

aurecon

Integrated System Plan

Stakeholder Workshop

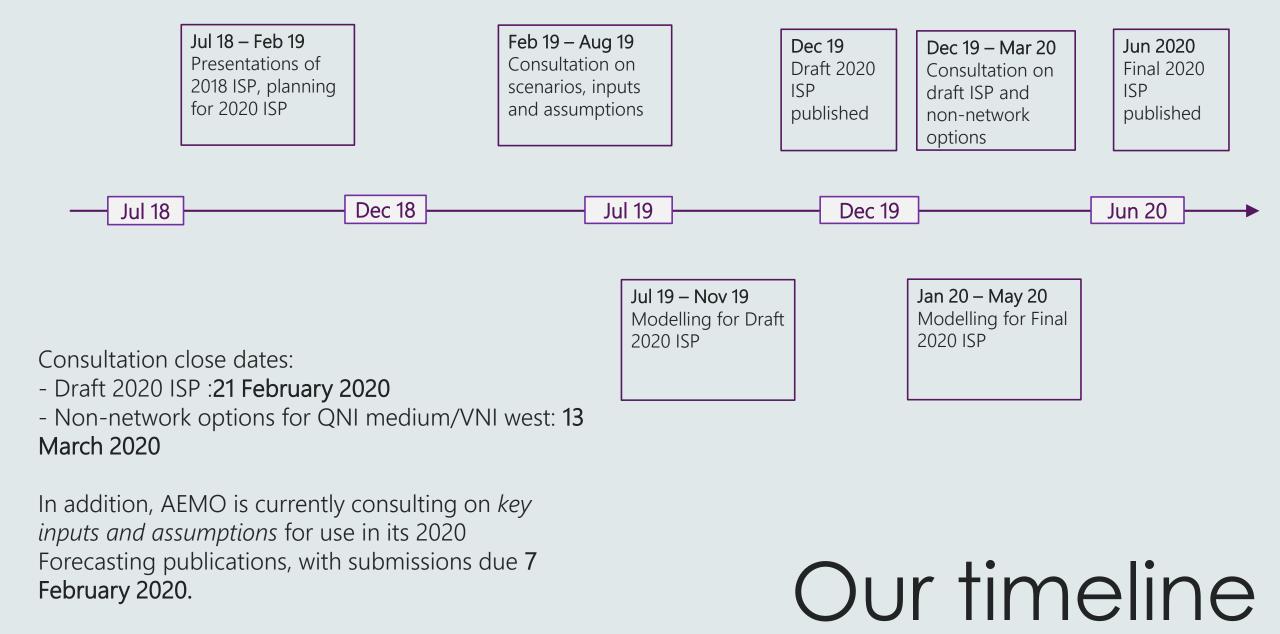
I would like to acknowledge that this meeting is being held on Aboriginal land.

I pay my respects to their Elders past, present and future.

Acknowledgement of Country

Natasha Sinclair, Principal Analyst / ISP Stakeholder Engagement







- Provide an opportunity to ask questions and improve your understanding of the ISP process and outcomes
- Involve participants in the ISP process by requesting feedback and input to prioritisation of workscope for the Final 2020 ISP

Objectives of today



Welcome

Alex Wonhas, Chief System Design and Engineering Officer



- In case of emergency...
- Ground rules
- Our set up
- Photos
- Social Media
- Media

Today



- Reviewing the roadmap
- Understanding the details
- What else...





Let's get to know each other



At your table...

• Introduce yourself - name, company

then...

• What are you most excited about for the future?



Introducing...the ISP



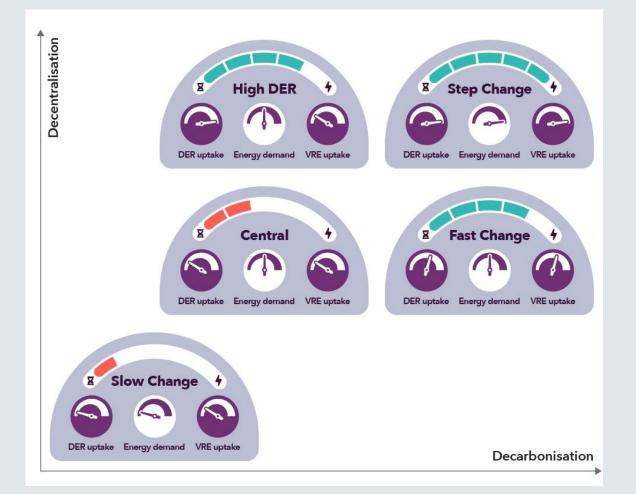


- The ISP process | Nicola Falcon
- A dynamic roadmap | Craig Price

Lets hear from AEMO



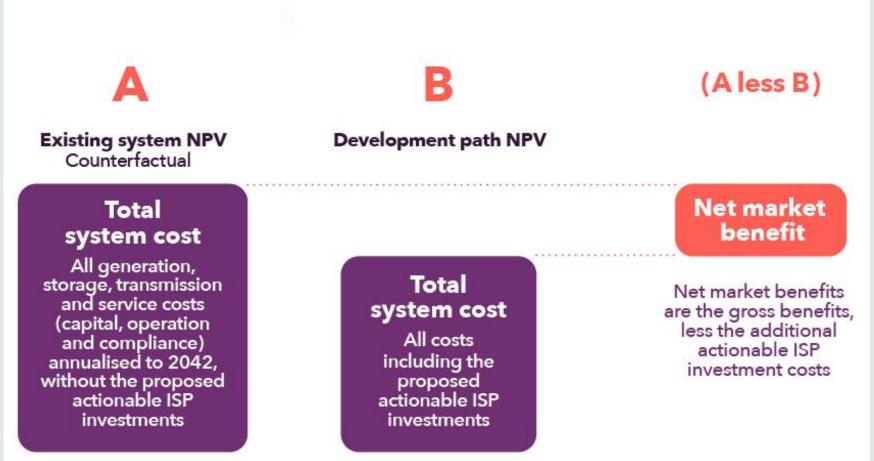
The ISP needs to be sufficiently flexible to accommodate multiple possible future worlds:



- Sensitivities:
- No QRET
- Delayed Snowy 2.0
- Early closure of brown coal
- Battery of the Nation
- Early central west NSW generation development
- Limited storage on mainland
- Lower battery costs



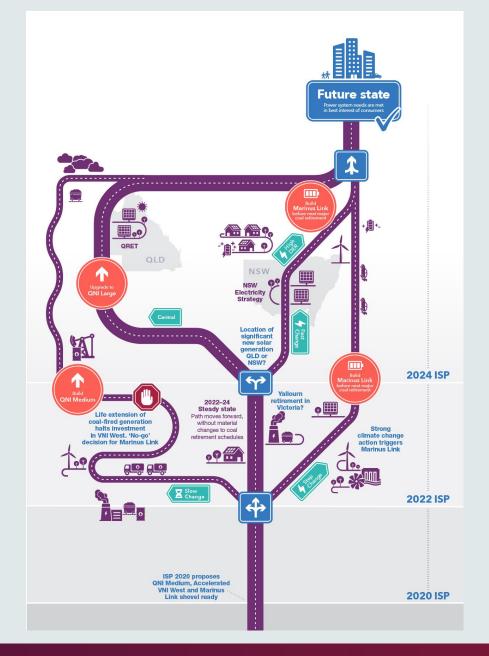
..with the recommended actionable ISP being one that delivers positive net market benefits while retaining flexibility





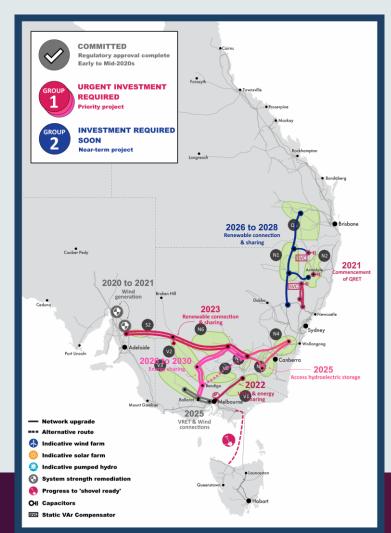
...resulting in a dynamic roadmap that deals with uncertainty and takes a whole-of-system view

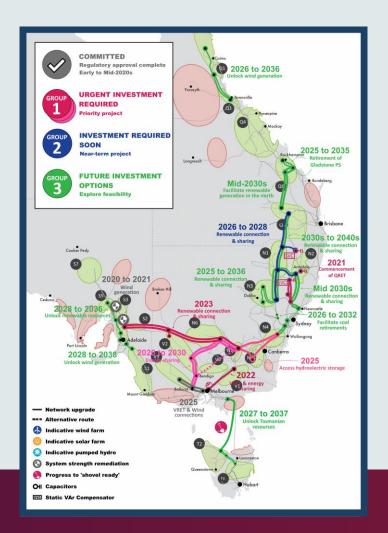






Core to this plan is integration of renewable generation as coal fired generation retires





- Further validation of the plan through detailed hourly simulations
- Resilience to climate change we will be including a chapter on this in the Final ISP
- Central West NSW REZ other sensitivities with generation development in this zone
- Choice of route selection for VNI West
- In step change scenario, are we confident the system is operable in 2040?
- Cost increases on interconnectors or generators (capex generally)
- Projections of Marginal Loss Factors (MLFs)

Prioritisation for final ISP



At your table...

...you'll find a copy of the roadmap

- In your group, read over the roadmap and discuss your questions
 - Make sure you capture any questions or comments you might have on the

sheet

The roadmap



Understanding the details





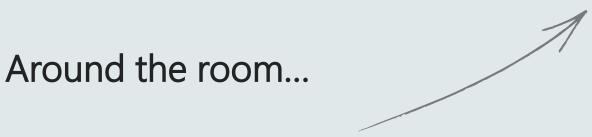
- Elijah Pack | Planning: Network and Non-network Options
- Andrew Turley | Decision Making and Least Worst Regrets
- Lars Narushevich | REZs and Renewable Integration
- Dane Winch | Energy Outlook: Forecasts, DER, Storage

Our panel today









We have 5 stations

Planning: Network and Non-Network Options Decision Making and Least Worst Regrets REZs and Renewable Integration Energy Outlook: Forecasts, DER, Storage Prioritisation

- You have 20 minutes at each station
- You have an opportunity to ask your questions to our AEMO reps
- If you can't ask your questions, capture them on post-its

Meet the modellers



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Prioritisation for final ISP



What we heard



What else...





Back at your table...

Think about your discussion and questions from this morning.

- What have we answered?
- What still needs to be addressed?
- What haven't we discussed that AEMO could look at over the next 3 months

What else...



To help us going forward...

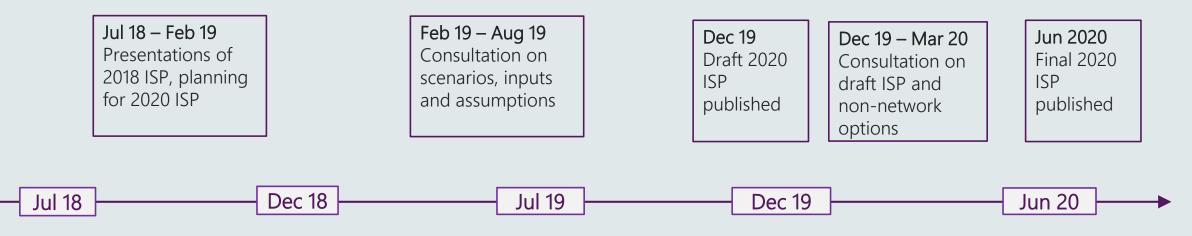
We'd like to get your thoughts on todays session

• Head here on your tablet or mobile device and leave us some feedback

Feedback bit.ly/38KoPb5







Consultation close dates:

Draft 2020 ISP :21 February 2020
Non-network options for QNI medium/VNI west: 13 March 2020

In addition, AEMO is currently consulting on *key inputs and assumptions* for use in its 2020 Forecasting publications, with submissions due **7 February 2020**.

Feedback - bit.ly/38KoPb5



Jul 19 – Nov 19 Modelling for Draft 2020 ISP **Jan 20 – May 20** Modelling for Final 2020 ISP



Next steps





