

WHEN BIG LOADS DROP

Large facilities can protect themselves while creating abrupt imbalances on the regional grid.

1

SELF-ISOLATION

Multiple campuses have transferred off the grid within seconds during transmission faults.

2

RIDE-THROUGH

Sensitive controls may disconnect for short voltage sags instead of remaining connected.

3

BACKUP EMISSIONS

Longer transfers increase generator noise, diesel exhaust, and permit exposure.

4

WEAK MODELING

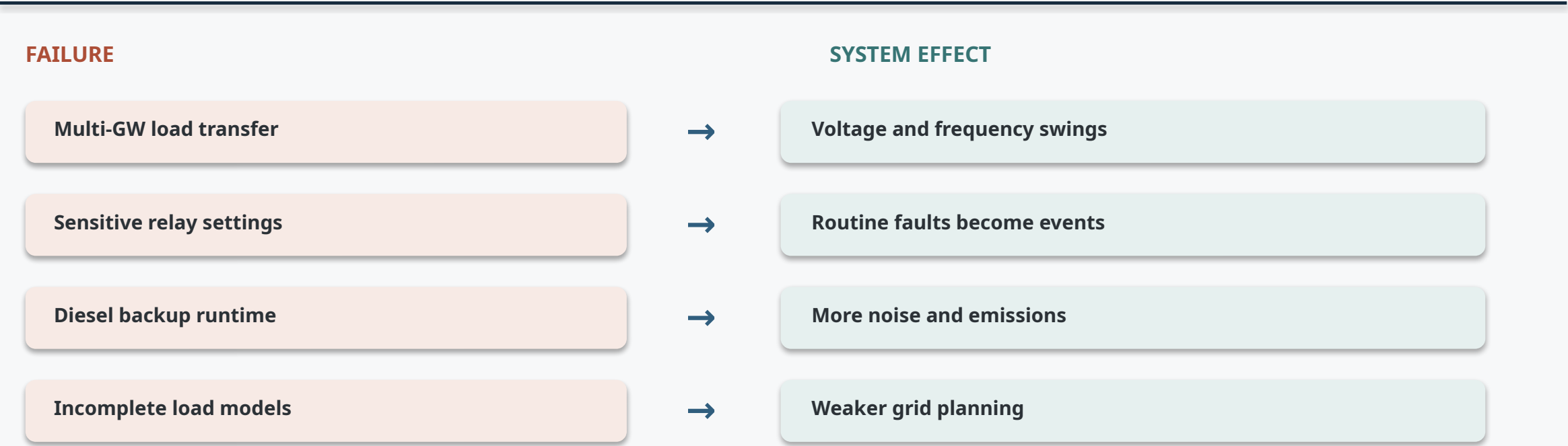
Incomplete dynamic models make utility planning and event prediction harder.

The paper argues that private equipment protection can create public reliability and cost consequences.

PRIVATE PROTECTION CAN CREATE PUBLIC RISK.

ONE FAILURE, WIDER EFFECTS

The facility action can move quickly from a local control decision to a regional system problem.

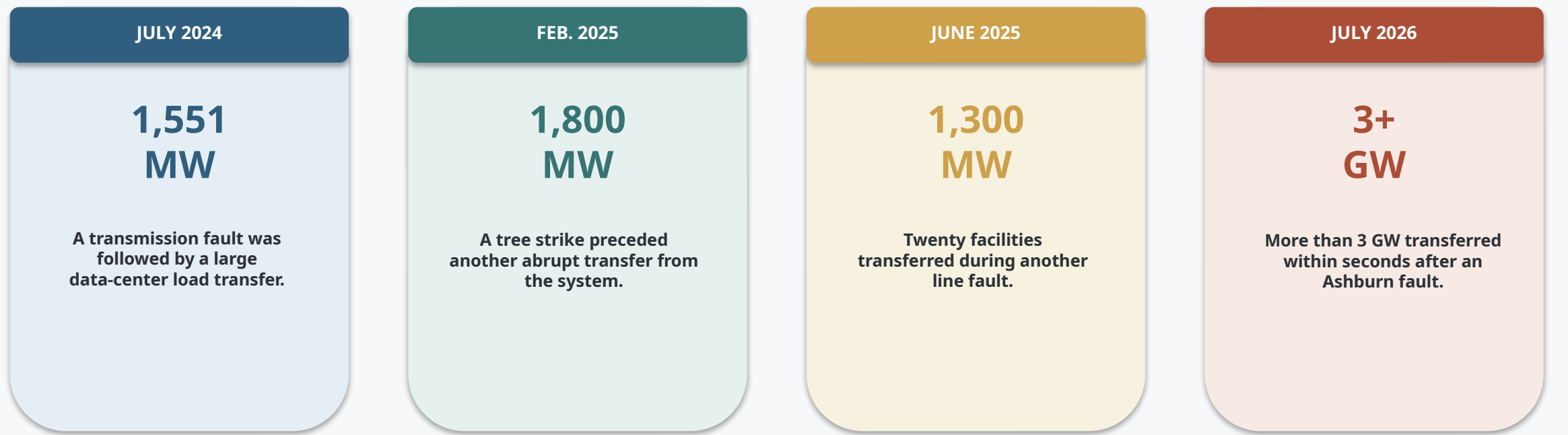


Utilities may need extra equipment and operating actions, while residual costs can reach other customers.

A PRIVATE SWITCH CAN MOVE A PUBLIC GRID.

FOUR DOCUMENTED LOAD DROPS

The issue paper lists repeated Dominion-territory events in which large data-center loads transferred.



The repeated pattern is why NERC, PJM, Dominion, and regulators are revisiting large-load behavior.

THE EVENTS ARE NO LONGER HYPOTHETICAL.

THE CITIZEN 4x4

Four permit questions can connect local approval to regional reliability and public cost.

- 01

REQUIRE RIDE-THROUGH

Ask how the facility will remain connected through ordinary voltage disturbances.
- 02

DEMAND MODELS

Require complete dynamic-load models and event reporting to the utility and County.
- 03

LIMIT GENERATORS

Set enforceable hours, emissions controls, noise limits, and reporting requirements.
- 04

ASSIGN COSTS

Require the operator to bear project and mitigation costs where legally feasible.

Local zoning cannot run the grid, but it can require clear commitments before granting land-use approval.

MAKE THE BIG LOAD BEHAVE LIKE ONE.