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## **CONSULTATION PAPER - TRANSMISSION PRICING REVIEW**

North Otago Irrigation Company (NOIC) welcomes the opportunity to comment on the 2019 Transmission Pricing Methodology (TPM) issues paper.

NOIC operates a substantial and modern irrigation scheme comprising an efficient 200km pumped and piped network. NOIC serves 163 farmer-shareholders by delivering the opportunity for reliable production to a 68,000 hectare command area in a drought prone region. Environmental leadership is a core strategy and NOIC was an early, if not the first, irrigation company in NZ to introduce auditable environmental standards for all farmers. Continuing to innovate and invest in sustainable management for farmer and community benefit remains a primary focus. The consequences of the NOIC scheme include a significant uplift in the community and economic well-being of the Waitaki region.

Network charges are a significant cost of operating NOIC's modern pressurised irrigation system. As one of the largest electricity users in the region, NOIC fully supports Network Waitaki's submission regarding the TPM issues paper.

The TPM issues paper is of great concern to us, as irrigation drives a substantial portion of Network Waitaki's demand. Under this TPM proposal, the move to Anytime Maximum Demand (AMD) for determining pricing will push transmission costs for Network Waitaki up by 55%. This could result in a potential increase in NOIC's network charges of up to 40%. The full increase would likely be passed on to farmers who contribute to the summer peak demand. In addition to the increase in costs from Network Waitaki to NOIC, which in turn get passed on to irrigators who use the NOIC scheme, the impact on our farmer shareholders will be compounded by the increase in on-farm costs for their own demand during peak times. The exact pass-through charge to irrigators will depend on the decision by Network Waitaki on how the cost should be spread across consumers.

By applying the principles that the Electricity Authority promotes of cost reflective pricing, we would expect that specific consumer groups will be targeted according to their contribution to the summer peak demand. As the summer peak is largely influenced by the agricultural sector and irrigators, we are likely to face a significant price shock if this proposal goes ahead.

The proposal also includes the inclusion of Black Point Grid Exit Point (GXP) as part of the Network Waitaki AMD portfolio, even though NOIC has a separate Notional Embedding agreement with Transpower. It is of grave concern to us that the TPM issues paper seemingly

does not consider the potential impact of the proposal on pre-existing contractual arrangements.

From what we have noted in the issues paper, it would appear the move towards a gross AMD residual charge, a benefit-based charge and contribution to a price cap are the driving forces behind Network Waitaki becoming the Electricity Distributor worst affected by the proposal. In our view:

1. Regional economic development will be negatively impacted by a theoretical pricing system that claims to successfully optimise the cost of transmission in New Zealand. The economic cost of impeding growth in a region where the cost will go up for the foreseeable future to pay for a so-called “benefit” will be significant and not aligned with the principle that the availability of electricity should be in support of economic development.
2. A transmission pricing approach that rewards better utilisation of assets through prices determined by peak load demand in winter (which is the main driver for investment in the core grid) rather than indiscriminate use of anytime demand, along with benefits that are intuitively correct rather than based on judgement calls that might be compromising to some regions, is essential to ensure general acceptance of the pricing regime. A regulated monopoly provider of a service such as Transpower should price its service so that no user would have reason to feel exploited by monopoly rent. The regulator has an important function to promote equity and fairness.
3. The move to a gross AMD residual charge is thus very concerning, given the benefit for Transpower if summer peaking consumers improve the utilisation of assets (in a generally winter peaking part of the grid) without the need to spend extra money to accommodate these consumers. Summer usage of the transmission network provides diversity in usage patterns and improves the overall load factor of the transmission network. This move alone will increase the cost by an unreasonable amount and cause serious economic harm.
4. Intuitively, the benefit-based charges are not convincing, with huge benefit payments expected by South Island consumers for investments on the North Island, as well as for the HVDC link that predominantly takes power to the North Island.
5. The suggestion that nodal prices provide “...a timely and efficient signal...” is not convincing in our view as we have limited visibility and will not be in a position to respond to nodal price signals, except through the signals that our retailer provides through repackaged energy prices. We will thus not be in a position to respond in a timely fashion to prevent transmission investments that could possibly be avoided were it communicated through a sensible peak demand type signal.

An additional hurdle for the use of nodal prices as a pricing signal for transmission services relates to the inelasticity of farmer demand. NOIC’s modern infrastructure is a pumped instantaneous demand system. To avoid environmental harm and minimise costs, farmers delay irrigation until it is needed. Farmers’ decisions prioritise protecting crop and pasture from moisture deficits due to unpredictable weather. Any delay in irrigation during dry periods is harmful to production and viability. Short-term pricing signals regarding constraints and peaks have to be ignored to ensure that irrigation is delivered before any losses occur. Therefore, as an irrigator, this part of the proposal will miss the target.

6. The introduction of a cap of 3.5% on the increase in the total electricity bill of an average consumer to limit the impact of price increases arising from this proposal initially appears to be sensible. However, it is then surprising that Network Waitaki consumers will contribute \$100,000 annually towards a pool of funds to balance this up with other users (mainly industrial consumers, who will have an increase greater than 3.5%).

This is in effect a socialisation of charges to ensure some consumers don't end up with price shocks, which in our view defeats the intent of the pricing structure change (which was to make it cost reflective and not to socialise costs). The largest beneficiaries of this are New Zealand Rail, Norske Skog, NZ Steel and Pan Pacific, who otherwise would have been exposed as a group to an average 11% increase in their electricity bills. These industrial consumers were much better situated to exploit the weaknesses in the current TPM (as discussed in the TPM issues paper), and that is clearly illustrated by the high increases in their transmission charges with some of these weaknesses eliminated.

To now expect a potential 55% increase (depending on allocation of transmission cost by Network Waitaki) for North Otago farmers to help reduce an 11% increase for industrial consumers just does not seem fair, especially if the high increase for the industrial consumers is partly a result of them previously gaming the system.

7. This proposal with such a significant increase comes as a shock, especially in view of the fact that it will not in any way solve the significant Transmission constraint in the region, but will be an additional cost with no benefit whatsoever considering:

- In the last two decades the North Otago region has experienced economic growth with key drivers including primary processing and irrigation. We have been aware and actively involved over many years in discussions with Transpower and Network Waitaki on possible options to alleviate the 110kV interconnection transmission line between Waitaki and Glenavy, which has been capacity constrained during the summer period for several years. This has been a big concern and the 2017 expansion of the NOIC irrigation scheme could not be connected without a Transpower special protection scheme. We are also aware that Network Waitaki has been obliged to load control during the summer months and has also implemented an emergency load shedding process that will be activated if Transpower declares a grid emergency on this line, as it did in 2015. Network Waitaki has also upgraded its Waitaki GXP and has built nearly 30 km of 66kV line that runs parallel to the existing Transpower 110kV interconnection line as this was more efficient than investing in the grid.

While we are relieved that these actions by Network Waitaki provide some form of reliability of supply, as they enable load to be removed from the Oamaru GXP to ensure that the interconnection transmission constraints are not exceeded, it cannot be viewed as a long-term solution.

- An increase of 55% in transmission charges will be a severe blow to economic development in the Waitaki District, especially considering that this 55% increase does not factor in the potential additional cost (estimated to be in the millions of dollars per annum) that will be required to address the current transmission interconnection constraint and that will have to be paid for by Network Waitaki consumers.
8. Reliability and quality of supply are non-negotiable to enable primary production business owners to fully utilise the capital investments they have made, to facilitate not only the sustainability of their businesses but also the contribution their businesses make to the local regional and national economy. Primary productive businesses, including all types of agriculture, horticulture and viticulture, in a drought prone area such as the Waitaki district, rely on irrigation for sustainable output.
  9. For Waitaki to grow into an attractive economic environment for people to work and live, the availability of electricity for growth at a competitive price is crucial. Electricity enables

economic activity, and with climate change challenges in a country with clean electricity, this is the energy source of choice for economic growth.

10. Decarbonisation is a priority for government as evident in the Zero Carbon Bill. Sectors across the economy are encouraged to increasingly focus on carbon reduction initiatives. These initiatives come at a cost and by increasing the price of electricity transmission so substantially in our district, with no added service or benefit, we will be disincentivised to invest in decarbonisation through the use of more renewable electricity and at the same time face substantially higher electricity prices.
11. We believe this proposal results in unfair treatment of a few Electricity Distributors and their customers, especially in view of Central Government's drive to grow all regions in New Zealand.

We would welcome the opportunity to further discuss our concerns and invite the Authority to North Otago to discuss the reality on the ground and the challenges and opportunities that consumers and businesses in this region face.

For any questions or clarifications please do not hesitate to contact us.

Yours Sincerely



Andrew Rodwell  
Chief Executive