By: Hall, et al. S.B. No. 75

A BILL TO BE ENTITLED

AN ACT

relating to the resilience of the electric grid and certain municipalities.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. The legislature finds that:

(1) electric grid outages threaten the lives of the citizens of this state and pose a disproportionately large risk to:

(A) the elderly, vulnerable, and underprivileged within this state; and

(B) communities facing disproportionate environmental health burdens and population vulnerabilities relating to facilities such as chemical plants and refineries that can become environmental disaster areas when taken off-line due to loss of electricity;

(2) the 16 critical infrastructure sectors identified in President Barack Obama's Presidential Policy Directive "Critical Infrastructure Security and Resilience" (PPD-21) (chemical, commercial facilities, communications, critical manufacturing, dams, defense industrial base, emergency services, energy, financial services, food and agriculture, government facilities, healthcare and public health, information technology, nuclear reactors, materials, and waste, transportation systems, water and wastewater systems) depend on the electric grid in this state and make the grid's protection vital to the economy of this

nation and homeland security;

(3) the power outage that occurred in this state in February 2021 caused:

(A) death and suffering in this state;

(B) economic loss to this state's economy;

(C) impacts to all critical infrastructures in this state;

(D) the dispatch of generation units that likely exceeded limits established by the Environmental Protection Agency for sulfur dioxide, nitrogen oxide, mercury, and carbon monoxide emissions and wastewater release limits;

(E) radically increased pricing of electricity and made electric power bills unaffordable to many customers across this state; and

(F) exacerbation of COVID-19 pandemic risk by forcing many of the state's citizens to consolidate at warming centers and in other small spaces where warmth for survival superseded social distancing protocols;

(4) a previous large-scale power outage occurred in this state in February 2011 during which 4.4 million customers were affected;

(5) this state is uniquely positioned to prevent power outages because this state is a net exporter of energy and is the only state with an electric grid almost exclusively within its territorial boundaries;

(6) the 2011 and 2021 power outages call into question:

(A) whether too much risk has been accepted regarding weatherization of electric generation infrastructure;

(B) whether this state lacks the internal distribution structure and control systems to manage rolling outages; and

(C) whether sufficient resources have been allocated toward overall grid resilience;

(7) public confidence in the resilience of the electric grid in this state is essential to ensuring economic prosperity, domestic tranquility, continuity of government, and life-sustaining systems;

(8) a resilient electric grid that offers businesses in this state continuity of operations in the event of a natural or man-made disaster will be an unrivaled attraction for businesses to expand or move their operations to this state;

(9) a resilient electric grid that can operate in the event of a natural or man-made disaster will protect important facets of this state, including its military installations and environment;

(10) current market incentives and regulations are not sufficient for electric utilities to:

(A) prioritize grid security and resilience; and

(B) protect the grid against hazards;

(11) protection of the electric grid in this state against hazards would assure businesses and the citizens of this state that the "lights will be back on first in Texas" in the event of a nationwide catastrophe affecting electric infrastructure,

sparing this state from catastrophic societal and environmental consequences; and

(12) when this state begins implementation of the plan for all hazards resilience described by Section 44.007, Utilities Code, as added by this Act, to protect the electric grid in this state, short-term and long-term economic benefits will far exceed even the most optimistic estimates of the conventional economic incentives provided by tax abatements to attract businesses to this state.

SECTION 2. Subtitle B, Title 2, Utilities Code, is amended by adding Chapter 44 to read as follows:

CHAPTER 44. GRID RESILIENCE

Sec. 44.001. DEFINITIONS. In this chapter:

(1) "All hazards" means:

(A) terrestrial weather including wind, hurricanes, tornadoes, flooding, ice storms, extended cold weather events, heat waves, and wildfires;

(B) seismic events including earthquakes and tsunamis;

(C) physical threats including terrorist attacks with direct fire, drones, explosives, and other methods of physical sabotage;

(D) cyber attacks including malware attacks and hacking of unprotected or compromised information technology networks;

(E) manipulation of operational technology devices including sensors, actuators, and drives;

(F) electromagnetic threats through man-made radio frequency weapons, high-altitude nuclear electromagnetic pulses, and naturally occurring geomagnetic disturbances;

(G) electric generation supply chain vulnerabilities including insecure or inadequate fuel transportation or storage; and

(H) insider threats caused by compromised or hostile personnel working within government or the utility industry.

(2) "Micro-grid" means a group of interconnected loads and distributed energy resources inside clearly defined electrical boundaries.

(3) "Security commission" means the Texas Grid Security Commission.

Sec. 44.002. TEXAS GRID SECURITY COMMISSION. (a) The Texas Grid Security Commission is composed of the following members:

(1) a representative of the Texas Division of Emergency Management appointed by the chief of that division;

(2) a representative of the commission appointed by that commission;

(3) a representative of the Railroad Commission of Texas appointed by that commission;

(4) a representative of the independent organization certified under Section 39.151 for the ERCOT power region appointed by the chief executive officer of that organization;

(5) a representative of power generation companies appointed by the chief of the Texas Division of Emergency

Management; and

(6) a representative of transmission and distribution utilities appointed by the chief of the Texas Division of Emergency Management.

(b) The Texas Division of Emergency Management shall designate a member of the security commission to serve as presiding officer.

(c) The security commission shall convene at the call of the presiding officer.

(d) The security commission shall report to the chief of the Texas Division of Emergency Management.

(e) A vacancy on the security commission is filled by appointment for the unexpired term in the same manner as the original appointment.

(f) To the extent possible, individuals appointed to the security commission must be residents of this state.

(g) The chief of the Texas Division of Emergency Management may invite officials or former officials of the United States Department of Defense or Department of Homeland Security with expertise on electromagnetic pulse defense to advise the security commission.

(h) The presiding officer of the security commission or the chief of the Texas Division of Emergency Management may invite to advise the security commission any person whose expertise the security commission considers necessary to carry out the purposes of this chapter, including individuals recognized as experts in the fields of law enforcement, emergency services, communications,

water and sewer services, health care, financial services, agriculture, transportation, electricity markets, cybersecurity of grid control systems, electromagnetic pulse mitigation, terrestrial and solar weather, and micro-grids.

Sec. 44.003. GRID RESILIENCE INFORMATION. (a) Each of the following members of the security commission shall apply for a secret security clearance or an interim secret security clearance to be granted by the federal government:

(1) the representative of the independent organization certified under Section 39.151 for the ERCOT power region;

(2) the representative of the Texas Division of Emergency Management; and

(3) the representative of the commission.

(b) A member of the security commission listed under Subsection (a) who is granted an applicable security clearance under that subsection is a member of the information security working group.

(c) The information security working group shall determine:

(1) which information created or obtained by the security commission is confidential;

(2) which members of the security commission may access which types of information received by the security commission; and

(3) which members, other than members of the working group, should apply for a secret security clearance or interim clearance granted by the federal government.

(d) Information that the information security working group determines is confidential under Subsection (c) shall be stored and maintained by the independent organization certified under Section 39.151 for the ERCOT power region.

(e) The security commission must maintain a reasonable balance between public transparency and security for information determined to be confidential under Subsection (c).

(f) Confidential information created or obtained by the security commission is not subject to disclosure under Chapter 552, Government Code.

(g) A meeting of the security commission that involves the discussion of confidential information is not subject to Chapter 551, Government Code.

Sec. 44.004. GRID RESILIENCE EVALUATION. (a) The security commission shall evaluate, using available information on past power outages in ERCOT, all hazards to the ERCOT electric grid, including threats that can cause future outages. The security commission shall evaluate the resilience of municipalities in this state in the following essential areas:

(1) emergency services;

(2) communications systems;

(3) water and sewer services;

(4) health care systems;

(5) financial services;

(6) energy systems, including whether energy, electric power, and fuel supplies are protected and available for recovery in the event of a catastrophic power outage; and

(7) transportation systems.

(b) The security commission may create groups to identify and address each hazard as necessary. The security commission must assess each hazard both on the likelihood of occurrence of the hazard and the potential consequences of the hazard.

(c) The security commission shall identify methods by which this state can support an overall national deterrence policy as proposed by the United States Cyberspace Solarium Commission, including by:

(1) identifying means to ensure that measures taken to increase resilience of electric utilities against all hazards support critical national security functions in this state; and

(2) engaging the Texas National Guard to be trained as first responders to cybersecurity threats to the ERCOT electric grid and other critical infrastructure.

(d) The security commission shall evaluate nuclear generation sites in this state, the resilience of each nuclear reactor to all hazards, and the resilience to all hazards of off-site power for critical safety systems that support the reactor and spent fuel. The security commission may communicate with the Nuclear Regulatory Commission to accomplish the evaluation.

(e) The security commission shall evaluate current Critical Infrastructure Protection standards established by the North American Electric Reliability Corporation and standards set by the National Institute of Standards and Technology to determine the most appropriate standards for protecting grid infrastructure in this state.

(f) The security commission shall investigate the steps that local communities and other states have taken to address grid resilience. The security commission may request funding from the Texas Division of Emergency Management to conduct site visits to these locations as required.

(g) The security commission shall identify universities based in this state that have expertise in cybersecurity and other matters that can contribute to the security commission's goal of mitigating all hazards to the grid in this state.

(h) In carrying out the security commission's duties under this section, the security commission may solicit information from:

(1) defense contractors with experience protecting defense systems from electromagnetic pulses;

(2) electric utilities that have developed electromagnetic pulse protections for the utilities' grid assets;

(3) the United States Department of Homeland Security; and

(4) the Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack.

Sec. 44.005. RESILIENCE STANDARDS. (a) Based on the findings of the evaluations and investigations conducted under Section 44.004, the security commission shall consider and recommend resilience standards for municipalities and critical components of the ERCOT electric grid.

(b) Standards considered and recommended for energy systems of municipalities should include provisions to ensure that energy, electric power, and fuel supplies are protected and available for

recovery in the event of a catastrophic power outage.

(c) Not later than October 1, 2026, the security commission shall prepare and deliver a report to the legislature on the recommended resilience standards required under this section and an anticipated timeline for implementation of the standards.

Sec. 44.006. MICRO-GRIDS. The security commission shall recommend resilience standards for micro-grids. The standards must be developed for both alternating current and direct current.

Sec. 44.007. PLAN FOR ALL HAZARDS RESILIENCE. (a) Not later than October 1, 2026, the security commission shall prepare and deliver to the legislature a plan for protecting the ERCOT electric grid from all hazards, including a catastrophic loss of power in the state.

(b) The plan must include:

(1) any weatherization requirements in addition to requirements established under Section 35.0021 necessary to prevent power outages from extreme cold weather events, an analysis of whether these requirements would induce cyber vulnerabilities, and an analysis of the associated costs for these requirements;

(2) provisions for installing, replacing, or upgrading industrial control systems and associated networks, or the use of compensating controls or procedures, in critical facilities to address cyber vulnerabilities;

(3) provisions for installing, replacing, or upgrading extra high-voltage power transformers and supervisory control and data acquisition systems to withstand 100 kilovolts/meter E1 electromagnetic pulses and 85 volts/kilometer

E3 electromagnetic pulses;

(4) a timeline for making improvements to remaining infrastructure to meet resilience standards adopted by the security commission under Section 44.005;

(5) long-term resilience provisions for supporting industries including:

(A) communications;

(B) food supply;

(C) fuel supply;

(D) health care;

(E) nuclear reactors, materials, and waste;

(F) transportation; and

(G) water and sewer services; and

(6) any additional provisions considered necessary by the security commission.

(c) The security commission may consult with the Private Sector Advisory Council in developing the plan.

Sec. 44.008. GRID RESILIENCE REPORT. (a) Not later than January 1 of each year, the security commission shall prepare and deliver a nonclassified report to the legislature, the governor, and the commission assessing natural and man-made threats to the electric grid and efforts to mitigate the threats.

(b) The security commission shall make the report available to the public.

(c) In preparing the report, the security commission may hold confidential or classified briefings with federal, state, and local officials as necessary.

SECTION 3. This Act takes effect immediately if it receives a vote of two-thirds of all the members elected to each house, as provided by Section 39, Article III, Texas Constitution. If this Act does not receive the vote necessary for immediate effect, this Act takes effect September 1, 2025.