Power Grid Rapid Response Checklist

The checklist supports identification of the true causes of a reliability event. It considers the event background, root driver, the plan for dealing with such eventualities, and how plans were inadequate. This checklist provides a framework that can be used to debunk the claims of parties seeking to blame renewables for reliability events.

The best sources for timely information to answer checklist questions are typically the system operator, the energy regulator, and the organisation administering energy markets. It may however take time for them to provide detailed reporting.

Before the facts are established, advocates of the clean energy transition have the opportunity to caution that any narrative blaming renewables for events is premature and nearly always turns out to be misinformation. They can also prevent others with business or political interests from seizing the narrative.

The checklist:

a. Demand and supply – what was the background?

- ☐ Was demand high, normal, or low?

b. What appears to be the root cause(s) based on best available information?

- ☐ Grid failure, generation failure, or unforeseen demand patterns?

c. What was the relative severity of the event?

- ☐ How many consumers were affected, for how long, with what specific consequences?

d. What was the system operator's resource plan for meeting demand under the relevant circumstances (assuming there was one)?

- ☐ How much operational capacity did it expect to have in reserve?

e. What was the expected role for renewables in the relevant contingency plan?

- ☐ How many gigawatts of wind and solar and other renewables was the system operator banking on being in operation under the circumstances?

f. To what extent did the system operator plan for and deploy demand flexibility?

- ☐ Did the system operator have access to voluntary curtailment by large industrial consumers for compensation?
- ☐ Are dynamic retail tariffs and smart technology widely deployed across the system?

g. How exactly did the plan fail, i.e. what was supposed to have happened that did not (not what renewables didn't do that they weren't expected to do)?

- ☐ Compared to the system operator plan, how much fossil fuel plant failed to materialise?
- ☐ Compared to the system operator plan, how much renewable energy failed to materialise?
- ☐ Was the level or shape demand caused by circumstances that couldn't reasonably be anticipated given historical experience? Or was there a failure to adequately plan for circumstances that should have been anticipated?

h. What false claims are being promoted by fossil industry players and their enablers?

- ☐ What are they reporting in the media?

i. Why exactly are the claims false?

- ☐ How do the claims stack against the root cause (b) and details of the plan failure (g)?

j. Are there legitimate transition-related challenges manifested in the event?

- ☐ Was a shortage of system inertia an issue?
- ☐ Was production from the wind and/or solar fleet below the reasonably expected range under the circumstances?

k. What best practices could a prudent system operator have employed to avoid the event?

- ☐ Were protections from changes in system frequency set appropriately in plants (and not overly sensitively), and was compliance enforced?
- ☐ Did the system operator have oversight of generation on the distribution network system?
- ☐ Did the system operator procure sufficient system inertia (or inertia replacement services)?