Customer Council AER2015 Working Group Meeting Notes

**Date:** 9.00am, Thursday, 28 August 2014

**Location:** Christie Conference Centre, 320 Adelaide Street, Brisbane

**Chair:** Malcolm Tadgell, Director, Advisory, KPMG

**Invitees:**
- *Ergon Energy:* Brendon Crown – Manager Regulatory Determination & Pricing, Peter Kane – Network Forecasting Manager, Sara Collins – Community Strategy Manager

**Guest:** Hugh Grant – Consumer Challenge Panel

**Apologies:** Carly Allen – QCOSS, Michael Fullelove – LGAQ, Ian Johnson – Queensland Farmers Federation

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**MEETING ITEMS**

**Presentation of Expenditure**

Prior to moving into the agenda, discussions were held, largely with the new participants of the groups, on the role of the Customer Council AER2015 Working Group and the matters discussed to date. This led to expectation being expressed that Ergon Energy should release its expenditure forecasts by category as soon as possible.

It was tabled that the consultation to date has been on a range of input issues, rather than the proposal as a whole, allowing participants to put forward matters they felt needed to be given specific consideration or to be addressed in the proposal. The forum has also supported the advocacy groups in building their capacity to engage, which will assist them when reviewing the final proposal.

To date only high level trends in the capital and operational forecast have been provided. It was agreed that releasing detail on the forecasts earlier would have supported the engagement process, however, late changes to security of supply network planning criteria and reliability standards has hampered this.
How the Cost of Capital is Determined

The majority of meetings covered the Weighted Average Cost of Capital (WACC) – the most significant building block in arriving at the Annual Revenue Requirement.

It was highlighted that the AER would use a ‘nominal vanilla’ WACC for all of the Distribution Network Service Providers (DNSP) commensurate with the efficient financing costs of a benchmark entity with a similar degree of risk to an Australian DNSP. This discussion also covered the nature of the rate of return, the Rules’ requirements, along with the AER’s proposed approach to estimating rate of return set out in its Guidelines; to estimating return on equity; to estimating return on debt; and to imputation credits.

It was highlighted that the AER’s guidelines for the WACC are not binding on the AER or Ergon Energy, but that either party is obliged to explain any departures from the guidelines that it chooses to make. There was a strong message from several participants that they were expecting Ergon Energy to follow the AER’s guidelines for setting the WACC without change.

Ergon Energy’s approach was then discussed. The impact of financing costs on network charges in the current five-year period was provided for context.

To determine appropriate WACC parameters, Ergon Energy enlisted expert advice from SFG Consulting; with Jemena and SAPN. Ergon Energy currently plans to use this advice in its proposal. This would see a recommendation to the AER that they depart from guidelines in a number of areas. Changes are being proposed with respect of Gamma and Cost of Equity. Ergon Energy is also currently working closely with Queensland Treasury Corporation on cost-of-debt issues (there could be some proposed departures). Departures are also being considered around credit rating and the averaging period.

Significant effort was made to highlight that what Ergon Energy puts into the Regulatory Proposal for the WACC will only be a placeholder as the AER’s final approach, and the averaging period that is used to prospectively determine rates, will dictate the final outcome. The reason that the AER keeps the final averaging period confidential was also explained (i.e. to avoid the potential to impact finance market outcomes to our customers’ detriment).

There was significant discussion of how Ergon Energy compared to an efficient, privately owned business from a cost-of-capital perspective. Some participants expressed the view that Ergon Energy’s return on equity was comparatively high. Several stakeholders requested that Ergon Energy provide additional analysis on this issue. While it was agreed to provide this information, it is not clear how these are relevant matters to consider under the Rules in assessing Ergon Energy’s proposed costs of capital as part of its regulatory proposal.

There was also discussion on the Regulated Asset Base (RAB). Ergon Energy’s pricing outcomes are likely to be flat or to fall due to: considerable restraint on costs during the period (which has reduced the RAB); the planned restraint on costs through to the next period; and an anticipated reduction in financing costs.
**Action:** Ergon Energy to update the group on its expected opening RAB for the next period and the impacts on prices.

There was a discussion about whether the WACC could be used to set a price path that was targeted at ensuring the longer-term competitiveness of the network over alternatives supply solutions.

**Action:** Provide the link to the public submission made by Jemena on cost of equity, based on the SFG Consulting Report shared by Ergon Energy. See below.


**Action:** Ergon Energy to prepare additional information on:

- the different external experts used to help inform Ergon’s WACC approach
- expected return on equity for a range of businesses in Ergon Energy’s network area (i.e. other than DNSPs) in the context of Ergon Energy’s WACC proposal
- Ergon Energy’s profitability and the contribution of the Community Service Obligation payment
- the cost of capital consideration being made by OFGEM and regulators in other jurisdictions and the relevance of that to Ergon Energy’s WACC proposal.

**Working Group Report to Ergon Energy**

At the previous meetings, the Working Group agreed that it would be useful to provide a report to Ergon Energy about its deliberations over the past five months. It was envisaged that the report would be authored by the Working Group, rather than Ergon Energy and be provided to Ergon Energy well ahead of it submitting its regulatory proposal. As the independent facilitator of the Working Group, the Chair prepared an initial draft of the report for members’ consideration and editing. The aim was to explore if there were agreed positions or recommendations that could be given to Ergon Energy, where the Working Group could find consensus.

At the meeting there remained support for the concept of putting matters forward to Ergon Energy in advance of the proposal, noting that this in no way impacted the advocacy group’s ability to raise matters in the submission process following the October submission of Ergon Energy’s Regulatory Proposal. However, reservations were expressed around signing off on a single document or shared statements of endorsement/concern due to the diversity in the group. A path forward was discussed.
Action: Members to provide Malcolm Tadgell feedback on the draft Working Group report, so that this document can be converted into an Ergon Energy document that summaries what was presented at the meetings and the key take outs heard from the group. This will be distributed to the Working Group for comment before the Regulatory Proposal is submitted to ensure it represents an accurate record of the meetings held.

Action: Hugh Grant offered to talk to the current members to collate a report, which would reflect the diverse opinions of each of the members of the group, and provide this to Ergon Energy to enable it to submit it to the AER with its regulatory proposal.

Demand forecasts and their link to expenditure forecasts

As the main driver of network augmentation investment, peak demand on Ergon Energy’s network and forecasting processes were discussed in detail. It was noted that the demand on Ergon Energy’s network peaks during the summer months, lasts for only short periods, and fluctuates from year to year.

Since forecasting for the current five-year regulatory control period, Ergon Energy’s forecasting techniques have been further developed and now incorporate the use of econometric and demographic metrics to ensure our forecasts are robust and reproducible.

Ergon Energy is expecting an average annual system peak demand growth of 1.3% per annum in the next regulatory control period. This medium forecast is down (equivalent to last year’s low forecast). This is the system-wide forecast only; it is important to note investment is driven at the local level only if a capacity constraint is identified. Ergon Energy’s planners use the low growth scenario when testing response to potential constraint.

Concerns around the forecast of demand were raised in the meeting. Ergon Energy acknowledges Queensland load growth without LNG growth is flat overall, however, at the system level some LNG associated load is anticipated.

There was also a brief discussion around asset utilisation. The group was provided a high level briefing on the changes to the security criteria (in the context of a number of load profiles) and was given reassurance that Ergon Energy was responding to demand using both traditional network solutions (frequently modular to avoid upfront investment) and alternative non-network solutions.

There was support for developing the regional growth draft map of the state to support stakeholders understanding. This map originated following a request in the previous meeting. There is the opportunity for the map to incorporate capacity constraint or plans for network investment/demand response.

In addition to discussing the load profile, it was highlighted that there was an increase in the total energy distributed in 2013-14, largely due to additional coal mining load. This was despite a decline in the electricity being used from the network by the average residential customer overall (at the same time though customer numbers are increasing).
For Ergon Energy, the combined customer number growth rate is projected to be at 1.7%, consistent with previous growth expectations.

**Action:** Provide Working Group with AEMO National Forecasting Report June 2014, noted in the meeting. Ergon Energy’s forecast are consistent with these forecasts. See link and refer to Figure 3


**Action:** Provide further detail on local demand / areas with network risk. Below is a link to the Distribution Annual Planning Report (DAPR) to show how we provide this information to stakeholders. The latest DAPR for 2014-19 will be published after 30 September. We are also currently working on a portal to allow engagement on areas of network risk.


**Action:** Investigate how we can incorporate stakeholder input into our annual summer forecasting processes (aligned with regional planning reviews). This will be ongoing.

**Action:** Ensure that the Regulatory Proposal incorporates an explanation of the net opex / capex trade off associated with alternative non-network solutions.

**Possible next agenda items**

The expectations from Consumer Challenge Panel were provided to the group, encouraging discussion on matters that they may want further information on in order to table concerns in advance or to respond following the submission of the proposal.

There was strong interest expressed in the category level capital and operational expenditure profiles; Ergon Energy’s demand management plan; in asset renewal; and ongoing interest in asset utilisation.

**Action:** Contact Working Group members to clarify expectations and arrange, as soon as possible, a meeting to discuss topic requested, including our draft capital and operational expenditure profiles.

**Action:** Arrange a separate meeting with the LGAQ on street lighting.

In April 2014 Ergon Energy established a new Customer Council working group, as an extension of our standing Customer Council (our peak body consultative forum, which brings together representatives from nine peak organisations across regional Queensland, established in 2011). The purpose of the smaller subgroup was to support the capacity of our key customer representative peak bodies to better understand and contribute to Ergon Energy’s developing expenditure proposal for the 2015 to 2020 regulatory control period.
Presentation to AER Working Committee WACC

Malcolm Tadgell
28 August
## Breakdown of revenue recovered – property owner and network owner (indicative 2010-15 period)

<table>
<thead>
<tr>
<th>Investment Property Owner</th>
<th>Network Owner</th>
<th>% of revenue collected in current period</th>
</tr>
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<tbody>
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<td>45%</td>
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Recall our previous meeting on price impacts?

We mentioned two meetings ago that including the expected reductions in financing costs, customers could experience around 10% price reductions in DUOS charges in 2015-16 if Totex is held at real 2012-13 levels.

### Real Network Charges % Change in 2015-16

- **No spend reduction**: Assumes 9.72% WACC with a price reduction of 12.75%
- **Actual spend reduction**: -2.12%
- **Actual spend and finance cost reductions**: Assumes 8.46% WACC with a price reduction of -9.75%
• Queensland Government’s announcement as part of the State Budget in June 2014
• Ergon Energy would be one of several government-owned corporations to be part of the Strongest and Smartest Choice campaign to reduce the State’s $80 billion debt.
• State Government has proposed a program of asset transactions and indicated that it would seek private sector investment in Ergon Energy’s network business, while retaining 100% ownership of the ordinary shares.
• The Government has however, committed not to divest itself of any Government businesses until it has secured a mandate from the Queensland people at the next election which is due to occur next year (likely March 2015).
• We are pursuing market based financing arrangements.
## WACC parameters – which one is the Guideline

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<th>WACC Parameters</th>
<th>Estimate as at:</th>
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| Nominal return on equity (%) unrounded | 8.05% | 8.05% |
| Nominal return on equity (%) rounded  | 8.10% | 8.10% |
| Nominal return on debt (%)            | 5.88% | 7.25% |
| Nominal vanilla WACC (%)              | 6.77% | 7.59% |
## WACC – indicative potential outcomes

### WACC Parameters

Based on AER Interpolation Method
as per Issues paper dated 7 April 2014

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<th>Parameter</th>
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Year 1 - Regulatory Year 2015-16

Comply with AER Guideline
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Seek independent expert advice and evidence on possible WACC outcomes

Determine a return on equity consistent with private investor expectations

Is the evidence resulting in a RoE consistent with NER?

Yes

Is the evidence resulting in a RoE consistent with AER foundation model?

Yes

Is the evidence resulting in a RoE consistent with AER parameters in foundation model?

Yes

Proposal to include evidence noting consistency with AER Guideline

No

Proposal to include evidence noting necessary departure from AER Guideline

No

Yes

No
WACC – issues for Ergon

- Co-engaged with Jemena and SAPN expert advice from SFG on appropriate WACC parameters
  - Likely to recommend to the AER that they depart from guideline in respect of Gamma and Cost of Equity
- Working closely with QTC on cost of debt issues:
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    - RoD estimation
    - Trailing Average Approach
    - Ten year transition period
    - Benchmark debt tenor of ten years
    - Annual updates on the return on debt
  - Apply a weighted trailing average based on changes in the Post Tax Revenue Model (PTRM) debt balances (i.e. 60% of the Regulated Asset Base).
  - Possible departure from the guideline on credit rating
  - Possible departure from proposing all 4 years of averaging period in proposal
Expectations from CCP which we will try and answer on proposal

• Addressing profitability
• Addressing what is currently being considered by OFGEM and regulation in other jurisdictions
• What are comparable expected levels of return for customers in our network area?
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Brendon Crown
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Demand forecasts and their link to expenditure forecasts

Peter Kane
28 August 2014
Demand and the link to the expenditure profile

Peak demand is one of the main driver of our network augmentation investment – part of the capex pie.

The demand on Ergon Energy’s network peaks during the summer months, lasting for only short intervals and fluctuating from year to year.

We are using traditional network solutions and alternative non-network solutions to respond to this demand.

Note: Expenditure estimates and forecasts above are indicative and subject to change.
Network forecasting

The Ergon Energy Network Forecasting team produce a number of standard forecasts for operational and regulatory purposes:

**Demand Forecasting**
- System
- Transmission-Distribution Connection Points (TNSP interface)
- Spatial (Zone Substation)

**Customer Numbers**

**Customer Initiated Capital Work (CICW) Forecasting**

**Energy Forecasting**
Since forecasting for the current five-year regulatory control period, our forecasting techniques have been further developed and now incorporate the use of econometric and demographic metrics to ensure our forecasts are robust and reproducible.

Method as recommended by AER and as provided by ACIL Allen
✓ Undergoes regular reviews internally and externally
✓ Well documented

Methodology has recently been taken up by AEMO for all NEM DNSPs
✓ Review by AER through Annual RIN and Benchmark RIN

Method
✓ Based on Multivariate equation of demand with Economic, technological (air-conditioning), demographic, meteorological demand management drivers.

Output
✓ Presented on following slides.
Last summer the coincident peak in demand across Ergon Energy’s main network was 2,441MW.

Thanks to record summer temperatures and the associated peak in residential air conditioner use, this was the system’s highest weekend peak experienced to date.

This substation-level peak occurred in the early evening; historically peaks have typically occurred mid-afternoon.
Overall we are forecasting peak demand to increase gradually in line with Queensland’s economic forecasts, with more rapid growth in specific areas.

From 2013/14 to 2023/2024 we are expecting an average annual system peak demand growth of 1.3% per annum.

Critical for our augmentation planning is the demand growth experienced at the regional level – both at the substation and downstream.

While overall we are expecting a low growth scenario, over the next five years 4% of our 371 zone substation will still experience sustained growth, both in general load and new connections.
Overall we are forecasting peak demand to increase gradually in line with Queensland’s economic forecasts, with more rapid growth in specific areas.

- >1.5% Significant Growth
- +/- 1.5% Steady Demand
- >-1.5% Reducing Demand
Demand forecasts – Growth and Risk

Growth

- Ergon Energy is taking a conservative approach to economic growth (GSP - Gross State Product)
- Consistent with Queensland Treasury forecast (Budget 2014) until post 2017 except for one period (2015-16)
  - 2015-16 LNG projects responsible for increase in balance of trade
  - Primary connections in off Ergon Energy Network supply resulting in EE using lower economic forecast in 2015-16 (Treasury’s 6% to EE 4% GSP)

Risk

- Conservative approach moves risk from customers to Ergon Energy
- Risk is better managed by Ergon Energy through best business practice
- Improved utilisation and flexible security measures
• There are several levels to the forecasting process
• The process involves reconciliation of the levels so that the same forecast is achieved by bottom up and top down methods
• Forecasting is the essential first step in the planning process
• Provides indication of when augmentation may be required by identifying load constraints.
• The Annual forecast process allows for adjustments to be made in the capital works programme. A classic feedback control system.
Managing risk

Network “peakiness” - (i.e. load at risk & for what period for worst day)

Gracemere Top 5 Avg. Summer Day Load Profile Forecast

N = Transformer 1 + Transformer 2

N-1 Transformer 1 or Transformer 2 Fail

Load at risk on worst days of year 2017/18
Managing risk

Network “peakiness” (i.e. load at risk & for what period – Hours per Year (Annual Load Duration))

2017/18: 180 Hrs
2012/13: 18 Hrs
Managing risk

Only an issue for summer – network and non-network solutions

Daily Maxima for MALC Malchi - 66/11kV Substation Total (2012/13)

- 8 Days 2012/13
- 30 Days 2017/18
- N-1
Energy used

The increase in the total energy distributed in 2013-14 (15,247GWh compared to 15,097GWh) was largely due to additional coal mining load.

In contrast to this and the peak experienced, during 2013-14 we continued to see a decline in the electricity being used from the network by the average residential customer overall.
For Ergon Energy, the combined customer number growth rate is projected to be at 1.7%, consistent with previous growth expectations.

This is in line with the five-year average, which will result in approximately 761,407 customers by June 2017 compared to the 701,215 at June 2012.

Consumption per customer will flatten but customer growth remains constant resulting in total consumption growth in out years.

Figure 2: Ergon Energy customers growth trend
Load Factor is defined as the average load divided by the peak load in a specified time period (source: Ergon Energy DAPR 2013)

Include East and West Zones and Mt Isa