ELECTRICITY SUPPLY INDUSTRY (PRICING AND RELATED MATTERS) REGULATIONS 2013</i> The Pricing Regulations make provisions in relation to section 43G(1) approvals and section 43G(4) revocations of approvals. | |
| REG - 21 | The Regulator must conduct a pricing investigation: <ul style="list-style-type: none"> ▪ before making/revoking an approval under section 43G of the Act; or ▪ at a reasonable time before the expiry of the Ministerial Approval. |
| REG – 22(1) | Before conducting the Investigation, the Regulator must give notice to: <ul style="list-style-type: none"> ▪ the Minister; ▪ Hydro Tasmania; ▪ any relevant authorised retailers; and ▪ the public – by publishing notice in a daily newspaper or the Regulator’s website (as the Regulator considers appropriate). |

| | |
|----------------------------|--|
| REG – 22(2) | <p>The Regulation 22(1) notice should specify:</p> <ul style="list-style-type: none"> ▪ the objective of the Investigation; ▪ the period within which submissions may be made; ▪ matters the Regulator would like submissions to address; and ▪ the date by which the Regulator is to complete the Investigation and provide a final report. |
| REG – 22(3) | <p>Before conducting the Investigation, the Regulation 22(1) notice must be available on the Regulator’s website (and remain there for at least 6 months).</p> |
| REG – 22(4)&(5) | <p>The notice to the Minister may be amended in writing, to the Minister, Hydro Tasmania and relevant authorised retailers, if necessary.</p> <p>The Regulator may not amend the objective of the Investigation.</p> |
| REG – 23 | <p>The Final Report of the Investigation is to set out:</p> <ul style="list-style-type: none"> ▪ a summary of the information obtained during the Investigation; and ▪ the decision as to whether to make and revoke an approval (and on what terms). |
| REG – 24 | <p>After completing the Final Report of the Investigation, the Regulator can make or revoke an approval under section 43G of the Act. The new approval remains in force until it is revoked.</p> |
| REG – 49 | <p>Regulation outlines requirements of the Regulator when conducting pricing investigations. This regulation details the form any submissions must take, as well as who the regulator may consult with, and how. In conducting an investigation, the Regulator is not bound by rules of evidence and may inform itself in any way it considers appropriate.</p> |
| REG – 51 & 52 | <p>Regulations 51 and 52 detail those persons that may be required to give evidence or provide documentation. These regulations also prescribe how the Regulator may use such information once it has been received.</p> |
| REG – 53 (1) | <p>At an appropriate time during the Investigation, the Regulator is to prepare a draft report.</p> |
| REG – 53 (2) | <p>The Draft Report must be provided (together with the relevant notice) to the Minister, Hydro Tasmania and each authorised retailer. The Draft Report (and the relevant notice) must be available on the Regulator’s website, for at least 6 months.</p> |
| REG – 53 (3) | <p>The relevant notice to accompany the Draft Report is to be a notice inviting submissions in respect of the Report before the date specified in the notice.</p> |

| | |
|---|--|
| REG – 54 (1) | <p>The Regulator must prepare a final report.</p> <p>The Final Report must be given to the Minister, Hydro Tasmania and each authorised retailer.</p> <p>Notice of the Report must be published in newspapers, or in such other manner as the Regulator considers appropriate (for example, its website).</p> |
| REG – 54 (3) | The Final Report is to be consistent with the Act and Regulations (specifically Regulation 23). |
| REG – 54 (6) | The Final Report must be available on the Regulator’s website. |
| WHOLESALE CONTRACT REGULATORY INSTRUMENT | |
| Part 1 - 1 | The existing Instrument ceases to have effect at the end of December 2018. ⁷ |
| 2.2 | The Regulator may determine replacement data sources if a source (as used in the Instrument) ceases to be published. |
| 2.3 | <p>The Regulator has discretion as to whether a new parameter (eg amount, rate, percentage or period) should be determined.</p> <p>The Regulator must notify Hydro of any new parameter and publish any new item on its website.</p> <p>The Regulator may determine different values to those specified in Schedule 1 of the Instrument (this is dependent on the definition of those items in Clause 28 of the Instrument).</p> |

⁷ Following the making of amending regulations in November 2016, the existing Instrument ceases to be in force after 31 December 2016.

4.2 Schedule 1 of the existing Instrument

Table 1 Off-Peak Cap Values

| Defined term | Value |
|------------------------------|------------|
| Off-Peak Reference Cap Value | \$0.33/MWh |
| Off-Peak Cap Value | \$0.33/MWh |

Table 2 Absolute Minimum Capacity Offer Volume

| Quarter | Absolute Minimum Capacity Offer Volume (MW) |
|------------------------------|---|
| Quarters ending 31 March | 4.3 |
| Quarters ending 30 June | 6.9 |
| Quarters ending 30 September | 6.6 |
| Quarters ending 31 December | 5.1 |

Table 3 Supplementary Offer Volumes, Headroom Buffers and Reserved Percentage

| Defined term | Value |
|---|---------|
| Supplementary Offer Capacity Volume | 20 MW |
| Supplementary Offer Energy Volume | 44 GWh |
| Reduced Supplementary Offer Capacity Volume | 10 MW |
| Reduced Supplementary Offer Energy Volume | 15 GWh |
| Capacity Headroom Buffer | 130 MW |
| Energy Headroom Buffer | 200 GWh |
| Reserved Percentage | 90% |

Table 4 Marginal Loss Factors

| Defined term | Value |
|-------------------------------------|--------|
| Maximum Export Marginal Loss Factor | 0.88 |
| Maximum Import Marginal Loss Factor | 1.064 |
| Off-Peak Marginal Loss Factor | 1.002 |
| Peak Marginal Los Factor | 0.94 |
| Average Basslink Flow Export | 500 MW |
| Average Basslink Flow Import | 462 MW |

Table 5 New Committed Wind Generation⁸

| Quarter | New Committed Wind Generation (GWh) |
|------------------------------|-------------------------------------|
| Quarters ending 31 March | 107 |
| Quarters ending 30 June | 130 |
| Quarters ending 30 September | 161 |
| Quarters ending 31 December | 134 |

Table 6 Calculation of Tasmanian Cap Value

| Defined term | Value |
|----------------------------|---------------------------------------|
| Costing Quarter | Quarter ending 31 December 2012 |
| Economic Life | 30 |
| Forecast Inflation Rate | 2.7% |
| Nominal Post Tax Debt Cost | 5.55% p.a. |
| Pre-Tax Real WACC | 8.0 % p.a. |
| Real Annual Operating Cost | \$14.1/kW (\$as at Costing Quarter) |
| Real Total Capital Cost | \$1 016/kW (\$ as at Costing Quarter) |

Table 7 Contract Premiums

| Defined term | Value |
|---------------------------|-------------|
| Off-Peak Contract Premium | \$3.4/MWh |
| Peak Contract Premium | \$15.60/MWh |

⁸ On 5 October 2016 Hydro Tasmania sought the Regulator's determination of updated New Committed Wind Generation values. This request was made as a consequence of the Musselroe Wind Farm having been commissioned for more than three years ie in the Instrument, wind farm generation is treated as New Committed Wind Generation for three years from the farm's commissioning date.

On 19 October 2016, the Regulator determined that, for the purposes of clause 9.3 of the Instrument and in accordance with the requirements set out in clause 28.1 of the Instrument, the New Committed Wind Generation values for each Quarter should be changed to zero. The Regulator made this determination as, in the most recent Statement of Opportunities published by AEMO, there is no new Tasmanian wind generating capacity that is classified as "committed". The Musselroe Wind Farm's generation for the last 12 Quarters has also been added to Historical Wind Generation.

These changes applied for the calculation of the regulated weekly wholesale contract pricing offers on 25 October 2016 and future pricing offers until the Regulator advises otherwise.

4.3 Schedule 1 of the new Instrument

Table 1 Off-Peak Cap Values

| Defined term | Value |
|------------------------------|------------|
| Off-Peak Reference Cap Value | \$0.33/MWh |
| Off-Peak Cap Value | \$0.33/MWh |

Table 2 Absolute Minimum Capacity Offer Volume

| Quarter | Absolute Minimum Capacity Offer Volume (MW) |
|------------------------------|---|
| Quarters ending 31 March | 4.3 |
| Quarters ending 30 June | 6.9 |
| Quarters ending 30 September | 6.6 |
| Quarters ending 31 December | 5.1 |

Table 3 Supplementary Offer Volumes, Headroom Buffers and Reserved Percentage

| Defined term | Value |
|---|---------|
| Supplementary Offer Capacity Volume | 20 MW |
| Supplementary Offer Energy Volume | 44 GWh |
| Reduced Supplementary Offer Capacity Volume | 10 MW |
| Reduced Supplementary Offer Energy Volume | 15 GWh |
| Capacity Headroom Buffer | 130 MW |
| Energy Headroom Buffer | 200 GWh |
| Reserved Percentage | 90% |

Table 4 Marginal Loss Factors

| Defined term | Value |
|-------------------------------------|--------|
| Maximum Export Marginal Loss Factor | 0.88 |
| Maximum Import Marginal Loss Factor | 1.064 |
| Off-Peak Marginal Loss Factor | 1.002 |
| Peak Marginal Loss Factor | 0.94 |
| Average Basslink Flow Export | 500 MW |
| Average Basslink Flow Import | 462 MW |

Table 5 New Committed Wind Generation

| Quarter | New Committed Wind Generation (GWh) |
|------------------------------|-------------------------------------|
| Quarters ending 31 March | 0 |
| Quarters ending 30 June | 0 |
| Quarters ending 30 September | 0 |
| Quarters ending 31 December | 0 |

Table 6 Calculation of Tasmanian Cap Value

| Defined term | Value |
|----------------------------|---------------------------------------|
| Costing Quarter | Quarter ending 31 December 2012 |
| Economic Life | 30 |
| Forecast Inflation Rate | 2.7% |
| Nominal Post Tax Debt Cost | 5.55% p.a. |
| Pre-Tax Real WACC | 8.0 % p.a. |
| Real Annual Operating Cost | \$14.1/kW (\$as at Costing Quarter) |
| Real Total Capital Cost | \$1 016/kW (\$ as at Costing Quarter) |
| Construction Quarter | 2026 ⁹ |

Table 7 Contract Premiums

| Defined term | Value |
|---------------------------|-------------|
| Off-Peak Contract Premium | \$3.4/MWh |
| Peak Contract Premium | \$15.60/MWh |

⁹ Date is based on the application of paragraph (b) of the definition of **Construction Quarter** in Clause 28.1 of the Instrument.