Genesis Energy Limited
Level 6
155 Fanshawe St
PO Box 90477
Victoria St West
Auckland 1142
New Zealand

T. 09 580 2094

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Electricity Authority
2 Hunter Street
WELLINGTON

By email: Consult-2021DryYearReview@ea.govt.nz

Consultation Paper— 2021 Dry Year Review

Generally speaking, Genesis supports MartinJenkins' findings that the system worked as intended. The extremely low hydrological inflows experienced during the first half of the year were challenging in isolation, but ongoing gas deliverability constraints exacerbated this considerably. That security of supply was maintained despite these factors is testament to the appropriateness of the policy settings, and capability of the industry and regulators.

However, no system is perfect and Genesis looks forward to contributing to the forthcoming consultations on security of supply policies. Detailed comments are reserved for these subsequent consultations, and this response addresses the Electricity Authority's request for feedback on specific aspects of the dry year event review:

1. The Authority's actual and perceived performance during the event.
2. The System Operator's actual and perceived performance during the event.
3. The dry year risk regime and incentives.
4. The preparedness of the industry (including the Authority).

The review of the industry's performance during the 2021 dry year event is a worthwhile exercise, and Genesis Energy is grateful for being consulted during its preparation and further on the output here. We were surprised that neither Gas Industry Company nor upstream gas producers were consulted over the course of the review. Given the importance of gas supply to the electricity system in dry sequences, these participants would have had useful insights to share. Genesis considers that future reviews of dry year events should canvass the views of fuel suppliers.

The Authority's actual and perceived performance during the event

The Authority performed its role satisfactorily during the dry year event. The well-established rules-based regime for managing fuel scarcity was adhered to even under considerable pressure later in the dry sequence, and the Authority rightly trusted the system to work as it has in the past.

Genesis understands the rationale for the s46 requests the Authority made of participants during the dry sequence, and endeavoured to ensure the Authority had access to the information it required throughout. However, and as communicated to the Authority at the time, s46 requests for large volumes of information can be time-consuming to respond to. This can have the undesirable effect of distracting staff from managing the event itself in real time. The Authority may wish to consider whether a formal regime for information provision during fuel shortages may meet its requirements while imposing a lighter compliance burden. Such a system may also provide greater certainty and predictability for participants.

Genesis agrees with the MartinJenkins report's conclusion that consideration should be given to the Authority's communications role in dry year events. Generator behaviour indicated that the emerging security of supply risks were understood and factored into planning early enough to ensure they were managed effectively. It is less clear whether some other participants – certain large consumers and small retailers in particular – had recognised and appropriately managed the commercial risks arising from fuel scarcity.

As the dry sequence wore on some participants were increasingly vocal via the media in respect of the cost pressures they were facing. Some of this commentary suggested that the conditions were evidence of a malfunctioning market, and implied there could be cost impacts for consumers.

As the MartinJenkins report rightly notes, high prices are an appropriate consequence of fuel scarcity. Indeed, such prices are necessary to incentivise appropriately conservative fuel use and in some cases demand rationing.

Genesis considers that the Authority could have done more to combat these media narratives. This would be an appropriate activity given the Authority's stated mission to enable greater understanding of the market, and ensure the electricity market has a high level of credibility[1].

The System Operator's actual and perceived performance during the event

Genesis considers that the System Operator effectively performed its defined role during the dry year event. The review highlights the decision to begin daily security of supply reporting on 12 April, the point at which the System Operator considered lake levels were likely to hit the 1% risk curve. Genesis believes the System Operator acted appropriately and in accordance with the policy in this instance.

The dry year risk regime and incentives

Genesis considers that appropriate incentives are in place to ensure prudent fuel management. In particular, the well-understood process regarding Official Conservation Campaigns and the associated consumer compensation are a strong incentive to ensure shortages do not occur.

There may be merit in revisiting the current compensation campaign settings, to provide more granularity in the options available to manage system risk. Providing for sub-national/regional conservation campaigns could ensure that campaign activity is proportionate to the level of risk, and avoid burdening retailers (particular smaller businesses) more than is necessary.

[1] https://www.ea.govt.nz/about-us/what-we-do/vision-values-mission/

Determining wholesale prices through a competitive market process also ensures risks are appropriately signalled.

The existing security of supply policies work well, and this was demonstrated through the dry year event. However, some potential areas for improvement were also highlighted. Genesis expects to comment on these in detail in the forthcoming review of the security of supply policy settings.

The report highlights concerns from some participants concerning the appropriateness of some of the assumptions underpinning risk curve modelling. In particular, whether it is right to assume large gas consumers will curtail production at times of electricity market stress to make gas available for electricity generation.

Genesis notes that this did take place during the dry year event, with Genesis and Methanex reaching a gas supply agreement for winter and future gas swap arrangement[2]. This was a commercial arrangement and Methanex are under no obligation to enter into such contracts, but the market did perform in line with the assumptions behind the risk curves. Accordingly, Genesis considers that it is appropriate for the risk curves to make some allowance for commercial arrangements to be struck, but that those assumptions should be explicit so that they are better understood and their reasonableness assessed.

Risk curves are designed to provide visibility of the security of supply outlook, and are rightly designed with this in mind. However, this does not explicitly provide an indication of the market conditions that may be expected as the fuel outlook moves down the curve. If it is the case that participants cannot make this link (and some parties' surprise at the dry year pricing conditions suggests this may be the case), there may be value in providing an 'overlay' that sets out the market implications of certain levels of supply risk. This would not be an appropriate role for the System Operator, but may be worthy of consideration by the Electricity Authority.

Alternatively, Transpower and the Authority may consider producing a 'risk dashboard', that combines the various risk reports in one place and provides a full picture of the supply situation. This dashboard could act as a 'single source of truth' that the Authority and others can refer to when communicating the level of system risk to the Minister and others. In addition, this approach could provide more warning signals as supply conditions approach concerning levels (but before the current policies require action).

Furthermore, Genesis agrees with the MartinJenkins report's findings that removing subjective elements from the Emergency Management Policy has merit. We expect this to be addressed in the forthcoming consultations.

The preparedness of the industry (including the Authority)

Generators, the Authority, and System Operator appeared to be well-prepared to manage the fuel scarcity that emerged over the first half of 2021. As previously noted, the level of preparedness of some large users and small retailers is less clear.

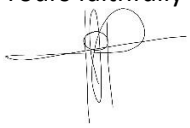
[2] https://www.genesisenergy.co.nz/about/media/news/genesis-and-methanex-work-together-to-improve-ener

Genesis responded to the signals by, among other things, bringing a third Rankine unit into service[3]. This brings significant operational challenges and costs, but proved crucial to ensuring security of electricity supply.

The developing la niña weather system, expected to result in lower inflows to New Zealand's hydro lakes, and continuing gas deliverability constraints were both well-understood and planned for ahead of time. The gas supply outlook can be understood with reference to the upstream information outage disclosure code[4], and Gas Industry Company publishes regular information on gas production[5] and storage[6].

Genesis considers that, with some minor adjustments, the current settings for managing dry year risk are appropriate.

Yours faithfully



Matt Ritchie
Senior Advisor, Regulatory Affairs and Government Relations

[3] https://www.genesisenergy.co.nz/about/media/news/huntly-availability-update-feb-2021
[4] https://industrynotifications.gasindustry.co.nz/
[5] https://www.gasindustry.co.nz/about-the-industry/gas-industry-information-portal/gas-production-and-major-consumption-charts/
[6] https://www.gasindustry.co.nz/about-the-industry/gas-industry-information-portal/gas-storage-information-chart/