Retailer Reliability Obligation

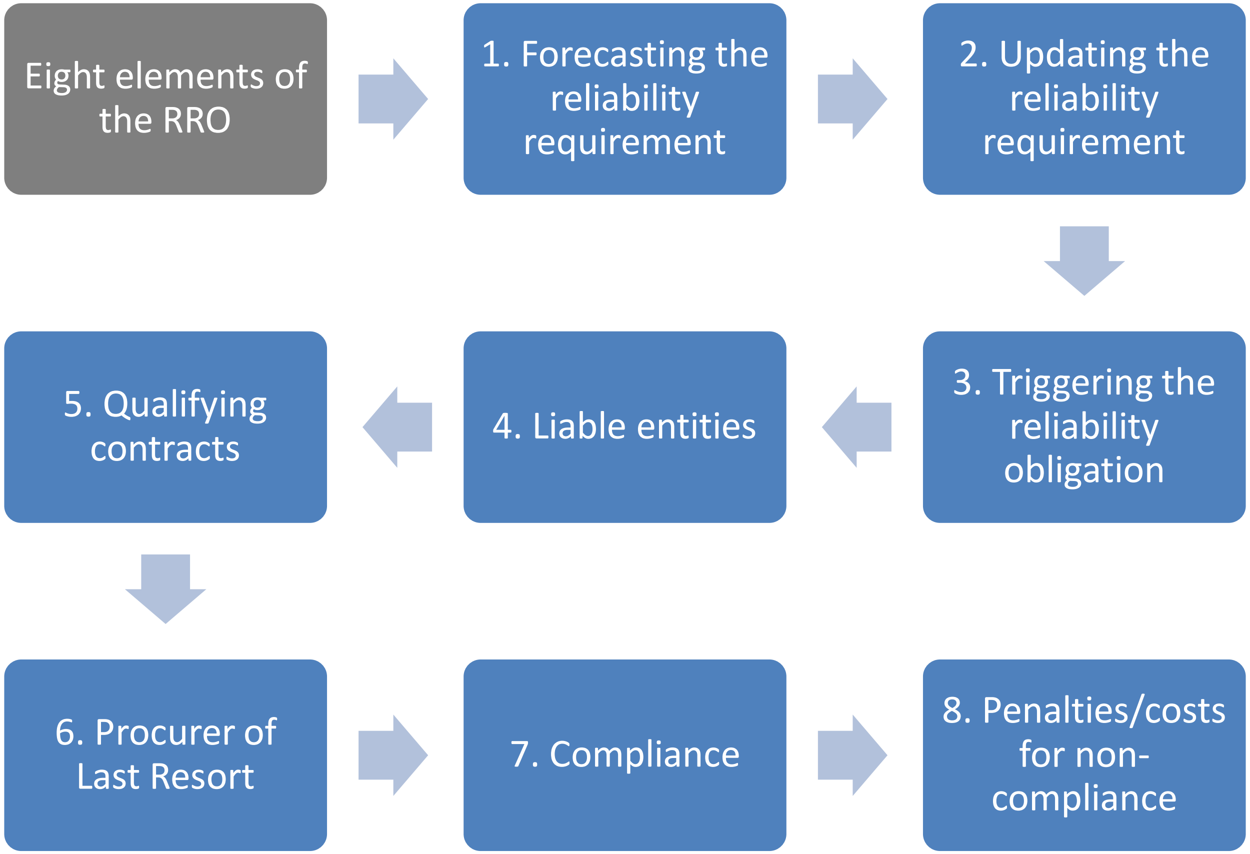
- NEG Final Detailed Design document published August 2018
- RRO draft legislation was agreed to by COAG Energy Council December 2018
- Additional papers for consultation were published with submissions due in December 2018
- These additional papers included: material reliability gap definition and communication; Compliance/PoLR Cost Recovery; Firmness principles for qualifying contracts
- The draft Rules were published on 8 March 2019
- Submissions on the draft Rules closes on 5 April 2019

Retailer Reliability Obligation

- **August: ESOO released**
- 39 months before T: AEMO must make a T-3 Reliability Instrument Request
- 37 months before T: AER issues T-3 Reliability Instrument (after consultation)
- MLO and Book Build operate between T-3 and T-1
- 18 months after T-3 – Opt-in cut off day
- 15 months before T: if gap persists in ESOO AEMO must make a T-1 reliability request
- 13 months before T: AER issues T-1 reliability instrument (after consultation)
- 12 months before T (T-1) : Contract position day
- 10 months before T: Contract Reporting Day
- August: ESOO released
- Gap period (T): New Entrant Contract Position Day (Set in T-1 instrument)
- No earlier than 10 business days from T: New Entrant Report Day (set in T-1 instrument)
- Compliance assessment (if 1-in-2 year peak demand forecast happens)

Retailer Reliability Obligation | Recap

Eight key elements outlined in the NEG Final Detailed Design Document:



RRO- Instrument

ESOO published

- This process applies if the ESOO Reliability Forecast (August) indicates there is a forecast reliability gap.
- Stakeholder consultation (including AER involvement) will have taken place during development of the forecast.

Prepare request

- AEMO will assess whether the forecast gap is material (breaches the reliability standard).
- If material, AEMO will prepare a reliability instrument request, in line with the form, manner and content prescribed by the Rules. Available preparation time will depend on the timing of the T-3 / T-1 cut-off day relative to the publication of the Reliability Forecast.

Submit request

- AEMO must only request a T-3/T-1 reliability instrument request at least 3 months before the identified T-3 and T-1 cut-off day.
- AEMO's request will be published on its website within 5 business days of submission to the AER.

Assess request

- From the date AEMO submits its request, the AER will have a maximum period of 2 months to consider a T-3 / T-1 instrument request, and reach a decision.
- This will include a period of stakeholder consultation on AEMO's request.
- The AER's assessment process will be set out in a published Guideline.

Publish decision

- The AER will publish its decision and the reliability instrument (if applicable) on its website within the 2 month assessment period (subject to corrections process).
- The instrument will take effect from the date it is published on the AER's website.
- The timelines above provide the market with at least 1 month's notice prior to the T-3/T-1 cut-off day, <u>unless</u> correction of a request extends the AER assessment period.

RRO- Instrument

The ESB is seeking stakeholder feedback on one specific question in relation to the process for the T-3 reliability instrument:

- Should the period of notice of closure of a generator be extended (for a period somewhere between 3 and 4 years)?

RRO – Opt-in

Establish opt-in register

- After a T-3 reliability instrument has been issued, the AER will establish an opt-in register to provide a definitive record of entities that have opted-in.
- A seperate register is required for each reliability gap .

Opt-in

- There are 2 types of opt-in customers: large opt-in customers and prescribed opt-in customers
- Opt-in parties must apply to the AER and be granted opt-in approval in accordance with the AER Opt-in Guideline

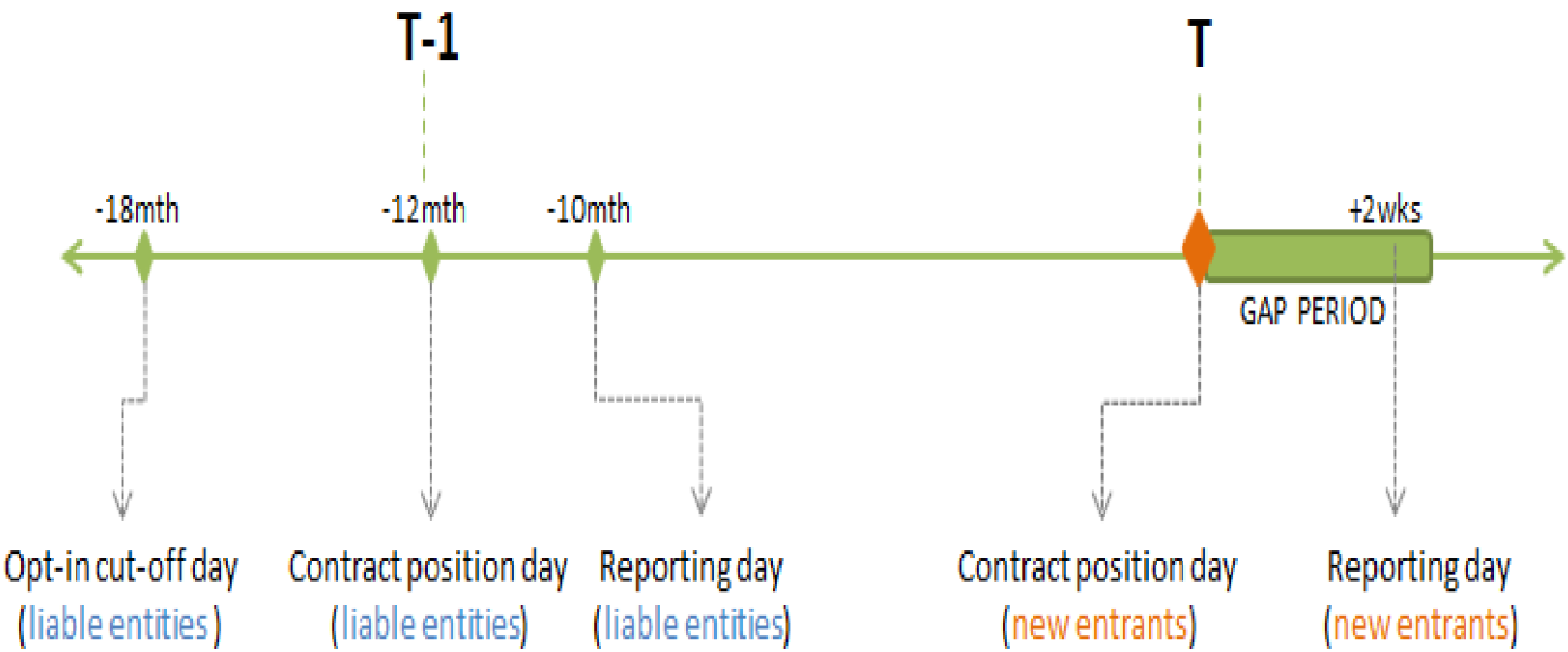
Changes to opt-in status

- Eligible entities will be able to make changes to their opt-in status, up to the opt-in cut-off day (for example, transfer thier obligation to another party, or opt-out).

Opt-in cut-off day

- The draft Rules provide an opt-in cut-off day by which entities must finalise their opt-in status. This aims to provide retailers with sufficient notice of customers deciding to opt-in, so that they can adjust their contract position accordingly.
- The opt-in cut-off day is 18 months from T-3

RRO – New Entrants



RRO – Liable Entities

The ESB has asked several specific question regarding liable entities:

- Is the large opt-in customer threshold appropriate?
- Are the proposed thresholds for Prescribed Opt-In customers (30 MW and 5 MW) the right thresholds?
- Is 100 MWh the correct threshold for when the obligation will apply to new entrants?

RRO – Qualifying Contracts

- A qualifying contract is:
  - Directly related to the purchase or sale, or price for the purchase or sale of electricity
  - Entered into to manage exposure to the volatility of the spot price
- Qualifying contracts must be ‘firmed’ in determining net contract position
- Firmness principles include:
  - Price terms of the contract which reduces exposure to volatility
  - Variability and profile of volume settled
  - Likelihood of providing cover
- AER will develop a firmness methodology guideline
  - Default firmness methodology for standard contract
  - Process and principles to determine methodology for bespoke contracts

RRO – Qualifying Contracts

Demand Response is dealt with in two ways under the RRO

1. Demand response as a qualifying contract:
   – Must be registered in AEMO's Demand Side Participation Information Portal
   – If activated during the gap period is added back to the liable entities actual demand
2. Demand response during the gap period:
   – Is not registered in the Portal and therefore is not a qualifying contract
   – Used during the gap period to reduce the demand of the liable entity and the demand by which compliance is assessed against

RRO – Qualifying Contracts

The draft Rules also provide for the grandfathering of some existing contracts:

- Large customers whose contracts were entered into prior to 10 August 2018 will be qualifying contracts with a firmness of 1
- The firmness factor will apply until the later of:
  - The original term of the contract (no extensions)
  - 1 July 2023

RRO – Firmness Methodology

- The ESB is seeking feedback in particular regarding:
  - the approach to the bespoke firmness methodology
  - whether a different approach should be used – ie a panel of approved auditors

RRO – Market Liquidity Obligation

Requirement	Details as per draft Rules
Product Type	• Base load and peak load futures (monthly or quarterly) • Cap futures (quarterly) • AER can approve other products • The combination of approved products is at the discretion of the obligated party
Size of bids and offers	Bids and offers must be posted so as to allow 1 MW lot trades

Bid/offer spreads	• Base load and peak load futures:
	    • NSW, VIC and QLD: 3 %
	    • SA: 5 %
	• Cap contracts:
	    • 10 %
	• Regardless of the above, the bid-offer spread does not have to be less than $1 per MW

Requirements to place bids/offers	• Must be available during a trading session • Trading session is a thirty minute session • There are 2 trading sessions per day: 11:00 – 11:30 and 3:30 – 4:00 • Total of 35 sessions in February thru November, 25 sessions in January and December
Net sales limits	• Daily limit 5 MWs per session in NSW, QLD, and VIC and 2 MWs per session in SA • Quarterly limit of 1.25% of MLO group's aggregate generation capacity • Total limit: 10% of MLO group's aggregate generation capacity

RRO – MLO

Currently, the draft rules provide that an obligated party for the MLO is an MLO Group

- For the purpose of determining a MLO group the following test is proposed:
  - A parcel of traced capacity of the generator is held by an entity that is party of a MLO group and
  - The MLO group as a whole holds aggregate scheduled capacity above 15 % in the region

RRO – MLO

The consultation paper asks several questions related specifically to the MLO:

- MLO trigger
- Deeming MLO obligated parties for the first 2 years
- Determining registered capacity
- The concepts of dispatch control and the control and influence test

RRO – Voluntary Book Build

The draft rules provide:

- AEMO will develop the Book Build Procedures and will run a book build at T-3
- AEMO may run a book build at T-2
- The book build is voluntary for participants

RRO – Net Contract Position

1. Determining the number of MW under qualifying contracts that REDUCE the liable entity's exposure to the spot price in the gap period, adjusted for firmness.

2. Subtracting the number of MW under qualifying contracts that INCREASE the liable entity's exposure to the spot price in the gap period, adjusted for firmness.

3. Adjusting for the effects of contracts that are not qualifying contracts, but which increase the liable entity's exposure to the volatility of the spot price.

RRO – Net Contract Position

Permitted adjustments

- **Mass market or small customers –** where a liable entity takes on or loses small customers it may apply to adjust its net contract position, but only where taking on or losing the customers causes the liable entity's load to increase by more than 15 per cent.
- **Existing large customers under 30 MW –** where a liable entity takes on or loses existing large customers below 30 MW in size, it may apply to adjust its net contract position, but only where taking on or losing the customers causes the liable entity's load to increase or decrease by more than 1 per cent.
- **New large customers –** where a liable entity takes on a customer over 30 MW that did not exist at the time of the contract position day, it may apply to adjust its net contract position, but only where taking on the new customer causes the liable entity's load to increase by more than 1 per cent.
- **Retailer of Last Resort (ROLR) customers -** where a liable entity takes on ROLR customers it may apply to adjust its net contract position.

RRO – Net Contract Position

The ESB is seeking feedback on some specific questions related to permitted adjustments:

- Other categories of adjustments
- Whether the thresholds for adjustments are appropriate
- Is the net contract position the appropriate measure for determining adjustments

RRO - Compliance

1. Calculate Liable Entity Actual Demand

Components of demand	Description
Revised settlement demand	Based on the final revised settlements data as reported by AEMO (i.e., after final revisions at 30 weeks).
Less adjustment for opt-in customers	A liable entity's demand will be reduced for any registered opt-in customers and this demand will be re-assigned to the opt-in customer.
Plus adjustment for demand response [under qualifying contracts]	Plus the liable entity's actual measured demand response for registered NMIs.
Plus adjustment for transmission losses	Adjusted to account for transmission losses (i.e., grossed up to the node).

RRO - Compliance

2. Calculate liable entity liable share of actual demand (scaled)

A liable entity's share of the one-in-two year peak demand forecast for a trading interval is calculated as follows:

$$LS = \left(\frac{\mathrm{LL}}{\mathrm{HAPD}}\right) \text{ x OITPDF}$$

where:

LS = the liable entity's liable share (in MW);

LL = the liable entity's liable load (in MW);

HAPD = the highest adjusted peak demand occurring in a 'compliance TI' in the relevant reliability gap period (in MW);

OITPDF = the one-in-two year peak demand forecast (in MW),

except that if OITPDF/HAPD > one, then it is taken to be equal to one.

The ESB is seeking views on the use of a single scaling factor for the entire gap period

RRO – Procurer of Last Resort

The POLR cost recovery mechanism only operates in the event that:

- Actual regional demand exceeds the one-in-two year peak demand forecast
- One or more liable entities is non-compliant with its obligations under the RRO

RRO – Procurer of Last Resort

The POLR cost recovery mechanism involves three parts:

- Determining POLR cost pool
  - Fixed POLR costs: portion of fixed RERT costs that may be reallocated determined by the ratio of the total reliability gap over the total RERT procured, capped at 1
  - Variable POLR costs: determined per trading interval as the ratio of MW size of gap to the total RERT dispatched, capped at 1
- Apportioning POLR costs
  - Fixed POLR costs: the liable entity’s maximum MW shortfall in any POLR TI over the period
  - Variable POLR costs: the sum of the liable entity’s MW shortfall in each POLR TI in which variable costs are incurred
  - This is capped at $100 million per liable entity per reliability gap
- Distribution of funds collected
  - Compliance outcomes are finalised after metering data becomes available (after 30 weeks)
  - AEMO must reallocate any POLR costs recovered to market customer based on each market customer’s share of energy consumption during the gap period

RRO – POLR worked example

- T-1 reliability instrument issued indicating there is a gap of 50 MW occurring between 3pm and 7pm on weekdays in December
- AEMO procures 50 MW of RERT contracts which have no availability payment and an activation payment of $300/MWh
- AEMO also procures an additional 50 MW of RERT contracts with a $1 million availability payment and a $250/MWh activation payment
- During the gap period, demand exceeds the one-in two year demand forecast by 10% for one hour
- AEMO dispatches 60MW of RERT contracts during this hour
- AEMO dispatches the contract with the lower activation payment first

Fixed costs:

Lesser of $\left(\frac{Total\ RRO\ reliability\ gap\ in\ MW}{Total\ RERT\ procured\ in\ MW}\right)$, 1

$= \left(\frac{50\ \mathrm{MW}}{100\ \mathrm{MW}}\right)$,1 = 0.5

= 0.5 x $1,000,000

= $500,000

Variable costs:

Lesser of $\left(\frac{Reliability\ gap\ in\ the\ TI\ in\ MW}{RERT\ dispatched\ in\ the\ TI\ in\ MW}\right)$, 1

= $\left(\frac{50\ MW}{60MW}\right)$, 1 = 0.83

=0.83 x $15,500

= $12,917

So total pool of costs:

= $500,000 + $12,917

= $512,917

This amount would be shared proportionately among non-compliant entities

RRO - Process

- The ESB will be hosting workshops to discuss in more detail:
  - Reliability Forecast
  - Demand Calculation
  - AER Guidelines and process
  - Obligated Parties under the MLO
  - Question period
- These workshops will be held:
  - Melbourne, Monday, 25 March 2019 1:00 – 4:30 pm
  - Sydney, Wednesday, 27 March 2019 9:00 am – 12:30 pm
- RSVP to the workshops at: energycouncil@environment.gov.au
- Submissions on the draft Rules and consultation paper closes 5 April 2019. Submissions can be sent to info@esb.org.au