SUBMISSION TO THE AUSTRALIAN ENERGY REGULATOR

QUEENSLAND DISTRIBUTION DETERMINATION FOR THE PERIOD 2015 - 2020

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1 INTRODUCTION

SPA Consulting Engineers (QLD) Pty Ltd are an electrical consulting engineering practice whose principal area of expertise is the design, documentation and contract administration of electrical distribution and roadway lighting for contestable subdivision developments. SPA carry out work primarily in regional Queensland (the area served by Ergon Energy).

SPA's position regarding the regulation of Ergon Energy is based on the following:

1. The cost of retail electricity in regional Queensland has almost doubled during the 5 year period 2010 – 2015 under the first AER distribution determination, despite inflation being less than 3% for the same period and the Reserve Bank cash rate being below 5 % with it being below 4 % for the majority of the time. The effect on the regional economy was substantial with manufacturers and primary producers unable to manage the rapidly rising prices and aged persons on fixed incomes suffering such that some, even in the humid tropics, could not afford to operate air conditioning to one room of their house during summer periods;
2. For the period 2010 - 2015 the mining industry in regional Queensland has to a significant extent buoyed the regional economy which has little underlying capacity due to poor years for agriculture and only very slight growth in tourism. The mining industry and associated minerals processing has also represented a significant cause of growth of demand. The mining industry declines in late 2013 and 2014 and expectations that there will be much less growth through 2015 – 2020 than previously anticipated will have a significant downward effect on the regional Queensland economy and on reduced load growth. A secondary effect is that residential construction previously stimulated by mining employment will also be much reduced. It then becomes critical that input costs to industry, commerce, institutions and householders be limited to prevent further increases in unemployment resulting in deep recession in the regional Queensland economy;
3. The AER "light handed approach" to the initial regulatory period 2010 – 2015 was such that Ergon Energy received a significantly greater approved cap than was appropriate. The area of WACC in particular was extremely generous, allocating a WACC of just under 10 %, when commercial interest rates paid by speculative investors during the same period averaged at less than 7%;
4. The regulatory framework that Ergon Energy operate within produces a propensity for over investment and demand is well below values projected by Ergon Energy planners with significant spare capacity now available. Ergon Energy's asset managers in particular nominate requirements which lead to the capital cost being higher than is necessary to achieve a reliable, safe network. Examples of this can be seen with the cost for the design and construction of zone substations as well as other requirements in the distribution network. There has, for much of the last 5 year period, been a view within Ergon Energy that they are a "no risk" business and this culture itself leads to greater costs than necessary;
5. Where customers are required to fund the cost of construction of network connection assets, the customer should have the ability to go to a market for the design, construction, testing, commissioning and energisation of the asset and should not be forced to use the DNSP to carry out such works; and
6. Where Ergon Energy receive gifted assets, or where developers provide contributions to the Ergon Energy cost of construction, the value of gifted assets and customer contributions should be identified separately in all regulatory reporting and must be permanently excluded from the regulatory asset base.

It is noted that from March 2014 that Ergon Energy senior executives have been working to effect cultural change within the business to reduce gold plating of standards and systems, however management from lower levels within the business appear not to share the same views and as a result the executive approach is not driving down within the business.

Ergon Energy senior executives have also been instrumental in establishing a developer reference group which SPA participate in, to try to reform processes and standards where it appears that they are excessive, and there has certainly been some improvements to some of the standards that will lead to reduced costs. Disappointingly, however since September 2014 the rate of advancement of reference group has almost ceased due to a change in the composition of the reference group's Ergon Energy members and we have received correspondence from Ergon Energy that indicated possible retrograde steps may occur shortly.

A critical element that greatly affects the operation of the distribution network that is taken out of the hands of Ergon Energy and which prevents them from more effectively managing the demand is the arrangement of tariffs. The lack of kVA tariffs, smart meters and tariffs that more effectively reflect the cost of using electrical energy at different times of the day produce a relatively poor load factor for Ergon Energy.

At recent public presentations, Ergon Energy senior executives advised a load factor of 0.4 for the Ergon network, which then requires a network with 2.5 times the capacity of the average load to supply peak loads. If tariff changes and further demand shifting incentives could be made that increase the load factor by shifting consumption to off peak times, then the present network would be able to satisfy a much larger total energy throughput without growth, and that would lead to a lesser requirement for capital. Whilst franchise tariffs are set by the Queensland Competition Authority and are independent of the AER, the AER can coordinate with Ergon Energy to increase incentives for demand side control such that Ergon Energy receive additional funding for initiatives to increase the load factor.

2 POWER IMBALANCE

In making this submission SPA raises the substantial power imbalance that exists between Ergon Energy and their customers / stakeholders with Ergon Energy having the more powerful position due to:

- Asymmetry of information;
- Asymmetry of resources (commercial resources, staffing resources, capital, etc);
- The disparity of power with respect to timing, i.e. where a customer wishes to challenge Ergon Energy, there is always a time pressure on the customer to capitulate as they carry the risks and costs associated with delays whilst not agreeing with Ergon Energy. Ergon Energy on the other hand have no, or insignificant commercial repercussions from delaying and as a result of this disparity challenges to Ergon Energy are most infrequent;
- Ergon Energy present a position of power, particularly through the historical position of DNSPs previously being "power authorities" with substantive power and close relationships with governments. As an example, local government authorities reference Ergon Energy to carry out roles which could be carried out commercially by others, due to historical connections with Ergon Energy's predecessors.

Given the very substantial power imbalance, we request that the AER gives additional weighting to this submission and those submissions from other public interest organisations.

3 COMMENTS AND RECOMMENDATIONS ON REGULATORY PERIOD 2015-2020

We offer the following comments and recommendation with respect to the AER's regulation of Ergon Energy for the 2015 – 2020 regulatory period.

3.1 WEIGHTED AVERAGE COST OF CAPITAL WACC

The WACC is a very significant component of the AER determination with respect to regulated revenue cap available to Ergon Energy. In setting the WACC for the 2010 – 2015 regulatory period the AER adopted an extremely generously approach to Ergon Energy, but much less so the regional Queenslanders and allocated a WACC just under 10%. It is understood that in part a reason for that was the difficulty in securing finance in the post GFC period.

We understand that Ergon Energy is forced to source funding from the Queensland Treasury which adds a margin onto all lending to Ergon Energy. If Ergon Energy were free to source capital on the wider market we believe that they could easily sell Electricity Bonds and would find a very well subscribed market with bonds offered at 5% return to the market.

Considering risks, commercial cost of funding, likely falling interest rates for the next 5 years, it would be expected that the AER would set WACC for the 2015 – 2020 period that is in the range of 5 – 6 %.

3.2 MAGNITUDE OF REGULATORY ASSET BASE

During presentations by Ergon Energy as part of their community engagement a participant queried an Ergon Energy financial manager as to when the regulatory asset base had last been formally and independently valued. The executive advised that the last actual valuation was in the late 1990s or early 2000s. Whilst it is possible that the executive did not have full data at the time of their response, it is critical that the asset base is accurately valued and that the value be established by a truly independent source. If there is no relatively recent valuation of the RAB with independence acceptable to the AER then we recommend that a valuation be ordered to verify the amount nominated by Ergon Energy.

3.3 RETURN ON CAPITAL

Ergon Energy in section 3.3 of their submission to the AER have estimated a rate of 8.02% for the return on capital for the 2015 – 2020 period. Whilst Ergon Energy may consider a rate of return of 8.02 % to be acceptable to them, it appears difficult to justify when the investment is a very low risk with a guaranteed return. Given the low risk profile and guaranteed return, we would expect that the rate would be no higher than 6 % be allocated.

3.4 REGULATORY APPROVED OPERATING EXPENSES (OPEX)

Labour costs within Ergon Energy are higher than those for comparable organisations in the wider commercial market.

Ergon Energy operates with an industrial arrangement which is very favourable towards its employees in terms of both wages and conditions. This is in part due to the relationship between the previous Queensland government (owner of Ergon Energy) and the main industrial body within Ergon Energy and partly due to the high demand for skilled trade labour that existed during the mining boom.

With the end of the mining boom midway through 2014 the labour market in Queensland relaxed significantly and it is relatively easy to obtain skilled labour at more competitive rates. The industrial agreements which Ergon Energy had agreed however did not permit wages to reflect the more open labour market, nor do they permit forced retrenchment of staff under downturn situations.

That Ergon Energy has an industrial arrangement which is very beneficial to its employees is not a reason for the AER to permit a greater opex than that which could be attained if the labour cost within Ergon Energy were reflective of the wider commercial market.

We recommend that the AER examines the Ergon Energy submission and only grants opex revenue on the basis of that which would occur in the wider commercial labour market.

4 COMMENTS AND RECOMMENDATIONS ON CONTESTABILITY

The issue of contestability represents an opportunity which is not being fully utilized and we examine the general issue as well as specific elements of contestability in this section of our submission.

4.1 CONTESTABILITY – MISSING AN OPPORTUNITY

A significant area lacking from the NEL and NER is that it they do not mandate requirements for DNSP to have contestability. The lack of formal rules on contestability results in DNSPs having an ad hoc approach. The lack of uniformity in contestability causes distortions such that customers in one DNSP areas are able to obtain commercially beneficial arrangements produced by contestability not available in other areas.

We recommend that the AER recommends to COAG that the NEL and NER be amended to require contestability for all customer initiated capital works.

4.2 CONTESTABILITY WITHIN THE ERGON ENERGY SYSTEM AT PRESENT

Ergon Energy have opened elements of customer initiated capital works on the Ergon Energy network to contestability as detailed below:

1. Design and construction of underground electrical reticulation and roadway lighting within the bounds of new residential subdivisions are contestable. This work does not include the testing and energising of the new assets.
2. Design and construction of roadway lighting on new and existing public roads where there are no live assets along the route where trenches are to be excavated. This work does not include the testing and energising of the new assets
3. The design and construction of customers initiated capital works for large customers (loads greater than 1.5 MVA). This work includes the testing, but not the energising of new assets.

There is a well-established substantial market for the elements 1 and 2 above with the ability to easily expand the extent of contestability.

There is a smaller market for the works associated with large customers due to the requirements nominated by Ergon Energy with respect to the provision of planning reports, in particular, but also with respect to access to details of the Ergon Energy protection system and network data.

4.3 OPPORTUNITIES FOR EXPANSION OF CONTESTABILITY FOR DESIGN AND CONSTRUCTION OF CUSTOMER INITIATED CAPITAL WORKS PROJECTS

There is significant opportunity for the expansion of contestability for the design and construction of customer initiated capital works. Presently the Ergon Energy imposed boundaries of contestability produces increased direct cost and increased delay times and prevent customers from having the ability to manage their own projects.

We recommend that contestability be expanded as detailed in the following sub-sections.

4.3.1 ENERGISING NEW LOW VOLTAGE LOADS CONNECTED TO NEW AND EXISTING PAD MOUNTED SUBSTATIONS UNDER THE CURRENT CONTESTABLE PROCESS

Presently Ergon Energy to not permit contestable contractors to energise works.

Where a new LV feeder connects to the low voltage switchgear of a new or existing substation, contestable contractors could readily make the connections and energise the feeders without having to engage with existing customers. This would reduce the costs and time taken to bring on line new projects.

Given that all contractors working on contestable projects are licensed electrical contractors and they have trained electricians, there is no reason why they could not carry out the testing and energising of low voltage feeders with pillars, street lights. The only delay in implementing the increase in contestability is small system changes within Ergon that would take no more than 4 – 6 weeks.

4.3.2 ENERGISING LOW VOLTAGE LOADS CONNECTED TO EXISTING LIVE ERGON ASSETS

Presently Ergon Energy to not permit contestable contractors to energise works.

Where new low voltage feeder cables need to connect onto existing live Ergon Energy assets, contestable contractors could readily coordinate with Ergon Energy via the following process to energise the new feeders:

- When advised by the contestable contractors that they are ready to make the connections, Ergon Energy issues a notice to affected customers of a scheduled shutdown to permit works to be carried out dead.
- The contestable contractors could then have access to the Ergon network and to make the necessary connections, after first carrying out testing and commissioning.
- Ergon Energy could, if deemed necessary have their own auditors review the testing, commissioning and energisation of the works, rather than carry out that works themselves. A preferable mechanism would be for contractors and consultants to “self certify” based on their capacity and accreditation.

4.3.3 DESIGN AND CONTRUCTION OF CUSTOMER INITATED CAPITAL WORKS ASSOCIATED WITH SMALL UNDERGROUND CUSTOMERS REQUIRING MORE CAPACITY THAN IS AVAILABLE FROM THE PRESENT NETWORK

In many instances a new or existing small underground customer requires more capacity from the network than is presently available. In the instance where the network is underground, this often results in a new substation being placed on the customer’s premises and in that instance there is no reason why the works could not be carried out via the contestable process.

It would take 3 to 6 months for Ergon Energy to set up the policy changes and documentation necessary to implement this change.

4.3.4 DESIGN AND CONSTRUCTION OF CUSTOMER INITIATED CAPITAL WORKS ASSOCIATED WITH LARGE CUSTOMERS

At present the process for the provision of supply to large customers (loads greater than 1.5 MVA) involves the following steps:

- Prepare a planning report;
- Prepare a concept design and estimate;

- Prepare a detailed design and documentation; and
- Construct and energise the works.

All phases of the process are open to contestability, however in practice having planning reports, augmentation of zone substation and adjustments to the protection system are difficult / impossible to carry out contestably at present. This is due to the Ergon Energy system information and protection system information not being available in a concise, fully detailed uniform manner and detailed standards on exactly what is acceptable to Ergon Energy by way of planning reports, etc also is not available.

We anticipate that ultimately it is Ergon Energy's intention to establish the provision of data and standards such that the major customer works can be readily carried out contestably, however at present the arrangements are difficult to navigate and prone to long delays, rejection, etc.

We recommend that Ergon Energy be requested to either provide planning reports and arrange the setting of protection themselves as a standard control service (until acceptable arrangements can be made) and to work to have standards and systems acceptable to the commercial market available within a reasonable period (say 12 months).

4.3.5 DESIGN AND CONSTRUCTION OF CUSTOMER INITIATED CAPITAL WORKS TO THE OVERHEAD NETWORK

There is no practical or legislative impediment to permitting customer initiated capital works to the overhead network from being contestable. Such works would include extensions of the network to serve new customers, relocation of assets associated with change to civil infrastructure, requirements for upgrading of the overhead network for a customers increased load requirements.

There is capacity within regional Queensland to carry out such works and it is limited only by present Ergon Energy policy. If Ergon Energy were encouraged to make such a change, it would take around 12 to 18 months for them to establish processed, standard and documentation to permit the works to be carried out contestably.

5 COMMENTS ON NETWORK DESIGN AND CONSTRUCTION STANDARDS

SPA are very familiar with the Ergon Energy design standards for underground works which are detailed in a range of Ergon Energy standard drawings, standard specifications and manuals and make comments in the following subsections.

5.1 CUSTOMER INITIATED CAPITAL WORKS REFERENCE GROUP

SPA have also been very active participants in the Customer Initiated Capital Works Reference Group which is a working group established by Ergon Energy in response to approaches to the respective state government minister and Ergon's Chief Executive associated with issues that were being experienced by the development industry.

The reference group was established in September 2013 and through it a number of changes, beneficial to Ergon Energy and to the wider community associated with processes and standards were made. These changes included:

- Process changes to make contestable works slightly more streamlined;
- Standardisation of performance security payments and removal of retention guarantees (although the defect liability period still remains);
- Adoption of a higher capacity allowance for distribution substations which permitted increased load to be connected to distribution substations, increasing their utilisation;

- Permission to use parallel LV feeders from substations in some instances which permits improved utilisation of distribution substations

The above changes to Ergon Energy processes and standards have resulted in the increased utilisation of assets in new underground subdivisions and we commend Ergon Energy for being receptive to the views of the external participants in the reference group.

5.2 CONSERVATIVE STANDARDS AND MANUALS

There are still areas where some of the Ergon Energy manuals and standards are excessively conservative and we believe that they could be changed to produce a higher utilisation of assets without causing a significant reduction is reliability.

Where we identify these issues we take them up directly with Ergon Energy and will continue to do so.