

Office of the Minister for Energy and Water Supply

Ref: EWS/002431 CLLO-PARL-12054

30 November 2012

Level 13 Mineral House
41 George Street Brisbane 4000
PO Box 15456 City East
Queensland 4002 Australia
Telephone +61 7 3896 3691
Facsimile +61 7 3012 9115

Mr Neil Laurie The Clerk of the Parliament Parliament House George Street BRISBANE QLD 4000

Dear Mr Laurie

I refer to your letter of 14 November 2012 enclosing a copy of Petition No. 2011-12 lodged in the Queensland Legislative Assembly.

The Petition draws the attention of the House to the proposed Gracemere Substation and Powerline Route Project and requests the House to stop the proposed substation site located on Platen, John, James and Lawrie Streets, Gracemere from being built on this area of land.

Ergon Energy Corporation Limited (Ergon) has to comply with National regulations that require it to provide a safe and reliable electricity supply to consumers at the lowest possible cost for electricity infrastructure upgrades or expansion. There are also a number of reliability standards, environmental laws and other criteria that they need to comply with that influence their decision on when and where they need to upgrade the electricity supply to an area.

Ergon is proposing to build this substation as a result of the existing electricity demand on its network in Gracemere and to allow it to cater for an expected rapid increase in commercial and residential development in the area. The existing Malachi substation supplying the town has reached its capacity as a result of current electricity demand and an additional facility is required to ensure a continued reliable supply of electricity to the township. Ergon has advised that without an additional substation and associated alternative supply source in the central business district, upwards of 6,000 customers would potentially be without power for an extended period of time if Ergon was to loose supply at the existing Malachi substation.

I understand that Ergon has undertaken a thorough assessment of a variety of potential locations for the proposed substation site in the Gracemere area, including a number of the options identified by members of the public. Ergon considered a number of technical, town planning, social, economic and environmental criteria before it selected the proposed substation site in Gracemere. In addition, Ergon also looked at the proximity of potential sites to where the electricity is needed, ease of access to current infrastructure, lot size, site access and a number of other criteria.

Wherever possible, Ergon tries to minimise the potential impacts of new electricity infrastructure on the land, wildlife and local residents as much as possible. The alternative sites proposed by members of the public were not considered suitable for a number of reasons, including being too far from the load centre, requiring additional power lines that would impact on more land and residences, being too close to planned residential areas, or the land not being available for sale.

While I can appreciate the wishes of the public to have the substation located away from the central business district, the practicalities of doing this would not only increase the cost to build the substation and connect it to the area that needs the additional electricity supply, but would also result in higher community impacts. In particular, Ergon would need to build a number of additional power lines to connect the substation to the areas that need the power, which would mean more residents would end up with powerlines running along their property boundaries. Also, as there are losses in electricity voltage the farther away the substation is from where the electricity is needed, more electricity needs to be produced to supply the same need which ultimately contributes to an upward pressure on the price everyone pays for electricity.

I understand the community has concerns about possible health effects associated with power lines. In that respect, Electromagnetic Fields (EMFs) are present wherever there is electricity and the strength of the EMF decreases rapidly with increased distance from the source. Ergon must comply with all current and proposed standards for EMFs and exercises prudent avoidance, ensuring that its electricity infrastructure provides minimal contribution to EMF exposures to local residences, schools and other buildings where people congregate and work.

Ergon has measured EMF readings at the boundary fence for two substations of a similar or larger size than the proposed Gracemere substation, and expects the EMF levels from the proposed substation would be negligible.

Ergon commenced community consultation in May 2012 which included contact with directly affected residents surrounding the proposed substation site, as well as consultation on the associated power line routes that will connect to the proposed substation. Further, community meetings were held in the local Gracemere shopping centre and in the main street on 10 and 12 May 2012. Ergon also provided information about the proposed substation and the community meetings to the local media and put up posters along the main street. The contact details for Ergon's community engagement team were provided to residents through information newsletters and on Ergon's website.

While the formal consultations finished on 8 June 2012, Ergon has continued discussions with interested residents past this date. Ergon is now considering the feedback it has received about how it can further reduce the impacts of the substation on surrounding residents and the community, and where possible will incorporate the suggestions into the design of the substation.

Yours sincerely

Mark McArdle MP

Minister for Energy and Water Supply