NERC Technical Conference: Loss of Non-Consequential Load During First Contingency Events

Kim Jones Analyst North Carolina Utilities Commission August 10, 2010 Scope of existing footnote B?
How define "system fringes"?
Costs to eliminate nonconsequential load loss during first contingency events?
Criteria for case by case review?

Criteria for case-by-case review?

Today's Questions

 Believe very few customer outages have resulted from Footnote B

Does anyone here know of one?

What has been the impact of Footnote B?

- The proposal to prohibit loss of nonconsequential load does not provide benefits to the bulk electric system.
- Changes to footnote B would be an overreach of FERC's jurisdiction into service quality issues more appropriately addressed by state commissions.
- Transmission planners should be allowed to use discretion in allowing for nonconsequential load loss

NC's concerns with the proposed Footnote B revisions The ERO (NERC) is to develop and enforce "reliability standards that provide for an <u>adequate</u> level of reliability of the <u>bulk-</u> <u>power system</u>"

"Bulk-power system" means:

- A) facilities and control systems needed to operate an interconnected electric energy transmission network (or any portion thereof), and
- B) electric energy from generators that is needed to maintain transmission system reliability



- NERC defines "load" as an end-use device or customer.
- By definition, it is a **retail** customer.
- "Load" is not a wholesale customer that resells power.
- "Load" is not a "firm transmission service customer"
 - A "load" might well be downstream from a firm transmission customer
 - The retail supplier, or local distribution company, is the firm transmission customer

What is "load"?

 Customers who are dissatisfied have recourse to state and local regulators.

 State and local regulators have the tools and power they need to improve the performance of the utilities they regulate.

State and local regulators have jurisdiction over electricity distributors and quality of service Whenever the [state] Commission finds that service is inadequate or that additions, extensions, repairs or improvements ought to be made to a public utility's facilities, the Commission shall order that such improvements shall be made

NC Statute 62-42 [paraphrased]

Typical Retail Service Regulations:

- "The Company does not guarantee continuous service"
- "In the event of adverse condition or disturbance on the system of Company, or on any other system directly or indirectly interconnected with it...the Company may...interrupt service to customers"

"Perfect Power" is not guaranteed

- A transmission fix today would be extremely expensive, and a better fix is coming in a few years anyway
- The first contingency event is extremely unlikely to occur at a time when load would have to be dropped
- The transmission operator has the ability to limit the length of the load loss, or the first contingency event that caused it
- The customer has the ability to mitigate the impacts of the outage

Transmission planners should use "loss of load" discretion sparingly

- There is reason to question whether the load is permanent
- The customer load in question is very small and not of a critical nature (like a hospital)
- Generation is proposed (but not yet funded) that would mitigate local outage impacts
- The customers in the area are aware of the risk and prefer to live with that risk rather than have transmission built, due to priorities regarding aesthetics, land use, historical, cultural or environmental significance

What kind of discretion?