

12 August 2021

James Stevenson-Wallace
Chief Executive
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9 August Undesirable Trading Situation and Trading Conduct Code breach

Dear James,

Electric Kiwi and Haast Energy Trading (Haast) consider that on 9 August 2021, during trading periods 37-42:

- There was an Undesirable Trading Situation (UTS);
- The UTS was individually and jointly caused by Contact and Genesis; and
- Contact and Genesis both breached the new trading conduct rules (clause 13.5A) in the Electricity Industry Participation Code (the Code).

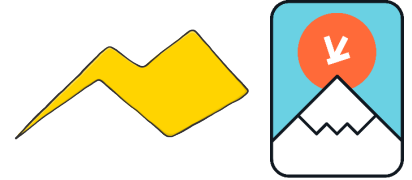
The Authority should investigate why HLY4 and TCC were not available for offer

The issues the Electricity Authority should specifically investigate include:

1. HLY4 wasn't on outage but wasn't offered to the market. Marc England, the Chief Executive of Genesis, says it takes 6 to 10 hours to get online,¹ but ignored that the cold weather and low evening wind were both forecast well in advance, and the System Operator issued a Customer Advice Notice (CAN) at 6:42am. The Minister of Energy, Hon Megan Woods, has already called it a commercial decision. The likely reason Genesis didn't run HLY4 is they were considering the economics of their wider portfolio in a manner which is inconsistent with offering on the basis of no significant market power.
2. TCC was available but didn't run. It may be argued that it takes several days to plan for the delivery of gas supplies, but the period in question is a 2.5 hour super peak. We believe Contact could have reorganised their existing supplies and had TCC plus both peakers on for the critical period, without burning significantly more gas than they did. The likely reason Contact didn't run TCC is they were considering the economics of their wider portfolio, again in a manner inconsistent with offering on the basis of no significant market power.

Please find attached the Notice of Breach forms for a trading conduct (clause 13.5A) breach and UTS.

¹ <https://www.stuff.co.nz/business/126029919/power-cuts-genesis-boss-says-firm-feels-victimised-as-transpower-admits-error>



It appears that generation capacity was withheld on 9 August

We consider that:

- **Both grid transmission and generation capacity were sufficient to meet the peak demand:** There was no physical/capacity reason why generation could not have met the full electricity demand on 9 August.
- **The generators were all fully aware of the potential for the peak in demand:** We agree with the Minister of Energy “the electricity market had clear warnings about the potential for the shortage situation”.²
- We also agree with Transpower that generators should have been keeping a close eye on the power situation and anyone could have seen the weather forecasts. We also agree with Transpower “This an informed industry” and there was an onus on generators to make sure that they were prepared.³
- The cold weather was well forecast. It shouldn't have been a surprise to anyone that HLY4 and TCC may have been required to meet demand. Independent demand forecasters Tesla described the event as “Although it was a cold day, it was nothing inconceivable. In fact, we've seen colder days in just the last 10 years”.⁴
- The System Operator provided multiple Customer Advice Notices (CAN) and Formal Notices,⁵ including the first CAN at 6:42am, 9 August, further alerting generators of the situation. The 6:42am CAN advised “North Island residual generation is less than 200 MW, including spare HVDC capacity, for trading periods TP 36 - 41 (17:30 -20:00) on 9 August 2021” and “If system conditions worsen, it could result in a WRN or GEN being issued due to insufficient offers being available to cover for the largest contingency or meet demand and maintain frequency keeping reserve”.⁶
- **It is wholly misleading and inaccurate for the Genesis CEO to claim all they can see in the market is their own customer demand, and they don't have visibility of the whole of the market:** “we can't see the whole market”.⁷ All large generators (and the Genesis traders) have full visibility of what is going on in the whole of the wholesale electricity market, including ahead schedules, generation and transmission outages, live generation data, comprehensive weather forecasts etc.
- **There is prima facie evidence both Contact Energy (Taranaki Combined Cycle) and Genesis Energy (Huntly, 3rd Rankine) withheld generation capacity.** We agree with the Minister of Energy that “We actually did have capacity that wasn't brought on. It wasn't that we didn't physically have the amount of power to generate. It is the way in which the market responds to these that we need to look at ...”⁸
- HLY4 was only turned off on Friday evening. It would have taken minimal effort and cost to have made it available for offer on Monday night. The Genesis CEO has reported “For us to fire up that 3rd unit ... it takes about 6 to 10 hours” which is well within the timeframe between the Transpower CAN and the outages. The Genesis CEO was also clear “Contact didn't have TCC running ...”⁹

² https://www.parliament.nz/en/pb/hansard-debates/rhr/document/HansS_20210810_050760000/woods-megan

³ <https://www.stuff.co.nz/business/126029919/power-cuts-genesis-boss-says-firm-feels-victimised-as-transpower-admits-error>

⁴ <https://www.linkedin.com/feed/update/urn:li:activity:6830584222550507521/>

⁵ The list of notices from the System Operator is here:

<https://www.transpower.co.nz/system-operator/operational-information/formal-notice>

and

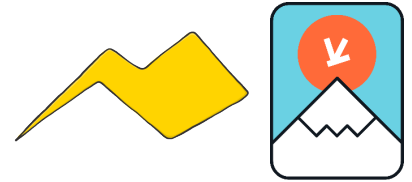
<https://www.transpower.co.nz/system-operator/operational-information/customer-advice-notice>.

⁶ <https://www.transpower.co.nz/sites/default/files/interfaces/can/CAN%20Low%20Residual%20Situation%204025411929.pdf>

⁷ <https://www.rnz.co.nz/national/programmes/checkpoint/audio/2018807654/power-outages-genesis-ceo-says-energy-minister-scapegoating-but-woods-has-questions>

⁸ <https://www.newshub.co.nz/home/politics/2021/08/power-crisis-megan-woods-sticks-to-guns-says-commercial-reasons-behind-outage-denies-scapegoating-genesis.html>

⁹ <https://www.rnz.co.nz/national/programmes/checkpoint/audio/2018807654/power-outages-genesis-ceo-says-energy-minister-scapegoating-but-woods-has-questions>



- The Tokaanu hydro intake weed issues, while not routine, have occurred a number of times in the past under similar conditions, and is not an exceptional or unexpected occurrence at this site.
- We note that wind forecasts early on 9 August NZT from the ECMWF, a commonly used weather provider (both on its own or resold through intermediaries such as MetService), were anticipating that wind would drop significantly during the evening of August 9th. Our own ECMWF driven wind model versus actuals for North Island wind is shown in the graph below. This forecast was received at 7.45am on 9 August NZT and predicted the evening wind well. It is also relevant that forecasts from the weekend were also accurate in predicting wind to decline significantly for the evening and for the cold temperatures. The drop in wind and cold conditions should have come as a surprise to none of the large generators.



*x-axis is UTC, 6am 9 Aug UTC = 6pm 9 Aug NZT.

**y-axis in GW.

***Inputs are the ECMWF 08 August 12Z ensemble mean windspeeds for North Island wind locations.

***Haast model transforms these into expected generation, calibrated by the historic relationship.

- **Outcomes reflected market power and the pivotal position Contact and Genesis were in:** We consider that the decisions of Contact and Genesis, respectively, not to make TCC and HLY4 available to offer to the market were inconsistent with the offers that the generators, acting rationally, would have made if no generator could exercise significant market power at the point of connection to the grid and in the trading period to which the offer relates (clause 13.5A(2)(a) of the Code).
- **It appears that the withholding of generation capacity may have constituted market manipulation and use of market power ((clause 5.1(2)(a) of the Code):** We consider that the market outcomes were different from those reasonably expected, both individually and jointly, due to the withholding of capacity from Huntly and/or TCC. We consider this resulted in prices and outcomes that were not consistent with supply (sufficient generation capacity to meet electricity demand) and demand conditions and therefore what might reasonably be expected if the market was operating normally). This aligns with the ACCC's guidance¹⁰ relation to Court precedent on the definition of market manipulation:

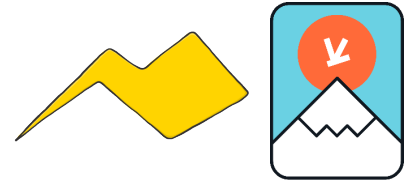
in ... market manipulation is centrally concerned with conduct, intentionally engaged in, which has resulted in a price which does not reflect the forces of supply and demand.¹¹

- We also note the Authority's clear statement that "If there is evidence of firms withholding output at what should be a profitable price, this indicates some degree of market power being exercised".¹²
- **Vertical-integration had an adverse impact on generation availability decisions:** Based on the statements made by the Genesis CEO, it appears its decision about whether to make HLY4 available was based on its vertically-integrated position and the extent to which its retail business was exposed to the spot market risk e.g.:

¹⁰ ACCC, Guidelines on Part XICA - Prohibited conduct in the energy market, May 2020.

¹¹ See Director of Public Prosecutions (Cth) v JM (2013) 250 CLR 135 at [70].

¹² Electricity Authority, Industry and market monitoring: Competition Information paper, 31 August 2011.



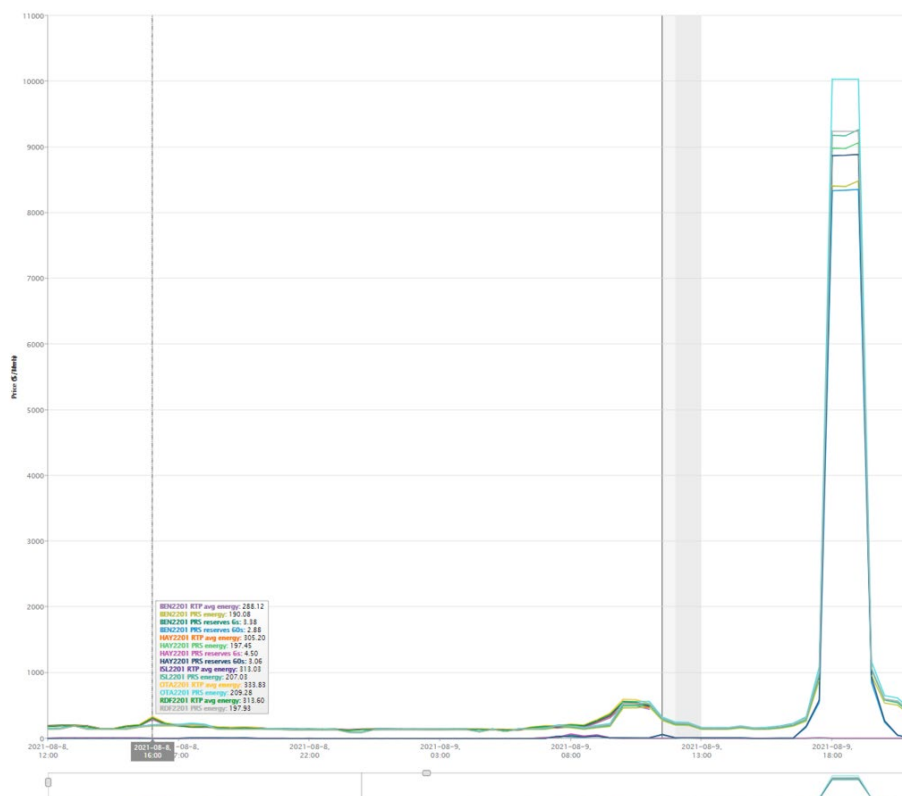
"[There] was an alert to the market that there was risk. When that happens everyone looks at their own portfolio and says what's our demand? What do we forecast the risk to be for the evening peak?, and we make sure we have enough units on line ... we can't see the whole market ... we manage our own portfolio like everyone else does ... When we looked at our portfolio, we knew we could meet our demand ...".¹³

"We looked at our portfolio yesterday and we knew that between all our customer demand and the generation we had online we could meet our customer demand.... We did what we always do and made sure we could meet our customers' demand ... our only accountability is to ensure we can supply our customers."¹⁴

"We made a decision on the basis of the information we had ... we knew we could meet our own demand."¹⁵

We do not consider it consistent with the outcomes of a workably competitive market, or "the offer that the generator, acting rationally, would have made if no generator could exercise significant market power", for a generator to decide not to make supply capacity available to meet demand in the market, because the generator considered its supply would be sufficient to meet its own retail customer base demand (clause 13.5A(2)(a) of the Code). In a normal functioning competitive market, a generator would have had strong incentives to respond to the expectation or forecast of heightened consumer demand and aim to supply as much of its product as possible.

- While Genesis claimed there wasn't any clear price signals from the wholesale spot market that the 3rd Rankine would be needed,¹⁶ the price-responsive schedule (PRS) signaled prices around 9,000/MWh in the morning (see diagram below which was clipped from the WITS website around 11.30am on 9 August).

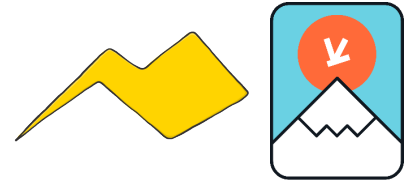


¹³ <https://www.rnz.co.nz/national/programmes/checkpoint/audio/2018807654/power-outages-genesis-ceo-says-energy-minister-scapegoating-but-woods-has-questions>

¹⁴ <https://www.rnz.co.nz/national/programmes/checkpoint/audio/2018807654/power-outages-genesis-ceo-says-energy-minister-scapegoating-but-woods-has-questions>

¹⁵ <https://www.rnz.co.nz/national/programmes/checkpoint/audio/2018807654/power-outages-genesis-ceo-says-energy-minister-scapegoating-but-woods-has-questions>

¹⁶ <https://www.energynews.co.nz/news/coal/103633/genesis-curbed-unit-5-blackout-hit>



- **No reasonable or credible reason has been provided for not offering available energy and reserves to the market:** Genesis has stated: “There was no third Rankine operating as there was sufficient generation capacity available to the market prior to the loss of generation at Tokaanu and sudden decline in wind generation that coincided with peak demand. A Rankine unit takes several hours to become operational and would not have met demand in the circumstances during last night’s peak.”¹⁷

We do not consider it credible for Genesis to blame the decline in wind generation for the shortfall. As covered above, commonly available weather forecasts correctly predicted the cold temperatures and lack of wind. The Genesis commentary also does not recognise that the System Operator provided sufficient notification for Genesis to have operated the Rankine unit via its 6.42am CAN.

- **Confidence in the market has been damaged:** We consider the above events reflect an undesirable trading situation that threatens, or may threaten, confidence in, or the integrity of, the wholesale market. We consider the response from the Prime Minister and the Minister of Energy, in of themselves, is sufficient to demonstrate confidence in the market has been damaged e.g. the Minister told Parliament that the “market failed” to deliver “security of supply”.¹⁸

Regardless of the mechanisms of the electricity market, New Zealanders rightly expect the lights to be on and the heaters to be running on a cold winter's night. That's why the situation that unfolded yesterday was unacceptable. If we're going to have a market-orientated system providing security of supply, then that market must deliver. The market failed in this respect.¹⁹

Yesterday's events have prompted further questions on whether the system is fit for purpose.²⁰

We expand on our concerns that there was a UTS and that confidence in and the integrity of the market was undermined in the following section.

Black outs and scarcity pricing should not occur when there is sufficient supply capacity to meet demand

Black outs and scarcity pricing events when there is sufficient supply capacity to meet demand reflects poor market conduct, is undesirable and undermines confidence in the market.

We agree with ENA that “[Monday] night’s performance was unacceptable”.²¹

Issues of market power and vertical-integration have previously manifest in detriment to consumers through high electricity prices, but now include power cuts. Consumers are over-paying for an unreliable service now; the situation just gets worse.

Incidents such as 9 August, where the electricity market fails to meet electricity demand despite sufficient generation and transmission capacity, undermine confidence in the market and bring into question how well the market is working. Whether fairly or otherwise, it is inevitable comparisons will be made with electricity markets in other jurisdictions where there have been supply problems, such as the February power outages in Texas.²²

We agree with the Minister “This appears to be a commercial constraint, rather than a physical constraint” and there had been enough capacity in the system, but it was not all used. We also agree with the Minister that “New Zealand consumers do not expect our electricity market to fail under demand pressures at any time, not least on a cold winter evening” and “This system has let New Zealanders down in this instance”.

¹⁷ <https://www.energynews.co.nz/news/energy-security/102930/record-demand-triggers-blackouts-more-tonight#comments>

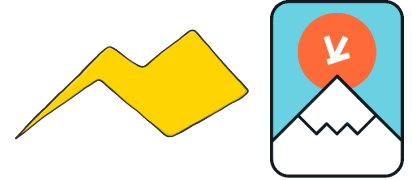
¹⁸ Megan Woods on the warpath over electricity outages, throws power generators under the bus, but brushes off calls to resign: https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12464117

¹⁹ https://www.parliament.nz/en/pb/hansard-debates/rhr/document/HansS_20210810_050760000/woods-megan

²⁰ https://www.parliament.nz/en/pb/hansard-debates/rhr/document/HansS_20210810_050760000/woods-megan

²¹ https://www.linkedin.com/posts/graemepetersbengelect_new-zealanders-deserve-an-independent-inquiry-activity-6830700617753853952-iX-v

²² <https://www.texastribune.org/2021/06/07/texas-ercot-power-grid-legislature/>



The Prime Minister was very clear "Even if it really was a peak on an extremely cold night, it is still not good enough that we weren't able to warm our homes".²³

Genesis now appears to be engaging in a spat with the Government that can only further damage confidence in the market claiming its treatment has been "grossly unfair", it has been "victimised" and it is being treated as a "scapegoat".²⁴ Genesis appears to be engaging in a pedantic argument with the Minister that "It wasn't a commercial decision, it was an operational decision". We are unsure what Genesis considers the importance of this distinction is supposed to be, or how it fits with its statements that it looked at its own portfolios and made sure it could meet its own customers' demand.²⁵

The Genesis CEO even went as far, in response to a question "Whose fault is it?" to blame the Minister: "I think the Minister is ultimately accountable for security of supply as a whole".²⁶

We have had to go back to the rift between the CEO of Telecom, Theresa Gattung, and the Prime Minister, Helen Clark, in 2006 to find a comparable dispute between a public utility and the Government. The Government ended up overhauling wholesale regulation but not before Ms Gattung told an Australian audience "The Government is way too smart to do anything dumb here".

There were already questions about the operation of the wholesale electricity market, with spot prices near double their historic norm since mid-2017, the 2019 UTS and the Authority's conclusion Contact and Meridian's withheld generation/unnecessarily spilled water but their trading conduct was "shielded" by the HSOTC rules at the time.

The 9 August event brings into further sharp focus issues of market concentration and vertical-integration and ultimately the integrity of the electricity market. We consider it unlikely there would have been the grid emergency, curtailment of supply or spike in prices, if the market had been operating in a workably competitive manner where no individual generation is able to unduly influence or manipulate electricity prices through withholding of supply capacity. In a workably competitive market, the response to a potential or likely record peak in demand would have been to maximise output supplied to the market. It is likely Contact and Genesis' commercial and operational decisions would have been different if they did not have market power or were not vertically-integrated.

None of this behaviour or market outcomes is contained in a vacuum.

It is all set against a backdrop of Commerce Commission investigations into the fuel and grocery markets where they found evidence of high and enduring monopoly profits and market concentration in circumstances with close parallels to the electricity sector. Incidents such as December 2019 and 9 August 2021 simply provide the most egregious examples of the problems in the market.

Obligation on generators to offer available plant

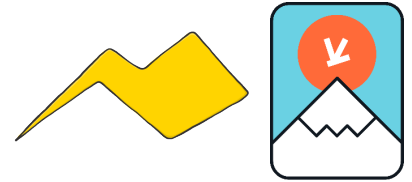
Underlying the excuses from the generators of the last few days is an assertion that a generator can sit back and wait for a GEN notice from Transpower before taking steps to bring an available plant to market. The Authority should reject this notion. There is an obligation that generation operators are aware of market circumstance, not just as far as their own customers are concerned, but also including when they may be required to run their plant in an overall market context. A reasonable and prudent operator would have anticipated that HLY4 and TCC may be required on Monday evening and have taken steps to ensure they could ramp in time. Genesis and Contact both failed to act like reasonable and prudent operators on 9 August.

²³ <https://www.stuff.co.nz/national/politics/300378816/megan-woods-blames-commercial-decisions-for-power-blackouts-genesis-energy-says-it-didnt-generate-extra-power>

²⁴ <https://www.rnz.co.nz/national/programmes/checkpoint/audio/2018807654/power-outages-genesis-ceo-says-energy-minister-scapegoating-but-woods-has-questions>

²⁵ <https://www.rnz.co.nz/national/programmes/checkpoint/audio/2018807654/power-outages-genesis-ceo-says-energy-minister-scapegoating-but-woods-has-questions>

²⁶ <https://www.rnz.co.nz/national/programmes/checkpoint/audio/2018807654/power-outages-genesis-ceo-says-energy-minister-scapegoating-but-woods-has-questions>



Summary of harm that was caused

We consider the individual and joint actions of Contact and Genesis resulted in net adverse impact on economic efficiency (in accordance with clause 13.5A(3) of the Code), which includes but is not necessarily limited to:

- Very high interim spot prices in both the South Island and North Island which were not reflective of the available supply.
- Higher costs to consumers through realised high wholesale prices and higher expectations of future prices, driven by disorderly market events rather than true supply and demand.
- A contrived scarcity pricing event. The Pricing Manager has declared a scarcity pricing event for 4 trading periods on the evening of 9 August. If the market had been orderly and the Code had been complied with the market would have cleared without a scarcity or infeasibility situation at much lower prices.
- Unnecessary outages and curtailment of electricity supply. It has been reported about 20,000 homes in the central and eastern North Island were left without power on Monday evening, as well as use of ripple control.

The Authority's TPM Cost Benefit Analysis can be used to quantify the detriment of curtailment of electricity demand as it quantifies the impact of curbing/suppressing electricity demand during peak-periods. We note that while the TPM CBA is based on the consumer benefit of electricity consumption being highest during peak periods, this would be a conservative quantification of the harm caused on 9 August as it doesn't take into account the specific benefits of electricity consumption/heating during particularly cold periods.

- Harm/exacerbation of harm to competition in the electricity retail market.
- Further erosions of trust and confidence in the market.

Actions the Authority should take

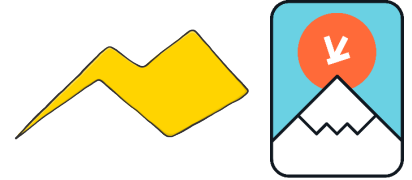
Firstly, the Authority should stop the Pricing Manager finalising prices for 9 August while it investigates. This would reduce the chance of having a split market by signalling to the ASX and others the potential for a price reset.

The scarcity pricing regime has been activated by the Pricing Manager. It will be a perverse outcome if the exercise of market power highlighted by this event is allowed to flow into higher realised and expected prices for consumers.

We believe the Authority should reset prices based on a model with TCC and HLY4 offered in a way consistent with 13.5A and a workably competitive market, and demand estimated at a no curtailment level.

If the Authority can't complete this process in time for settlement of August contracts with the Clearing Manager on 20 September, it should instruct the Clearing Manager to update prices based on an estimate of where it expects this process to arrive. Allowing the market to settle based on the current interim prices will see consumers bearing the cost of an avoidable market failure.

The Authority should seek to set a new benchmark in moving quickly to resolve this situation. We believe previous UTS and trading conduct processes have taken far too long to resolve, which in itself has damaged confidence. The Authority should incorporate its decision and remedy consultations into a single process and compress the timeline as much as possible.



Concluding remarks

We consider 9 August highlights a stark choice for the Authority between protecting individual market participants from the repercussions of their actions, and protecting consumers and the integrity of the electricity market.

The result of Contact and Genesis' actions on 9 August was price spikes and power outages in very cold conditions. We have no sympathy that Genesis feels "victimised" for a situation of its own making.²⁷

Genesis has been clear its decision to withhold availability of the 3rd Rankine was that it wasn't needed to meet the needs of its own retail customers: e.g. "We don't have any legal or regulatory accountability for security of supply in New Zealand, our only accountability is to be sure we can supply our customers".²⁸ This is not the way a market subject to competitive disciplines such that no party has significant market power should operate. Nor does vertical-integration reflect an efficient way to manage wholesale electricity market risk if it results in withholding of electricity generation that is needed to meet market demand, but not needed for self-supply.

Genesis purports that it lost over \$1 million on 9 August but this in no way limits its culpability or fault. It would be ironic if both Genesis and consumers would have been better off if Genesis had not made the decision to withhold generation capacity, but it did make that decision.

We fully expect a recycling of the excuses and passing of responsibility that happened after the 2019/2020 hydro spills. We have already seen a repeat of the commentary Meridian relied on, including that market conditions were unprecedented (level of demand instead of level of hydro inflows), there was a "confluence of factors" (Genesis uses the phrase a "unique set of circumstances") and attempts to spread or share responsibility e.g. "It is important to note that yesterday's market conditions arose as a consequence of a number of plant and market-related issues and cannot be attributed to a single cause or company"²⁹ and "every other single generator in the market" is equally accountable for what happened: "You can name them all. Contact didn't have TCC running which is a large unit in Taranaki. We don't know what Mercury and Meridian were doing, [or] whether they could have put more water in the system".³⁰

There was sufficient generation capacity to meet the record peak in electricity demand, and the market would have done so but for the decisions of Contact and Genesis, respectively not to make TCC and the 3rd Rankine available to the market. These decisions were made with clear forecasts that cold weather conditions would hit the country, and the System Operator CAN at 6:42am that there could be insufficient generation supply later in the day.

Genesis comment made a year ago, in relation to the 2019/2020 UTS-HSOTC complaint, is equally applicable to the circumstances around 9 August: "the situation ... has shown that allowing for such concentration of generation capacity, without appropriate regulatory safeguards, leaves a market vulnerable".³¹

²⁷ <https://www.stuff.co.nz/business/126029919/power-cuts-genesis-boss-says-firm-feels-victimised-as-transpower-admits-error>

²⁸ <https://www.rnz.co.nz/national/programmes/checkpoint/audio/2018807654/power-outages-genesis-ceo-says-energy-minister-scapegoating-but-woods-has-questions>

²⁹ <https://www.energynews.co.nz/news/coal/103633/genesis-curbed-unit-5-blackout-hit>

³⁰ <https://www.rnz.co.nz/national/programmes/checkpoint/audio/2018807654/power-outages-genesis-ceo-says-energy-minister-scapegoating-but-woods-has-questions>

³¹ Genesis, Re: Consultation on UTS preliminary decision, 18 August 2020: <https://www.ea.govt.nz/assets/dms-assets/27/27221Genesis-Energy-2019-UTS-Preliminary-Decision-Submission.pdf>

Yours sincerely,



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