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Commerce Commission.

Aurora Energy investment plan submission.

18 August 2020

Consumer and stakeholder confidence.

The following notes give examples of why as an engineer and as an Aurora client I have no confidence in Aurora's directorship, management and engineering. I have worked for ██████████ ██████████ and since retiring have maintained regular contact with ██████████ I stay updated about my and their concerns.

Since 1998 Aurora has let the network deteriorate in two ways. Failing to spend on maintenance growth.

Massive load growth of commercial, industrial, urban, agriculture, horticulture and viticulture has occurred in the Central Lakes District and Aurora has not spent the income they earn from those connections to make their clients supplies reliable and of suitable power quality. Voltage complaints are a large area of concern.

Rural loads supply multi million dollar enterprises that employ large numbers of people directly and indirectly, contribute to the local economy and earn high export dollars. Many of these enterprises are rural and supplied by decayed, unsafe and inappropriate feeders. The on site constructed distribution assets are funded by the enterprise and gifted to Aurora. The enterprise pays large lines and energy costs. Many of the loads are in the order MVAh in energy usage.

While I was managing such projects part of my responsibility was to recommend upstream network improvement to handle the nature and size of these large loads. In particular power quality and reliability of supply. In nearly every case no network development took place even though these enterprises added greatly to Aurora's asset value and income.

These enterprises remain in a precarious economic situation. N = 1 is not an appropriate feeder configuration for such loads requiring a secure supply. Eg frosty fighting, Horticulture and viticulture irrigation, pivot irrigation, stock water and dairy milk processing.

Energy consumers do have contingency plans for outages but acknowledging that weather events and equipment failure can occur but the length and frequency of outages is unacceptable.

Aurora's Capital Funding Request requires enterprises in rural areas to pay a ferroresonance charge. This charge was implemented to fund the installation of switches and circuit breakers to enable safe switching of large loads. The money went into a fund but was rarely spent for the purposes it was gathered. This resulted in lines people unsafely switching large current loads with inappropriately rated switchgear. This was brought to Aurora's attention at safety days but no action was taken.

The ferroresonance charge was also to fund the replacement of aged unsafe Air Break switches. This was rarely done and the incidence of unusable switches results in large area outages and high SAIDI minutes. This is common in Central Lakes and Dunedin City.

When employed by [REDACTED] and now, reference was made by staff that Delta was a cash cow for Aurora. For private projects margins were minimised and on Aurora projects, maximised.

Private projects were competitively tendered, Aurora projects were not. The greater the value that Delta charged for an Aurora Network Development project, the greater the value on Aurora's asset list.

In Frankton Flats, Queenstown, where another network owns a Grid Exit Point and an extensive transmission and distribution network, Aurora will fund projects 100% to guarantee they get the connection.

I contracted to [REDACTED] during the accelerated pole programme. The practices used then persist to this day.

The Dewar pole testing regime has been flawed from the beginning. The equipment and procedure has not had a sign off from a professional engineer in New Zealand to qualify it as reliable and repeatable. There is no standard to have the hardware tested against a registered testing and calibration house. Parts of the equipment are tested but not the system.

When I visited Aurora's Dunedin office [REDACTED] I was shown pole samples removed following Dewar testing failure and removal. The poles had been sawn through and photographed. Most poles showed no signs of decay even though they failed the Dewar test.

Meanwhile Dela and Aurora staff knew of other poles that should have been removed from the network. The easiest and simplest poles got priority to give the impression that Aurora was taking action. Faulty poles with large strains and on corners were deferred.

In recent times pole nailing has been prevalent on Aurora's network.

As a qualified pole designer I have concerns over the pole nailing process. When pole structures are designed, calculations are performed on underground conditions and proposed concrete structures to counter side and in line forces. Safe pole design includes a study of forces above and below the ground and ground conditions. Nailing shatters the underground structures resulting in original designed mitigation redundant leaving the pole unsafe. No pole design input is done on poles to be nailed.

There are instances of poles on redundant lines being nailed. This is an obvious misuse of funds.

Outages and traffic management

I have friends who work for civil and site safety management contractors.

Aurora is renowned for advising outages but not turning up on site on the advised date.

Safety management is laid out and civil contractors turn up only to be called off without notice. This has been often caused by poor Network operations planning.

This has resulted in Delta and other contractors staff having to be called off the work site for the day and have an unproductive day because no other work has been planned..

Aurora Investment and length of investment

Because of my reasons stated in the consumer and stakeholder confidence part of my submission above, I have no confidence that the existing ownership, governance,

management and engineering personnel have shown any aptitude to make wise engineering decisions or ability to manage funds. Central Lakes being a small community with strong local networks makes these shortcomings widely known. There is a raw anger and distrust of the existing Aurora company by the public in the Central Lakes districts. I consider this to be inconsolable.

This distrust has not reached its full potential as there are members of the public who consider that changing energy companies will avoid line charge increases. When the realisation that line charges cannot be avoided becomes widely known there will be another public debate and protestations.

The company should be funded and staffed by a proven competent Network owner. Aurora is insolvent with requested future expenditure exceeding the existing asset value. The company is worth a fee simple of one dollar. It's only value to a new owner is its long term future income and rights to easements and access corridors. The new owner would incur debt owed as a loan from Dunedin City Council.

Line charges could increase but on a long term basis and by a moderate amount. beneficiary and national superannuants energy assistance will be wholly absorbed by Aurora line charges. At a time of economic hardship and with the Central Government heavily assisting New Zealanders, massive line charge increases are totally irresponsible and unacceptable. The costs to repair and upgrade the network should be funded by a new owner by a modest increase in line charges and an investment based on a long term secure return.

While top management has been turned over over recent years there is still a recalcitrant middle management who are the continuum of the sick Culture of Aurora whose attitudes are supported by new directors and management. In no way should anybody associated with Aurora be rewarded by being trusted with future funding.

An undertaking should be taken by the Central Government to build a structure that has the Authority to monitor and discipline Lines companies to ensure that the situation that Dunedin and Central Lakes district line users find themselves in today does not continue.

The Commerce Commission, The Electrical Authority and WorkSafe New Zealand have been found impotent and irresponsible by witnessing this demise and not suggesting legislation to stop such behaviour.

Communication

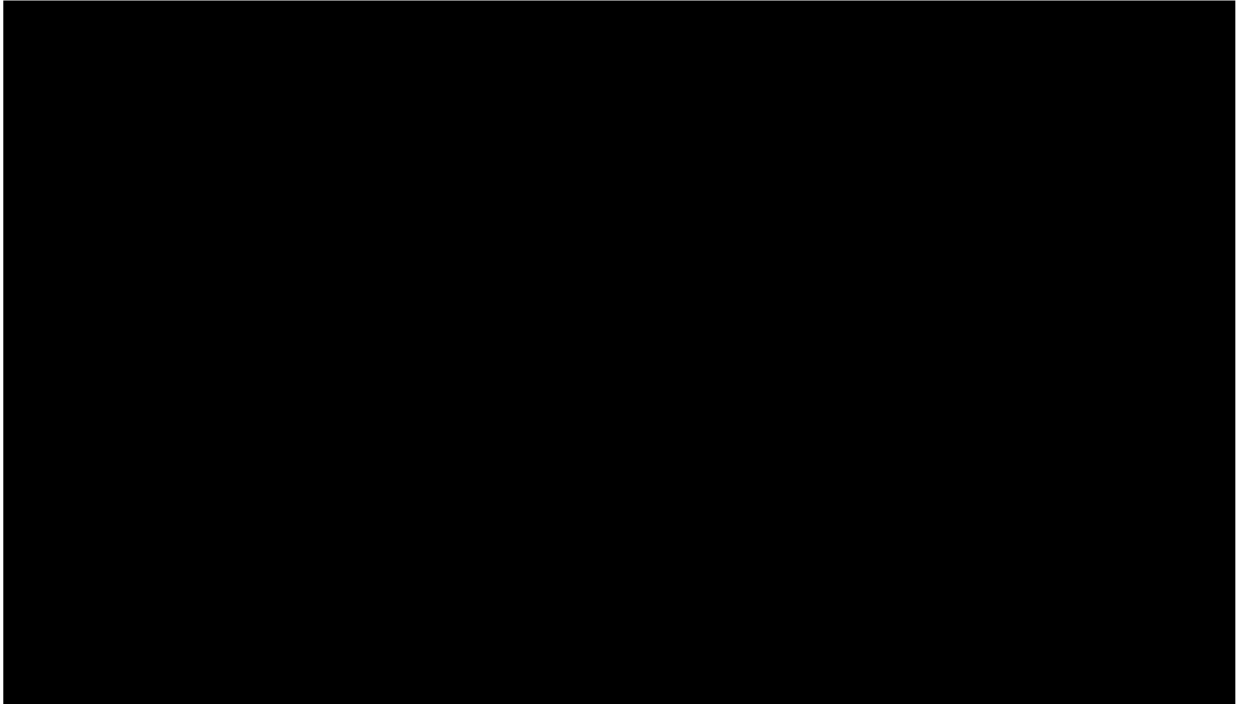
No matter what communication Aurora has with its clients it will be treated with distrust and disdain due to denial, lies, inaccurate statements and spin by the company.

Aurora has no credibility to build on.

A large amount of money is required to make Aurora's network safe, reliable and able to supply the massive load growth in the Central Lakes. This is a case of Aurora having received the income to perform this requirement but mis spending it and now wanting reward by requesting further funds.

Aurora talks of average line charges but I live in Clyde and as an example will have a monthly line charge increase from \$180.00 to \$270.00 per month in the next two year. I live in view of Clyde power station, there is 2km of line from the Clyde Dam Grid Exit Point to the Clyde/Earnsclough substation and then a further [REDACTED] to my home. Clyde has the highest line charge on Aurora's network and one of the highest line charges in New Zealand. Clyde

has one of the unsafest, unreliable networks in the country with no spending proposed in the next five years according to Aurora CPP and Asset Management Plan.



I trust this information in its present form will not be disclosed to Aurora's CEO by your team member with a conflict of interest. Unfortunately the Commerce Commissions integrity and process is in question by a number of people.