

By: Cain

H.B. No. 941

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 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

1 nation and homeland security;

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

4 (A) death and suffering in this state;

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

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

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

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

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18 superseded social distancing protocols;

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

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

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

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

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

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

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

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

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

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

22 (A) prioritize grid security and resilience; and

23 (B) protect the grid against hazards;

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

1 sparing this state from catastrophic societal and environmental
2 consequences; and

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

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

12 CHAPTER 44. GRID RESILIENCE

13 Sec. 44.001. DEFINITIONS. In this chapter:

14 (1) "All hazards" means:

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

18 (B) seismic events including earthquakes and
19 tsunamis;

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1 Management; and

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

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

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

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

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

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

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

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

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

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

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

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

14 (3) the representative of the commission.

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

19 (c) The information security working group shall determine:

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

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

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

1 (d) Information that the information security working group
2 determines is confidential under Subsection (c) shall be stored and
3 maintained by the independent organization certified under Section
4 39.151 for the ERCOT power region.

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

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

11 (g) A meeting of the security commission that involves the
12 discussion of confidential information is not subject to Chapter
13 551, Government Code.

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

- 20 (1) emergency services;
21 (2) communications systems;
22 (3) water and sewer services;
23 (4) health care systems;
24 (5) financial services;
25 (6) energy systems, including whether energy,
26 electric power, and fuel supplies are protected and available for
27 recovery in the event of a catastrophic power outage; and

1 (7) transportation systems.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1 recovery in the event of a catastrophic power outage.

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

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

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

14 (b) The plan must include:

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

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

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

1 E3 electromagnetic pulses;

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

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

7 (A) communications;

8 (B) food supply;

9 (C) fuel supply;

10 (D) health care;

11 (E) nuclear reactors, materials, and waste;

12 (F) transportation; and

13 (G) water and sewer services; and

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

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

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

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

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

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