

Counterflow

By Steve Huntoon

Winter Ain't Over Yet

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To *paraphrase* Jack Palance in *City Slickers*, winter ain't over yet.

Weather Underground says March is the craziest weather month.¹

Judging from the pair of marathon two-day hearings before the Texas House and Senate, the Texas tragedy has infinite complexities for everything connected to our industry.

But for now, I'd like to focus on the very short term — what lessons we might learn to give us actionable intel for the rest of the winter.² Not just for Texas, but for our industry everywhere.

1. Electric-gas interdependence. We now know that much of the loss of gas supply to gas generators was due to the blackout of electric supply to gas infrastructure.³ This caused the vicious cycle of blackouts causing loss of gas supply to generators, causing more blackouts.

Oncor, the largest electric utility in Texas, said that before the storm it had a list of 35 critical gas facilities to protect from load shed. During the storm another 168 (not a typo) critical gas facilities were identified.

So here's the proactive measure that NERC, the Edison Electric Institute, the Natural Gas Supply Association and the Interstate Natural Gas Association of America can do on an emergency basis: Make sure that every electric utility knows the critical gas facilities in its service territory.

2. Water infrastructure. Ditto on this. Every electric utility should know the water treatment plants and other critical water infrastructure in its service territory.

3. Communications. The lack of timely, accurate information was a huge problem. Not only lack of communications but inaccurate information such as customers being told that there were rolling blackouts and they could expect service to return from time to time. So many



Billy Crystal: Hi Curly. Kill anyone today?
Jack Palance (grinning): Day ain't over yet. | Columbia Pictures

of these customers chose to stay put instead of staying with relatives, friends, etc. And of course, during blackouts there is a huge question of how to get information to customers.

Every electric utility should be asking itself: During an emergency, how do we get timely and accurate information to mass media, to regulators, to elected officials and directly to customers? If the blackout has taken the ISP or home wi-fi down, what about text messages to the customer phone number on file?

4. Black-start units. We know that about half of ERCOT black-start units were out (same as in 2011, by the way). Whatever the reason — maybe diesel fuel freeze, maybe lack of proper maintenance, maybe gas supply was cut — this has got to be addressed. BTW there were

references to basically the end of days if the grid had gone down and a black start would be necessary. That is hyperbole — as long as black-start units actually perform as they're well paid to do.

5. Scheduled, maintenance, planned outages. Whatever the term, every electric utility should be monitoring these like a hawk during winter (and summer) months. Under no circumstances should the allowed megawatts exceed the megawatts assumed in the reliability model for the upcoming winter or summer. That is a recipe for disaster.

We're all trying to deal with this in real time and I would greatly appreciate input on what I've got wrong and what I've left out. Thank you. ■

¹ <https://www.wunderground.com/cat6/March-Weather-Madness-Most-Extreme-Month-Year>.

² For the longer-term study, I hope FERC has a Word version of its August 2011 report because it could mostly just repeat that report in terms of what went wrong, recommendations, etc., this time around. The song remains the same.

³ Kudos to Bloomberg reporters for flagging this long before the hearings. [https://finance.yahoo.com/news/giant-flaw-texas-blackouts-cut-005229826.html#:~:text=\(Bloomberg\)%20%2D%2D%20When%20the%20Texas,to%20hospitals%20and%20nursing%20homes](https://finance.yahoo.com/news/giant-flaw-texas-blackouts-cut-005229826.html#:~:text=(Bloomberg)%20%2D%2D%20When%20the%20Texas,to%20hospitals%20and%20nursing%20homes).

⁴ BTW, Twitter doesn't count as effective customer communication. Only 0.4% of customers in the ERCOT footprint follow Twitter, and only 0.5% of customers in the Oncor footprint do.