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Air Liquide New Zealand Limited

Submission to the

Electricity Authority

regarding the

Transmission Pricing Methodology
Issues and Proposal
Second Paper

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AIR LIQUIDE NEW ZEALAND LIMITED

Air Liquide New Zealand is a subsidiary of the global Air Liquide Group with Head Office in Paris. The Air Liquide Group is the world leader in gases, technologies and services for Industry and Health. Air Liquide is present in 80 countries with approximately 68,000 employees and serves more than 3 million customers and patients. Oxygen, nitrogen and hydrogen have been at the core of the company's activities since its creation in 1902.

Air Liquide New Zealand manufactures its own oxygen, nitrogen, carbon dioxide and acetylene locally. It imports specialty gases for local consumption and exports gases to the Pacific Islands. Local industries served include paper, dairy, medical, fabrication, food, wine and oil.

Oxygen and nitrogen are produced in a cryogenic plant in Manukau, Auckland, carbon dioxide in Marsden Point (Northland) and acetylene in Auckland. Markets served cover the whole of New Zealand, from Invercargill to the Far North and include several Pacific islands as well.

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SUMMARY

Air Liquide cannot support the Electricity Authority's proposal for dramatically changing the Transmission Pricing regime (TPM) for the New Zealand electricity network.

The changes are not simple pricing changes because the changes proposed will cause far reaching effects that encompass strategic and policy level decision making that should be addressed at a much higher level than the Electricity Authority.

Electricity is a significant input cost to Air Liquide NZ and any increase in cost is a serious concern for the company. From the information supplied to date it would seem that a significant increase would occur in network charges, totalling well in excess of $100,000 per annum.

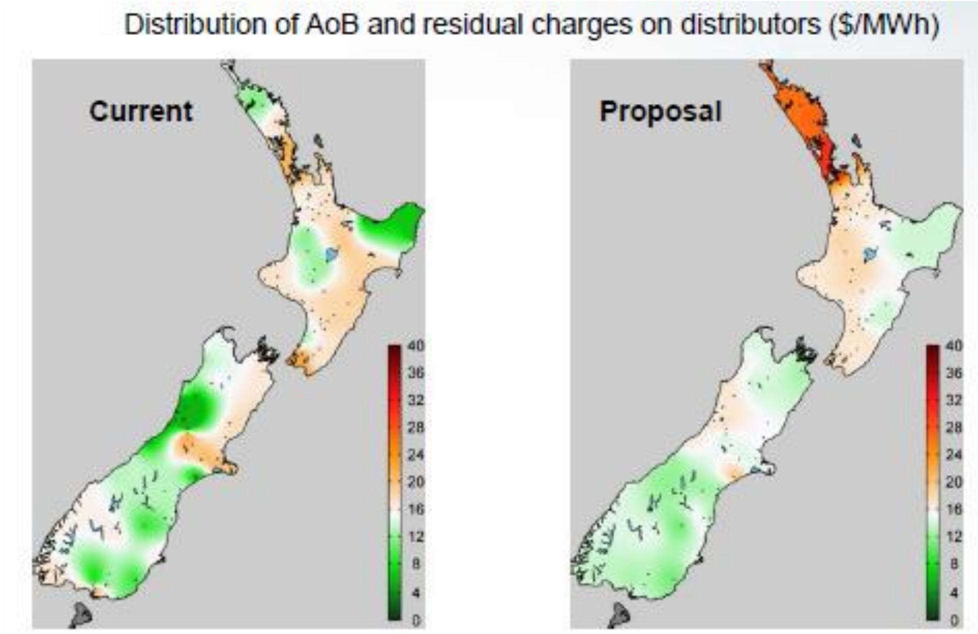
After reviewing the proposed new Transmission Pricing Methodology we do not see it as a significant improvement and it fails to show how transmission costs would reduce long term under the proposal.

Air Liquide has made long term investment decisions based on the existing delivered pricing and thus any retrospective changes to recover previous infrastructure investments jeopardises these decisions. As such, Air Liquide NZ suggest that the existing methodology should be retained.

Electricity generation and distribution patterns have not fundamentally changed over the past 20 years and the existing methodology seems to be working, even if some parties feel a greater impact financially. It should also be said that those companies who will see the most benefit from the proposed changes would have had to utilise the existing system configuration to make their historic investment decisions.

We are not convinced by the information provided to date that we, the electricity market or New Zealand will be better off long term with the proposed methodology, rather, select organisations will see the benefit, whilst there will be many organisations adversely affected.

The diagrams below, presented by the Electricity Authority, appear to sum up the situation very well. The current situation shows a fairly even distribution of costs (a spread of about 20 $/MWh on the given scale) with the Auckland area shouldering the highest costs. The proposed situation shows a fairly even cost distribution south of the Waikato, but greatly increased costs north of this (a new spread of over 22 $/MWh). The sudden cost change in the Auckland area appears designed to strangle the country's hub of industry and kill off any growth in an already struggling Northland. The current model has been reasonably effective and should remain to be. Retaining the current model will certainly be less disruptive to New Zealand than the proposed situation.



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SUBMISSION

Air Liquide New Zealand's production operations are focused in Auckland and Northland, the areas most affected by the proposed changes. These changes therefore affect the whole business model adopted by Air Liquide NZ.

As an example, the closure of Pacific Steel's steel plant in September 2015 presented Air Liquide with an opportunity to move the cryogenic production plant away from Manukau to optimise operating costs. By the end of the year, Air Liquide had concluded negotiations with Fletcher Building, who had negotiated with Vector and Contact Energy, to remain on the site in Manukau with set electricity supply costs. The changes proposed by the Electricity Authority would change this situation significantly, but Air Liquide NZ is now contractually locked in long term. Making changes of this magnitude will no doubt affect nearly every industry in the affected areas, changing the facts/assumptions that many key decisions were made on. The effects of these changes are too large to proceed with implementation without a much wider national discussion at a higher level than has currently occurred.

Because the cost of electricity is such a significant portion of operating costs (70 to 80% in the case of the cryogenic production plant in Manukau), Air Liquide NZ has a policy of linking contracted product prices to the electricity cost. This means that the significant increase in costs proposed by this paper will be passed on very quickly to consumers who will no doubt pass these costs on to their customers. Other businesses will no doubt be in a similar position, needing to pass on increased costs as soon as possible. The inflationary pressures from the industries in the adversely affected areas will have widespread effects on the economy.

These are massive increases by any measure and appear to sit outside the regulator's mandate to protect the long term benefit of end-users

From our point of view it looks more like the Electricity Authority has solved a small issue for Meridian, Contact Energy and the smelter at Tiwai Point by turning it into a larger issue for the rest of the country.

The regions most affected by the proposed changes are home to a very significant proportion of New Zealand's industry and wealth generation. Structural changes like those proposed by the EA need to be discussed more openly at much higher levels than has been evident to date. A much more balanced solution needs to be generated from this discussion if the New Zealand economy is not to be adversely affected.

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Air Liquide provides the following additional comments on aspects of the EA published Consumer Guide dated 17 May 2016 for consideration.

2.12 Service based pricing. It is explained that some parties are paying the same as others that have a higher level of service (security). This is possibly the case, but the worst affected areas (Auckland and Northland) cannot be said to have a high level of security. How can these areas then be required to pay even more for their supply of electricity than they currently are?

Area of Benefit Charges

2.21 The proposal is to allocate HVDC and interconnection investments approved after 2004. These investments were approved by the Electricity Authority as being needed and the best option to achieve the result. All historical grid investments will have had some area of benefit effect and thus singling out recent investments is arbitrary and ignores the long life expectation of many pre-2004 network assets.

If the Area of Benefit charge was to proceed, it is proposed that it is applied to future investments only. The EA in the Consumer Guide indicates that now is a good time to change methodology as most major grid upgrades are complete. In effect the grid has caught up from under investment and has capacity for the future.

By only applying Area of Benefit to the future will allow future investment decisions to be made with the beneficiaries having an understanding of the costs that will result and not retrospectively having an unexpected cost applied.

The existing methodology was deemed appropriate for allocating the costs resulting from these investments.

Transpower, in the past, had tried to get the beneficiaries to pay for new grid investments. This was particularly unsuccessful as the all parties tried to argue their benefit was less than their neighbours. It is unclear who will be determining who has received what benefit as yet but it is predicted this will be difficult to administer.

5.13 Some direct consumers pay more than the total cost of supplying them and NZAS is quoted as an example.

This issue could be better addressed in the prudent discount policy component of the existing and proposed charges rather than changing the whole TPM and affecting more consumers and industries with a ‘solution’ that has much wider ramifications than the issues it claims to resolve. Air Liquide NZ does not believe that a select number of individual parties who feel that the current situation is not working for them should result in such expansive changes as proposed. It seems that consumers in Auckland and Northland will be effectively subsidising NZAS and others who gain to benefit most from the proposed changes. This should not be about winners and losers; the system needs to be fair and equitable and ensure the ongoing competitiveness of the broader New Zealand industry, not just the select few. Further, Air Liquide NZ understands that NZAS has not made any further commitment to operations in New Zealand past 2019, when the changes would be proposed to come in, which begs the question as to why such changes would be contemplated without this certainty.

Residual Charge

2.35 to 2.40 The recovery of this charge is indicated to be capacity based instead of the coincident demand.

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By having a capacity based charge takes away the incentive to reduce demand at peak times and only having an incentive when the asset is nearing being fully loaded. Thus the regional co-ordination will be lost.

If Distributed Generation is deemed a problem with the current methodology it is suggested that this is resolved within the suggested changes to Distributed Generation pricing Principles. Incentives to encourage renewable electricity generation close to Auckland and in Northland would help alleviate some of these issues in a more positive way. The geothermal power plants at Ngawha are an example of what is possible, and in fact, such investments will potentially be penalised in terms of the connection charges, providing a disincentive for any such future investments.

Within its existing connection charges, Transpower already has incentive to manage peak demand to ensure the existing asset capacities are not exceeded. An extra incentive using the Residual charge is not deemed necessary.

What are fundamental problems with the current TPM?

5.20 – 5.22: The current charges are not service based and cost reflective and subsequently send the wrong pricing signals and lead to poor investment decisions.

Comment
Over time all parties are responding to signals to reduce costs. The existing TPM is sending signals to reduce load at peak regional times. Thus long term the effect is to reduce grid investment until necessary. It is suggested that this is still fundamentally appropriate and situations with perverse results are few.

5.23 The current TPM is also not durable, as evidenced by the almost constant lobbying for fundamental changes to the TPM. Poor durability creates uncertainty, potentially causing grid users to make inefficient location and investment decisions and poor operating decisions. It also leads to ongoing lobbying costs for fundamental changes to the TPM.

Comment
This suggests the current TPM is not durable due to constant lobbying for fundamental change. This is not actually a reason and suggests that the lobbying is just working. As previously stated, the benefits being sought by the lobbyists appear to be for a very small minority, and at the cost of a much larger portion of New Zealand. Surely there should be a broader independent review of the market and that the EA does not respond to constant noise from a vocal few.

There is little information provided predicting what the long term result will be should the current TPM be retained.

Summary

Air Liquide New Zealand are not opposed to a thorough review of the energy infrastructure in New Zealand, however believe that the current proposal falls well short of what could be considered a balanced view. Whilst there will be a direct financial impact on our business, our concern is broader – if adopted, the proposed changes will adversely impact many thousands of New Zealand businesses who are based in the industrial hubs of Auckland and Northland.

Air Liquide encourage a more transparent review process that allows a more balanced view of the alternatives as well as a greater level of independent analysis and review.

Please do not hesitate to contact us should further information be required – contact details are included on the cover page.