

BILL ANALYSIS

Senate Research Center
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C.S.S.B. 1606
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Business & Commerce
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Committee Report (Substituted)

AUTHOR'S / SPONSOR'S STATEMENT OF INTENT

The 82nd Legislature failed to protect the grid after the 2011 winter storm. That failure resulted in the February 2021 winter storm giving millions of Texans firsthand experience with power outages varying from a few hours to nearly a week. Apart from the disruption of residences losing power, an extended power outage has economy-crippling financial implications, potentially unraveling our modern society. Electricity is no longer a luxury, it has risen in importance to be behind only air and water in sustaining life. Sustainable economic prosperity for future generations of Texans is dependent upon a resilient electrical grid.

This bill would provide for continued economic prosperity for the state and prepare for increased future demand by creating the Texas Grid Security Commission under the direction of the Texas Division of Emergency Management to oversee the process by which the critical infrastructure of the power grid is identified and hardened. This bill would also promote resilient energy communities that could protect against a catastrophic loss of power as well as respond quickly in the event of a major outage.

(Original Author's/Sponsor's Statement of Intent)

C.S.S.B. 1606 amends current law relating to the resilience of the electric grid and certain municipalities.

RULEMAKING AUTHORITY

This bill does not expressly grant any additional rulemaking authority to a state officer, institution, or agency.

SECTION BY SECTION ANALYSIS

SECTION 1. Amends Subtitle B, Title 2, Utilities Code, by adding Chapter 44, as follows:

CHAPTER 44. GRID RESILIENCE

Sec. 44.001. DEFINITIONS. Defines "all hazards," "micro-grid," and "security commission."

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

- (1) a representative of the Texas Division of Emergency Management (TDEM) appointed by the chief of TDEM;
- (2) a representative of the State Office of Risk Management (SORM) appointed by the risk management board;
- (3) a representative of the independent organization certified under Section 39.151 (Essential Organizations) for the ERCOT region appointed by the chief executive officer of the organization;

- (4) a representative of the Texas Military Department (TMD) appointed by the adjutant general of TMD;
- (5) a representative of the Texas Military Preparedness Commission appointed by that commission;
- (6) a representative of the Office of State-Federal Relations (OSFR) appointed by the director of OSFR;
- (7) a representative of the Department of Information Resources (DIR) appointed by the executive director of DIR;
- (8) a representative of power generation companies appointed by the chief of TDEM;
- (9) two representatives of transmission and distribution utilities appointed by the chief of TDEM;
- (10) three individuals with expertise in critical infrastructure protection appointed by the chief of TDEM, to represent the public interest;
- (11) one representative appointed by the chief of TDEM from each of certain essential services sectors.
- (12) an expert in the field of higher education appointed by the chief of TDEM; and
- (13) an expert in the field of electricity markets and regulations appointed by the chief of TDEM.

(b) Authorizes the chief of TDEM to invite members or former members of the United States Air Force's Electromagnetic Defense Task Force to the security commission.

(c) Requires TDEM to designate a member of the security commission to serve as presiding officer.

(d) Requires the security commission to convene at the call of the presiding officer.

(e) Requires the security commission to report to the chief of TDEM.

(f) Provides that a vacancy on the security commission is filled by appointment for the unexpired term in the same manner as the original appointment.

(g) Requires individuals appointed to the security commission, to the extent possible, to be residents of this state.

(h) Authorizes the presiding officer of the security commission or the chief of TDEM to invite subject matter experts to advise the security commission, including individuals recognized as experts in the fields of electricity markets, cybersecurity of grid control systems, electromagnetic pulse mitigation, terrestrial and solar weather, and micro-grids. Authorizes the presiding officer to invite an individual for this purpose regardless of whether the individual is a resident of this state.

Sec. 44.003. GRID RESILIENCE INFORMATION. (a) Requires each of the following members of the security commission to 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 region;
- (2) the representative of TDEM; and
- (3) the representative of SORM.

(b) Provides that 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) Requires the information security working group to determine

(1) which information received by the security commission that is used in determining the vulnerabilities of the electric grid or that is related to measures to be taken to protect the grid is confidential and not subject to Chapter 552 (Public Information), Government Code;

(2) which members of the security commission are authorized to 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) Requires that information that the information security working group determines is confidential under Subsection (c) be stored and maintained by the independent organization certified under Section 39.151 for the ERCOT power region.

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

(f) Provides that nothing in this section abrogates any rights or remedies under Chapter 552, Government Code.

Sec. 44.004. GRID RESILIENCE EVALUATION. (a) Requires the security commission to evaluate, using available information on past blackouts in ERCOT, all hazards to the ERCOT electric grid, including threats that can cause future blackouts.

(b) Authorizes the security commission to create groups or teams to address each hazard as necessary. Requires the security commission to assess each hazard both on the likelihood of occurrence of the hazard and the potential consequences of the hazard.

(c) Requires the security commission to identify methods by which the state can support an overall national deterrence policy as proposed by the Cyberspace Solarium Commission including by:

(1) identifying means to ensure that all hazards resilience for electric utilities supports 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) Requires the security commission to 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. Authorizes the security commission to communicate with the Nuclear Regulatory Commission to accomplish the evaluation.

(e) Requires the security commission to 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 the grid infrastructure in this state.

(f) Requires the security commission to investigate the steps that local communities and other states have taken to address grid resilience. Authorizes the security commission to request funding to conduct site visits to these locations as required.

(g) Requires the security commission to 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) Authorizes the security commission, in carrying out the commission's duties under this section, to solicit information from:

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

(2) electric utilities that have developed electromagnetic pulse protections for 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. **GRID RESILIENCE RECOMMENDATIONS.** Requires the security commission, based on the findings and evaluations conducted under Section 44.004, to develop resilience recommendations for critical components of the ERCOT electric grid.

Sec. 44.006. **PLAN FOR ALL HAZARDS RESILIENCE.** (a) Requires the security commission, not later than January 1, 2022, to 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) Requires that the plan include:

(1) weatherizing recommendations to prevent blackouts from extreme cold weather events, an analysis of whether these recommendations would induce cyber vulnerabilities, and an analysis of the associated costs for these recommendations;

(2) recommendations 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 and associated costs for these recommendations;

(3) recommendations 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 and associated costs for these recommendations;

(4) long-term resilience provisions for supporting certain industries;

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

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

Sec. 44.007. GRID RESILIENCE REPORT. (a) Requires the security commission, not later than January 1 of each year, to prepare and deliver a nonclassified report to the legislature, the governor, and the Public Utility Commission assessing natural and man-made threats to the electric grid and efforts to mitigate the threats.

(b) Authorizes the security commission, in preparing the report, to hold confidential or classified briefings with federal, state, and local officials as necessary.

Sec. 44.008. MICRO-GRIDS. Requires the security commission to establish resilience standards for micro-grids and certify a micro-grid that meets the standards. Requires that the standards be developed for both alternating current and direct current micro-grids.

SECTION 2. Amends Chapter 380, Local Government Code, by adding Section 380.004, as follows:

Sec. 380.004. FIVE STAR GOLD RESILIENT COMMUNITIES. (a) Requires the security commission to establish resilience standards for municipalities in certain essential service areas.

(b) Requires that standards for energy systems under Subsection (a) 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) Authorizes the security commission, on the application of a municipality for the designation, to designate a municipality that meets the resilience standards in the applicable service area as:

- (1) a Resilient Emergency Services Community;
- (2) a Resilient Communications Systems Community;
- (3) a Resilient Clean Water and Sewer Services Community;
- (4) a Resilient Health Care Systems Community;
- (5) a Resilient Financial Services Community;
- (6) a Resilient Energy Community; or
- (7) a Resilient Transportation Community.

(d) Authorizes the security commission to designate a municipality that meets the resilience standards in five of the seven service areas as a Five Star Gold Resilient Community.

(e) Prohibits a municipality from using a resilient community designation in advertising, marketing, or economic development initiatives unless the security commission has awarded the municipality with the designation in the applicable service area or as a Five Star Gold Resilient Community.

SECTION 3. Requires the security commission, not later than January 1, 2023, to prepare and deliver a report to the legislature on the progress of implementing resilience recommendations developed under Section 44.005, Utilities Code, as added by this Act.

SECTION 4. Effective date: upon passage or September 1, 2021.