

Submitter: System Operator

Q1. Do you agree with the draft determination that the System Operator was the causer of the UFE at approximately 1.04pm 11 July 2025? If not, please advise your view on the causer and give reasons.

No. For the reasons set out in the System Operator's Causation Report dated 1 October 2025 (re 11 July 2025 Under-Frequency Event) our recommendation remains that the Grid Owner is the causer of this UFE.

The System Operator makes the following further submissions on the Authority's draft determination of causer: 11 July 2025 under-frequency event (**Draft Determination**):

1.1 We submit that the Grid Owner, as the owner and operator of the HVDC link, is better placed than the System Operator:

- to know how to operate the HVDC link, including its appropriate control settings, and
- to be fully informed about the operational limits of the HVDC link.

The Grid Owner, not the System Operator, is obliged to operate the HVDC link in accordance with good electricity industry practice (clause 12.113 of the Code).

1.2 The Authority, in its Draft Determination, notes "the grid owner has advised that its grid asset controllers are not required to be experts in electrical engineering and all the systems of the grid." (paragraph 5.16). We submit that the System Operator coordinators are also not required to be experts in electrical engineering and all the systems of the grid, including the HVDC control systems which are particularly complex. The experts in the HVDC link and its control systems are within the Grid Owner's Operational Engineering team, and an HVDC engineer is on call 24/7 to provide advice if needed. The normal process is for advice from the Grid Owner's Operational Engineering team to be given to the Grid Owner control room upon enquiry from a Grid Owner operator. On other occasions, the Grid Owner's HVDC engineers have provided direct advice to Grid Owner operators – including on Sunday 19 June 2025 in response to a query on earlier HVDC bus outages.

1.3 The System Operator would not be expected to be an expert in the operation of other asset owners' assets (generators and connected asset owners). We submit that the Authority should not take a different approach when the relevant asset happens to be part of the grid. The Draft Determination effectively bestows the Grid Owner's HVDC expertise on the System Operator, which is contrary to clause 7.10(2) of the Code.

1.4 In paragraph 5.8 of the Draft Determination, the Authority states that "This decision by the System Operator was made without any involvement by the grid owner". This is incorrect – there was involvement by the Grid Owner through NGOC, which is referenced elsewhere in the Draft Determination and confirmed by a voice recording that we understand the Grid Owner has shared with the Authority. The Grid Owner had an opportunity to disagree with

the System Operator about not selecting HPC Roundpower to Monopole and not selecting HPC Switch Level to 'Increased' at HAY. The Grid Owner operator did not disagree with the System Operator's recommendation as to the appropriate control settings when it was discussed at 6.57 am on 11 July 2025. The System Operator did not unilaterally omit to instruct the Grid Owner to change the control settings – the System Operator discussed this with the Grid Owner first.

1.5 We note that the discussion at 6.57 am on 11 July 2025 did not contain the usual control room command language, either in its content or tone. That discussion was not an instruction by the System Operator to the Grid Owner to leave the control settings unchanged. We submit that the Authority is wrong to say that the System Operator, at the time of the discussion, had already made a decision not to instruct the Grid Owner to change the control settings and the discussion was merely a communication of that decision to the Grid Owner (Draft Determination, paragraph 5.17). At most, this was a System Operator recommendation, which the Grid Owner had the opportunity to respond to and disagree with. The Grid Owner did not disagree with the recommendation, and so the System Operator decided not to instruct the Grid Owner to change the control settings. If the Grid Owner had subsequently challenged this decision, for example after conferring with the Grid Owner's Operational Engineering team, the System Operator could have changed its mind and instructed the Grid Owner to change the control settings.

1.6 We disagree with the Authority that in these circumstances the Grid Owner could not have overridden the System Operator's recommendation (or decision or instruction or however the discussion at 6.57 am on 11 July 2025 is characterised) (Draft Determination paragraph 5.13). The Grid Owner is obliged to act as instructed by the System Operator in a grid emergency (clause 7(21) of Technical Code B) but outside of that the Grid Owner's obligation is merely to cooperate with the System Operator as reasonably required (clause 8.26 of the Code). It would not have been uncooperative or unreasonable of the Grid Owner to challenge the System Operator's view that the changes to the control settings were unnecessary if the Grid Owner had formed a contrary view based on its greater expertise in the operation of the HVDC link. In fact, that is what the System Operator expects the Grid Owner to do.

1.7 We agree with the Authority that the Grid Owner had the opportunity to question or seek further explanation for the deviation from the procedure but did not do so (Draft Determination paragraph 5.16). This was not a grid emergency or a response to real-time conditions in the power system. The discussions between the System Operator and Grid Owner happened one hour before the planned outage was scheduled to begin. There was time for the Grid Owner operator to check the decision with the Grid Owner's Operational Engineering team. Timings of planned outages can and do get deferred if there is a need to review any pre-requisites for the outages.

1.8 We submit that the Draft Determination does not adequately take into account the context at the relevant time. There were non-standard restrictions in place around HVDC filter operations (TI-DP-1195) which is the reason behind the System Operator's view that

changing the control settings was unnecessary. The System Operator's view was not an unreasonable one in the circumstances. Evidently, the Grid Owner's operators agreed, albeit without checking with the Grid Owner's Operational Engineering team.

1.9 We agree that this event has raised questions about the Grid Owner's acceptance of System Operator recommendations without challenge (Draft Determination, paragraph 5.11) and we are dealing with those questions internally.

1.10 Paragraph 5.14 of the Draft Determination states that the Authority considers that the System Operator should have followed its own procedure (as set out in TI-DP-1139 HAY Bus D Removal for HAY Bus Zone and CB Fail outages) for removing HAY Bus D, by instructing the grid owner to apply the prescribed control system settings. While that is correct in hindsight, we submit it does not provide a complete answer to the question of who the causer is. The System Operator's discretion to deviate from procedures when operational conditions require or justify it is important given the complexity of the power system and is aligned with the practicalities of System Operator decision making.

1.11 We consider there are strong policy reasons why the System Operator should not be determined as the causer of **any UFE**, at least not by reason of an omission. Among other things:

- If the System Operator can be a causer then this is likely to have a chilling effect on potentially valuable discussions about asset operational matters between the System Operator and asset owners. We believe such discussions are much more likely to avert potential UFEs and other undesirable power system conditions than lead to them.
- If the System Operator can be a causer, particularly by reason of an omission, asset owners may use that to obfuscate what would otherwise be straightforward causer determinations.
- The extension of the causer definition to the System Operator is beyond the original problem description supporting the change to the definition in May 2025. The Authority's October 2024 consultation paper said the change was being proposed to "Include distributors and energy storage systems as potential causers of under-frequency events". There was at that stage no mention of it being a problem that the System Operator could not be a causer, or an intention to capture the System Operator in the amended definition.

1.12 We acknowledge that the current definition of "causer" in the Code is, on its face, sufficiently wide to capture the System Operator. However, for the reasons outlined in the paragraph above, we consider this should not be the case, and submit that there should be a very high bar for determining that the System Operator is the causer of a UFE. In this case, we do not consider the facts support a determination that the System Operator is the causer.

Q2. Do you agree with the System Operator's assessment that 119.84MW was lost from the power system in the 11 July 2025 UFE? If not, please advise your view on the MW lost and give reasons.

Yes – this is consistent with the approach the System Operator has taken to calculate the loss for other UFEs.