How a Winter Storm in Texas Hammered the State and its Energy Market, Potentially Causing Greater Economic Loss than Hurricane Harvey

In the days following Texas's February 2021 winter storm event, unofficially named Winter Storm Uri, we have received many questions from out-of-state colleagues and clients—particularly from those living in colder climates—asking how one winter storm could possibly have wreaked the havoc that it did in Texas. The answer is surprisingly complex, and has nothing to do with Texans' alleged lack of fortitude in cold weather. This was a humanitarian and economic disaster, the legal and economic fallout of which will be felt for years to come.

To start, Uri was an unprecedented weather event in Texas. Temperatures in Dallas, at -2 degrees Fahrenheit, were colder than in Anchorage, Alaska. Cities across the state were blanketed in ice and snow, and more than 3,000 new records for daily low temperatures were set during the week that followed. Infrastructure in Texas, which is one of the warmest states in the U.S., is built to withstand extreme heat but is less fortified against the cold. Roads and bridges iced over, with no salt trucks to service them. Water pipes froze and burst. And electricity demand surged due to historic winter highs as Texans scrambled to warm uninsulated offices and homes.

At the same time demand for electricity spiked, supply fell to unprecedented lows as power plants unexpectedly tripped offline. Natural gas froze in pipelines and at wellheads. Solar energy panels and wind turbines iced over. Nuclear power plants operated at reduced capacity as feed water pumps froze. At Uri's height, almost half of the Texas power grid's 108 gigawatts of generating capacity was offline. Without enough power to meet demand, the Energy Reliability Council of Texas ("ERCOT"), which runs Texas's electricity market and operates it grid, initiated rolling blackouts, forcing millions of Texans into the dark. The rolling blackouts had the unanticipated consequence of knocking still more power plants offline. At one point, the grid was approximately 4 minutes and 30 seconds away from a catastrophic failure that would have thrown Texas's generators and transmission systems offline for months.

The unique structure of Texas's power market left the state vulnerable to an event of this type. In most markets, the grid operator makes capacity payments to generators to ensure that a specified supply of power is available for purchase, but ERCOT does not. ERCOT also does not require generators to winterize, and its rules are structured such that winterization costs are difficult for generators to recoup. These features serve to lower electricity prices when conditions are normal, but they leave the grid susceptible to power shortages when demand is high or supply is low—both of which were happening during Uri. Because the Texas grid is not connected to other grids in the United States, Texas could not make up the shortfall by importing power from another state.

The power shortage spurred a financial catastrophe. On February 15, 2021, the wholesale cost of electricity in Texas, typically $20-$30/MWh, had risen to $1,200/MWh as demand outstripped supply and rolling blackouts began. ERCOT's regulator, the Public Utility Commission of Texas ("PUCT"), reacted by ordering ERCOT to increase prices to $9,000/MWh, a scarcity pricing signal intended to incentivize additional supply. But with roughly 50 gigawatts of generating capacity knocked offline by weather, supply could not meaningfully increase until temperatures began to warm on February 17. ERCOT kept the $9,000/MWh price in place though February 19, many multiples longer than the scarcity pricing signal had ever been applied before. An independent market monitor appointed by the state of Texas later concluded that

ERCOT's imposition of the $9,000/MWh price lasted at least 32 hours too long, resulting in $16 billion of overcharges. Although the monitor has recommended that these charges be reversed, PUCT has signaled reluctance to do so. In the five-day period between February 15-19, ERCOT sold approximately $55 billion of power—approximately the same amount over the previous four *years* combined.

The extraordinary prices that prevailed during Uri have impacted Texas's entire electricity ecosystem. The most visible casualties are the consumer-facing "retail" companies that purchased wholesale power from ERCOT at astronomical prices to sell to customers under fixed-price contracts. One retailer, Brazos Electric Power Cooperative, Inc., recently filed for Chapter 11 bankruptcy after incurring $2.1 billion in charges, and others will likely follow. Although some generators benefitted from the $9,000/MWh price imposed, many others—including those unable to produce power or participate in a market marked by extreme pricing and unavailability of power or fuel for purchase—face significant claims asserted by their counterparties. Multiple natural gas suppliers whose storage or distribution facilities froze during the storm have already filed declaratory judgment actions in Texas court claiming force majeure. The economic effects of the storm were reflected and amplified in the commodities trading and derivatives markets.

Of course, Uri's economic fallout extends far beyond the power market. Texas businesses lost days of productivity during the storm and blackouts. Texas homeowners experienced extensive property damage relating to burst water pipes and other freezing issues. Economic researchers and modelers have estimated that the total economic losses to individuals and businesses from the storm could range from $155 billion to $295 billion. If these estimates are accurate, Uri will be the costliest winter event in U.S. history, and could rival or exceed the economic losses from Hurricane Harvey, which made landfall in Texas in 2017 and caused approximately $190 billion in losses. Catastrophe modeling firm Karen Clark and Company anticipates that insured losses alone resulting from the winter storm will be about $18 billion. With hundreds of thousands of claims filed or anticipated, Uri will likely be the largest insurance claim event ever in Texas.

The storm and surrounding events also extracted a heavy human toll. State authorities suspect that at least 50 deaths were caused by the winter storm, due to causes such as hypothermia, carbon monoxide poisoning, home fires, and deaths from crashes on icy roads. Hundreds of millions of dollars in personal injury claims have already been filed against ERCOT and other participants in Texas's electricity marketplace, with more almost certainly to follow.

The legal issues and challenges from this unprecedented event are just starting to unfold. Uri has already prompted a slew of regulatory filings, lawsuits, and at least one bankruptcy, with more inevitably to come. We expect to see extensive litigation in a variety of contexts concerning whether Uri was a force majeure event. There will be numerous bankruptcies and restructurings for power companies injured in the storm and related creditor lawsuits. Business interruption claims across an array of industries will likely proliferate, and a growing docket of storm-related personal-injury lawsuits and mass actions may ultimately be consolidated into a state MDL. Losses in the complex commodities and derivatives markets that overlay Texas's electricity ecosystem could prompt significant financial litigation. And the numerous administrative proceedings that have been filed against PUC regarding ERCOT's pricing decisions during Uri could ultimately ripen into litigation against the PUC or the state of Texas. With hundreds of billions in losses at stake, the litigation fallout from this storm will persist for years to come.

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Partner in Quinn Emanuel's Houston office. She lived in Houston during Hurricanes Ike and Harvey and can vouch for the fact that Uri's disruptions were similar in severity though different in kind. Matthew Scheck, matthewscheck@quinnemanuel.com, is a Partner in Quinn Emanuel's Austin office. He has lived in Texas for just two months, and hopes that Austin's famous Spring season makes up for this very weird winter.

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If you have any questions about the issues addressed in this Client Alert, or if you would like a copy of any of the materials we reference, please do not hesitate to contact us:

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