27 February 2015

Jeanette Radcliffe
Secretary
Senate Select Committee
PO Box 6100
CANBERRA ACT 2600

Dear Ms Radcliffe

**Senate Inquiry into Wind Turbines**

Ergon Energy Corporation Limited (Ergon Energy), in its capacity as a distribution network service provider in Queensland, welcomes the opportunity to provide comment to the Senate Select Committee's *Inquiry into Wind Turbines*.

Ergon Energy owns and operates 33 isolated diesel power stations, which provide electricity to communities in Western Queensland, the Gulf of Carpentaria, Cape York Peninsula, various Torres Strait Islands, as well as Mornington Island and Palm Island. There are different renewable energy resources at these sites, including generating electricity from wind, solar and geothermal.

There is abundant wind resource at many of the power station sites, particularly in the Torres Strait Islands where Ergon Energy has 16 diesel power stations. Ergon Energy currently owns and operates a wind farm on Thursday Island in the Torres Strait Islands that consists of two 225kW wind turbines providing around 5 per cent of the total energy needs of the island. The annual diesel consumption on Thursday Island is approximately 6 million litres of diesel per annum. The wind turbines generate up to 1.22 GWh, saving approximately 300 000 litres of diesel and 870 tonnes of greenhouse gases each year. The wind farm was commissioned in 1997 and the turbines are aging assets at the end of their life. Due to the diesel and greenhouse gas savings associated with wind generation Ergon Energy is actively engaged in investigating opportunities to increase wind generation in the Torres Strait Islands to further reduce diesel consumption and adverse environmental impacts.

Notwithstanding, for the majority of remote communities, particularly island communities, which in some cases are less than one kilometre long, there is insufficient land available that is also isolated from the residential community that can be used to locate wind turbines. As such, constraints such as blanket exclusion zones for wind turbines would
severely impact the ability of Ergon Energy to supply the most viable and lowest life cycle cost electricity to many remote communities. Ergon Energy recommends that a more suitable approach to the installation of wind generation, particularly in remote off grid communities, would be to allow analysis on a case by case basis and solutions tailored for each community.

In addition to our comments about the need for windfarm planning processes to not unreasonably inhibit the provision of viable, low life cycle cost electricity supply arrangements in remote communities, we make the following comments in relation to the first term of reference, namely:

(a) The effect on household power prices, particularly households which receive no benefit from rooftop solar panels, and the merits of consumer subsidies for operators

Ergon Energy notes that Queensland has one of the highest penetration rates of PVs in the world. With over 100,000 systems in Ergon Energy’s distribution area, this equates to approximately 2.1% of the energy traded in the grid, with owners self-consuming approximately 1.5% above total grid fed energy.

It should be noted that while distributed energy resources can reduce required network expenditure in some cases (i.e. where it is integrated with coincident load); they do increase the need for network augmentation and represent a net cost to consumers. Further policies that seek to stimulate renewable energy increase costs to consumers under current pricing arrangements. Ergon Energy analysis shows that across the 2010-2015 regulatory control period green schemes such as the Carbon Tax, Large Scale Renewable Energy Target (LRET), Small Scale Renewable Energy Scheme (SRES), Gas Electricity Certificates (GECs) and the Solar Feed in Tariff (FiT) will cost regional Queensland customers around $1580 million. This equates to an average liability per customer of $2,229 over the five year period. Prior to the removal of the carbon tax this average liability was expected to be $2,654 per customer, noting actual impacts vary according to consumption. For the average residential customer these costs represent approximately 8.5% of their retail bill. Environmental allowances such as the LRET, SRES and GECs account for 37 per cent of the impact and the costs of the Solar FiT and associated network costs account for around 26 per cent. Specifically the estimated cost of the FiT and associated costs is $413 million, with the costs of the SRES estimated to be $280 million. This equates to an average cost of $990.49 per customer over the five years, with the average cost being $311.87 in 2013-14 alone.

It should also be noted that as the FiT scheme exists until 2028, there exists a liability of $1.56 billion under this scheme. In its recent Draft Determination on Regulated Retail Prices the QCA noted that ‘the costs of the Solar Bonus Scheme continue to have an impact on prices representing about 6% ($89) of the typical bill for a residential customer on tariff 11 in 2015-16’. It should be noted that those costs relate to FiT costs incurred in 2013-14 given the 2 year lag that occurs in the recovery of the costs.
Should you require additional information or wish to discuss any aspect of this submission, please do not hesitate to contact either myself or Trudy Fraser.

Yours sincerely

Jenny Doyle
Group Manager Regulatory Affairs