

Testimony in Support of HB 1607  
March 25, 2020  
Jean Ryall – Advanced Power Alliance

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Mr. Chairman, Madam Vice Chair and members of the committee. Thank you for allowing me to testify today. My name is Jean Ryall and I am here on behalf of the Advanced Power Alliance testifying in support of HB 1607.

The Members of the Advanced Power Alliance represent a diverse cross-section of the world's leading energy companies, energy investors, energy consumers and power generation manufacturers. We advocate for advanced power technologies including wind, solar and energy storage in Texas.

Projects developed by our member companies and investors generate local tax revenue and multi-generational income for Texas landowners. The success and reliability of the ERCOT Competitive Power Market is of great importance to our members, their customers, local partners and landowners.

We thank Representative Darby for his leadership, knowledge of electric market issues and for introducing HB 1607.

Transmission congestion has plagued the ERCOT Grid for quite some time and the cost have risen dramatically over the last many years. In 2019, the cost of transmission congestion reached 1.2 B dollars. This similar to the cost of congestion in 2018. Comparatively, the cost of congestion during 2016 was just under half a billion dollars. Congestion costs have more than doubled in a short period of time and the cost of congestion is ultimately paid by the consumer. HB 1607 provides much needed remedy to the ever rising costs of congestion and relief for consumers.

Many years ago, congestion had been an issue mainly impacting the West, today, there are constraints and congestion in the West, Panhandle, the Valley, the Coast, Houston and in the Dallas area. Grid congestion is a state-wide issue at this time and this bill will give the commission and ERCOT another tool to use to provide relief by expediting transmission upgrades that are already identified in

ERCOT's planning process to meet load growth and decrease the cost of the overall cost of congestion. Congestion decreases grid reliability and resiliency particularly during weather events like hurricanes and extreme heat or freezing temperatures.

The recent extreme winter weather event (February 14-February 19) further exposed the congested state of our power grid when megawatts of power were desperately needed most. During the recent winter event, there were periods of time when there were MWs of power generated that could not be delivered to the consumer because of constraints and congestion on the grid. While millions of Texans were without power, there was approximately 5,000 MWs of stranded generation that could not be delivered to consumers. That is enough generation to power approximately 1 million homes. This bill provides a tool for the commission and ERCOT to expedite transmission upgrades that are already in ERCOT's planning horizon. According to the Independent Market Monitor, the real-time cost of congestion during this time period, was \$562 million. That is higher than the cost of annual cost of congestion in 2016.

Transmission congestion is a costly issue that impacts electricity consumers, renewable and thermal generators and the overall reliability of the grid. Congestion drives up the wholesale cost of power and has a chilling effect on new power plant investment.

In addition, our members are seeing a migration of projects from resource rich zones to less resource rich areas resulting in a reduction in project power output, increases in development costs and typically an increase in time to develop new projects.

The current transmission planning process is antiquated and is simply not keeping pace with our rapidly evolving market and growing demand for power. This creates additional stress on the grid leading to reliability concerns, placing additional costs on consumers and possible resource adequacy issues. HB 1607 improves upon the existing transmission planning process. "A holistic transmission planning methodology or process that more accurately values the benefits of new transmission is needed for Texas".

Quotes from the December 2020 ERCOT Long-Term System Assessment.

“The need for transmission upgrades is driven by the location of generation developments and trends in customer demand growth.” “Large industrial load growth in both rural and urban areas increase the need for major transmission improvements.” “New load patterns and new technologies such as electric vehicles also drive the need for new transmission.”

The recent winter event further exposed the challenges of congestion on the grid. Preliminary data indicates that there were megawatts of thermal and renewable power generated there unable to be delivered to consumers because of congestion on the grid.

Transmission congestion increases the overall cost of electricity for consumers. When transmission is upgraded, congestion costs are greatly reduced and the reduction in the cost of congestion which is ultimately paid by the consumer, offsets the cost of the new transmission.

Dr. Joshua Rhodes with the University of Texas developed a model of the grid and performed transmission analysis earlier this year. He found that \$4 B in near-term grid improvements would create at least \$7 B in energy cost savings, reduce congestion costs, creating over \$11 B in local taxes and \$13 B in land-owner payments. Other benefits include reduced emissions and a reduction in power generation water usage saving approximately 25 billion gallons per year.

HB 1607 will deliver benefits to all Texas energy sectors and consumers including the Permian Basin Industries, manufacturing and industrial expansions on the coast, and residential consumers. While this measure does focus on infrastructure, it also delivers important policy solutions. Specifically, it improves upon the transmission planning process – an issue of concern to nearly all ERCOT market participants. The bill creates a more holistic transmission planning process that better captures the benefits of transmission for all stakeholders by expediting the deployment of some transmission infrastructure already in the planning stages to address both inter-zonal and intra-zonal congestion.

HB 1607 provides the commission and ERCOT another tool that will improve upon the transmission planning and approval process and that better aligns with the

ever changing mix of resources on the grid. This is good for consumers and good for the state's economy.

Thank you again for allowing me to testify and I am happy to answer any questions.

"The bill seeks to expedite transmission infrastructure that is already in the ERCOT planning stages. These are transmission lines that ERCOT has already identified as being needed for the state to meet load growth and to operate a reliable grid that delivers affordable power to all consumers."

## CREZ

HB 1607 repeals CREZ. It improves upon the ERCOT transmission planning process and expedites needed transmission upgrades for a stronger, more reliable grid – benefiting all Texas energy sectors and consumer classes.

Although CREZ brought benefits to other industries, it was primarily designed to help grow renewable energy. The focus of HB 1607 is to deliver benefits to all Texas energy sectors and consumers including the Permian Basin Industries, manufacturing and industrial expansions on the coast, and residential.

CREZ was an infrastructure only bill. While this measure does focus on some infrastructure, it also delivers important policy solutions. Specifically, it improves upon the transmission planning process – an issue of concern to nearly all ERCOT market participants. The bill creates a more holistic transmission planning process that better captures the benefits of transmission for all stakeholders.

CREZ created a roadmap – we have the roadmap and we do not need to create anything new. The bill simply seeks to expedite transmission infrastructure that is already in the early ERCOT planning stages. These transmission lines have already been identified by ERCOT as being needed for the state to meet load growth and to operate a reliable grid that delivers affordable power to all consumers. The bill

will quicken the pace to better address growing problems and relieve the cost of congestion that is ultimately paid by consumers.

### Generation Capacity (nameplate capacity) and Capacity Factor

Generation Nameplate Capacity is the maximum power output a generator can produce under at full power.

Every type of generation has a “capacity factor” or “Net Capacity” that is less than 100% of its nameplate capacity. Most generators do not operate at full capacity all the time. Output may vary based on maintenance issues, weather conditions such as wind and sun availability, fuel costs or instructions from the grid operator.