

Case Study Six Rule 2.1 of technical code C of schedule C3 of part C of the Electricity Governance Rules 2003

Voice communications and instructions

Introduction

Recently the Electricity Governance Rules Committee ("the Committee") considered a case which it decided to publish as a useful resource for participants.

The case involves voice communication protocols which are contained in rule 2 of technical code C of schedule C3 of part C of the Rules. Rule 2 sets minimum process requirements for asset owners and the System Operator to follow when communicating with each other.

The case that forms the basis of this case study is not unique. It raises similar issues about voice communications that the Commission has seen in a number of other cases.

The Committee appreciates the involvement of the asset owner and the System Operator in producing this case study, and permitting this information to be used as a case study

Rule 2.1 of technical code C of schedule C3 of part C ("rule 2.1")

The Electricity Governance Rules require asset owners and the System Operator to communicate on certain matters. Rule 2 of technical code C of schedule C3 focuses on how those communications should occur by setting out minimum process requirements. The content of the communications is dealt with elsewhere in the Rules.

This case study focuses on rule 2.1, which states:

2.1 Voice and electronic communications

Every voice or electronic communication between the system operator and the asset owner must be logged by both the system operator and the asset owner. Unless otherwise agreed between the system operator and the asset owner every voice instruction must be repeated back by the person receiving the instruction and confirmed by the person giving the instruction before the instruction is actioned.

What does rule 2.1 require?

Rule 2.1 requires, at a minimum, that:

- every voice or electronic communication between the System Operator and the asset owner be logged by both parties; and
- every voice instruction must be repeated by the person receiving the instruction and confirmed by the person giving the instruction, before the instruction is actioned. Parties can agree not to do this, but in the Commission's view agreement should be express and clearly understood by both parties.

Who does rule 2.1 apply to?

Rule 2.1 applies to the System Operator and asset owners. An asset owner is a participant who owns assets used for generating or conveying electricity and persons who operate such assets. For the purposes of part C, of which rule 2.1 is a part, asset owners also include consumers who have a point of connection to the grid.

Rule 2.1 does not apply to owners of excluded generating stations. Excluded generating stations are generating stations that exports less than 30 MW to a local network or the grid (unless the Board has issued a directive under rule 10, that the generating station has to comply with rule 2.1).

Case Study

The asset owner reported that as a result of an incident that occurred earlier that year, that it had breached several rules, including rule 2.1.

Circumstances of the event

The circumstances surrounding the incident were:

At 13:31, grid owner's circuits tripped causing the asset owner's plant generation to trip. At the time the cause of the generation trip was unknown so the asset owner changed its generation offer to zero within the two hour period and claimed a bona-fide reason.

At 15:27 in a telephone communication between the System Operator and the asset owner, the System Operator requested the asset owner to resume generation at the plant as this would have provided voltage support for the system security.

The asset owner then advised its trading division that the plant was available and could be re-offered. The trader was only able to reoffer generation commencing at 16:00 as the 15:30 trading period had by that stage commenced. However, following the communication at 15:27 between the System Operator and the asset owner, the plant resumed generation at 15:31.

A further discussion between the asset owner and the System Operator clarified that the plant was generating without having made an offer in the market. The asset owner then ceased generating at the plant until the 16:00 trading period for which it had made an offer.

At the time when the plant was generating without an offer in place, the station was being managed under a block dispatch agreement. Overall, the block dispatch was achieved so there was no market impact of the plant generating when it did not have an offer in place.

Analysis of the incident

Rule 2.1 was breached during the telephone communication between the asset owner's operator and the System Operator at 15.27 on the day in question. Although the communication was logged, the asset owner's analysis of the log confirms that the understanding about whether an instruction had been issued and the content of the communication was not clear.

The asset owner thought it was being given an instruction by the System Operator to bring the plant on as quickly as possible, because there was a security situation. However the System Operator did not intend its communication to be an instruction.

Why did the misunderstanding occur?

- the two parties heard different things from the same conversation; one thought an instruction
 was being issued, the other did not. As with all telephone conversations, the parties lacked the
 non-verbal cues which help us interpret intentions and meanings from face to face
 communications, and as a result a misunderstanding arose;
- the language used by the parties was casual in style, and did not distinguish between a casual exchange of information and an instruction being issued;
- both organisations were trying to work together to achieve a common outcome (security of supply), but differed in how they thought the other wanted them to achieve that;
- what was interpreted as an instruction was not repeated back to the other party. Had this been done it might have helped identify that no instruction was intended to be issued.

The key learning from this incident was that although the System Operator and asset owners convey very useful information to each other during their communications a different and more formal type of language needs to be adopted when instructions are involved.

Impact on the market

The asset owner assessed the market and operational impact of all of the breaches as nil due to total generation meeting block dispatch.

Actions taken to prevent recurrence

The asset owner reminded its staff of the requirement to ensure each station operates within the capability of the offer, and of the protocols around voice communications. The asset owner reviewed

the incident with the System Operator. The incident is to be used as a learning example for staff training on voice communications.

The Committee's Decision

The Committee declined to pursue the self-reported breach of rule 2.1 of technical code C of schedule C3 of part C in accordance with or 67(1)(c) of the Regulations. In declining to pursue this breach the Committee considered the fact that:

- the breach had no market impact;
- the breach was self-reported;
- the asset owner has reminded its staff to follow the protocols for voice communications; and
- the System Operator has also reviewed the incident and will use this as a learning example for staff training on voice communications.

Investigator's tips on how to avoid breaching rule 2.1

The Committee is supported in its role of assessing breaches of rule 2.1 by the Commission's investigators. Over time the investigators have looked into many alleged breaches and have the following tips for how to avoid breaching rule 2.1. Remember, the tips are just that - tips. You know best how to run your operations to comply with the Rules!

- 1. **Familiarise yourself with the System Operator's standard format for issuing instructions** (see below). If staff are familiar with this policy, and the policy is followed correctly, there should be little doubt about whether a conversation is a communication or a voice instruction.
- 2. **Repeat, repeat.** The Rules require every voice/electronic communication between the System Operator and the asset owner to be logged, but only voice instructions have to be repeated back by the receiving party, and confirmed by the instructing party. If you're in any doubt about whether you're receiving a voice instruction or not, repeat it back. If an instruction was not intended, you repeating it back will alert the instructor that there has been a miscommunication. If an instruction was intended, then by repeating it back, you are complying with the Rules, and the instructor will confirm or reissue the instruction.
- 3. **If in doubt clarify.** Ambiguity in communications can easily arise. For example, where a word has multiple meanings, where a word that sounds similar to another word with a different meaning is used, or where it is not clear which piece of equipment an instruction relates to. If you are in any doubt about whether an instruction has been issued, or the

exact action required by that instruction, clarify by questioning, until you are satisfied you understand.

4. **Have a verbal communications policy that staff understand and follow.** All participants (the System Operator, generators and distributors) should have a verbal communication policy and should train their operators in the application of the policy. The policy should emphasise the four "Cs"; clarity, conciseness, correctness, and consistency.

System Operator's Standard Format for Operational Communication.

The suggested format is:

1. Establish communications

2. Transmit the message

- giving instructions by phone needs to be a disciplined process. It is important that there be no confusion to either party. This potential confusion can be avoided by giving clear, concise and correct instructions.
- if the message is abnormal or an emergency situation exists, additional care should be taken to speak slowly, clearly, and accurately.
- instructions need to be given as a command not a request and it is command language that defines the difference between instructions and requests.
- command language is necessary to ensure that the correct message is given and that there is no interpretation required. Keep instructions short and to the point; long instructions create opportunities for confusion.

3. Repeat back the message

- it is important when receiving instructions that a few simple rules are followed; listen carefully, use questions for clarity, repeat back.
- once a message has been transmitted, the intended receiver should repeat back the message to the sender. When you are giving instructions, check that your instruction has been correctly received by ensuring the intended recipient repeats back the instructions you have given him/her.
- when receiving instructions, listen carefully to the whole instruction and do not interrupt the instruction giver. It is important that instructions be given in a complete form as breaking them up can cause the meaning to be misinterpreted;
- if any part of the instruction is unclear do not hesitate to ask questions once the entire instruction has been given.
- in a stressful environment, mistakes can be made if instructions are not given and received correctly. If you believe you are being given an incorrect instruction, make sure you query the instruction with the instruction giver.
- on receiving an instruction, repeat it back to the giver. Repeat the instruction exactly as it was given, do not attempt to interpret it simply repeat it.

• the instruction giver should then either confirm the instruction or reissue it. This process should be repeated until both parties are certain that the correct message has been sent and received.

4. Confirm repeat back

- after the repeat back, the sender should confirm or correct the receiver. The absence of the confirmation step may result in miscommunication because the receiver may have misheard the instructions and repeated erroneous information.
- a lack of response by the sender may be misinterpreted as a silent confirmation that the repeated message was correct.
- the receiver should not carry out the action until confirmation is received.

5. Closure

• after issuing an instruction avoid additional conversation that may confuse or distract the receiver from acting on the instruction.

This case study provides information on the Commission's approach to rule 2.1 of technical code C of schedule C3 of part C of the Electricity Governance Rules 2003. It is intended for information purposes only and does not create a precedent for future decisions. There's no substitute for Participants getting their own advice.