Twitter Thread by Laura Walker ████ ████████



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A reminder that the Texas power grid is run by the STATE. Stop blaming city or county officials for power outages.

> ERCOT is the traffic manager of the electric grid which reports to the State. Neither the City nor the County controls or regulates ERCOT or the power generators. That is solely the responsibility of the State. st
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> — Sylvester Turner (@SylvesterTurner) February 15, 2021

Texas is the only state with a power grid separated from the rest of the country. "The separation of the Texas grid from the rest of the country has its origins in the evolution of electric utilities early last century."

"In 1935, President Franklin D. Roosevelt signed the Federal Power Act, which charged the Federal Power Commission with overseeing interstate electricity sales. By not crossing state lines, Texas utilities avoided being subjected to federal rules."

"The Texas grid is called ERCOT, and it is run by an agency of the same name — the Electric Reliability Council of Texas. ERCOT does not actually cover all of Texas. El Paso is on another grid, as is the upper Panhandle and a chunk of East Texas. "

"The ERCOT grid remains beyond the jurisdiction of the Federal Energy Regulatory Commission, which succeeded the Federal Power Commission and regulates interstate electric transmission."

Here's a little mini-explainer: https://t.co/Ct1tP3DavR

This isn't the first time that weatherization has been an issue with equipment failure and rotating outages in Texas. We can look back to 1989 and 2011 for the previous worst Texas power grid management failures.

"In August 2011, six months after an ice storm crippled much of the state and resulted in rotating outages, the Federal Energy Regulatory Commission and the North American Electric Reliability Corporation issued a report with recommendations."

"That investigation revealed what happened in 2011, also happened in 1989, which is the first time ERCOT ever implemented rotating outages." So the federal investigation identified problems. And made recommendations. But could not mandate implementation.

And that is because Texas avoided federal regulation. So it was up to Texas to implement changes to avoid another major power grid failure and disaster. Oh, here we are again. Guess what?

"Winterizing equipment – making sure it can sustain extended periods of below-freezing temperatures – has never been a requirement in Texas like other states."

Oh. Muh freedoms.

Implementing the recommended power grid upgrades to avoid this failure costs money, and unregulated Texas state control of the power grid means Texas could implement - or not - at their leisure, with no federal control or penalty for failing to do so.

Everyone screeching at city or county officials for power outages or blaming "green energy" or whatever is misguided. The state has had TEN YEARS to figure out how to manage a crisis like this arctic blast. Cities & counties are scrambling to mitigate, but they have no control.

At any rate, here's hoping Texas figures out that mandating an upgrade in power grid and procedures is a good thing, or we'll be right back in this situation when the next winter surprise - not a surprise, really - arrives.

Additional sourcing: https://t.co/EmZPtl1gKq

And while we are here: "Don’t point too many fingers at Texas wind turbines, because they’re not the main reason broad swaths of the state have been plunged into darkness."

"While ice has forced some turbines to shut down just as a brutal cold wave drives record electricity demand, wind only comprises 25% of the state’s energy mix this time of year. The majority of outages overnight were plants fueled by natural gas, coal and nuclear."

"In Texas, where 25 gigawatts of wind capacity feeds into the state’s main power grid, wind can sometimes produce as much as 60% of total electricity." BUT . . .

"because wind power tends to ebb in the winter, the grid operator typically assumes that the turbines will generate only about 19% to 43% of their maximum output."

Wind power is supplemental to help go green, not a substitute, and certainly not the core power resource.

“The performance of wind and solar is way down the list among the smaller factors in the disaster that we’re facing,” says Daniel Cohan, associate professor of environmental engineering at Rice University. Blaming renewables for the blackouts “is really a red herring.”

This is one of many news items with headlines about wind turbines in Texas going down that turns out to explain why they are not at the top of the list of the causes of the Texas power failures: https://t.co/ShQit9dlM6

NOTE: I'm no energy expert. Work I have done in that area is oil & gas and not in any technical/engineering capacity. Anyone can google this up. ProTip: stay away from right wing media when you do :P

Here is an actual expert to follow: https://t.co/Oz9idXU5uQ

> To be fair: you can't really count on wind. But ERCOT also WASNT counting on wind much, assuming only ~6 GW would be available (currently theres 1.6 GW). They WERE counting on gas and coal plants (~70 GW of them), which have failed in a massive way: ~25-30 GW have been offline. https://t.co/fBsyhuQwC5
>
> — JesseJenkins (@JesseJenkins) February 15, 2021