

By: Hall, et al.

S.B. No. 1606

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. 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

1 pulse, and naturally occurring geomagnetic disturbances;

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

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

8 (2) "Micro-grid" means a group of interconnected loads
9 and distributed energy resources inside clearly defined electrical
10 boundaries that act as a single controllable entity with respect to
11 the grid.

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

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

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

18 (2) a representative of the State Office of Risk
19 Management appointed by the risk management board;

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

23 (4) a representative of the Texas Military Department
24 appointed by the adjutant general of that department;

25 (5) a representative of the Texas Military
26 Preparedness Commission appointed by that commission;

27 (6) a representative of the Office of State-Federal

1 Relations appointed by the director of that office;
2 (7) a representative of the Department of Information
3 Resources appointed by the executive director of that department;
4 (8) a representative of power generation companies
5 appointed by the chief of the Texas Division of Emergency
6 Management;
7 (9) two representatives of transmission and
8 distribution utilities appointed by the chief of the Texas Division
9 of Emergency Management;
10 (10) three individuals with expertise in critical
11 infrastructure protection appointed by the chief of the Texas
12 Division of Emergency Management, to represent the public interest;
13 (11) one representative appointed by the chief of the
14 Texas Division of Emergency Management from each of the following
15 essential services sectors:
16 (A) law enforcement;
17 (B) emergency services;
18 (C) communications;
19 (D) water and sewer services;
20 (E) health care;
21 (F) financial services;
22 (G) food and agriculture;
23 (H) transportation; and
24 (I) energy;
25 (12) an expert in the field of higher education
26 appointed by the chief of the Texas Division of Emergency
27 Management; and

1 (13) an expert in the field of electricity markets and
2 regulations appointed by the chief of the Texas Division of
3 Emergency Management.

4 (b) The chief of the Texas Division of Emergency Management
5 may invite members or former members of the United States Air
6 Force's Electromagnetic Defense Task Force to the security
7 commission.

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

11 (d) The security commission shall convene at the call of the
12 presiding officer.

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

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

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

20 (h) The presiding officer of the security commission or the
21 chief of the Texas Division of Emergency Management may invite
22 subject matter experts to advise the security commission, including
23 individuals recognized as experts in the fields of electricity
24 markets, cybersecurity of grid control systems, electromagnetic
25 pulse mitigation, terrestrial and solar weather, and micro-grids.
26 The presiding officer may invite an individual for this purpose
27 regardless of whether the individual is a resident of this state.

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

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

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

9 (3) the representative of the State Office of Risk
10 Management.

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

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

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

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

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

27 (d) Information that the information security working group

1 determines is confidential under Subsection (c) shall be stored and
2 maintained by the independent organization certified under Section
3 39.151 for the ERCOT power region.

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

7 (f) Nothing in this section abrogates any rights or remedies
8 under Chapter 552, Government Code.

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

13 (b) The security commission may create groups or teams,
14 including groups or teams with external stakeholders, to address
15 each hazard as necessary. The security commission must assess each
16 hazard both on the likelihood of occurrence of the hazard and the
17 potential consequences of the hazard.

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

21 (1) identifying means to ensure that all hazards
22 resilience for electric utilities supports critical national
23 security functions in this state; and

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

27 (d) The security commission shall evaluate nuclear

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

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

12 (f) The security commission shall investigate the steps
13 that local communities and other states have taken to address grid
14 resilience. The security commission may request funding to conduct
15 site visits to these locations as required.

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

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

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

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

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

27 and

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

3 Sec. 44.005. GRID RESILIENCE RECOMMENDATIONS. Based on the
4 findings of the evaluations and investigations conducted under
5 Section 44.004, the security commission shall develop resilience
6 recommendations for critical components of the ERCOT electric grid.

7 Sec. 44.006. RECOMMENDED PLAN FOR ALL HAZARDS RESILIENCE.

8 (a) Not later than January 1, 2022, the security commission shall
9 prepare and deliver to the legislature a recommended plan for
10 protecting the ERCOT electric grid from all hazards, including a
11 catastrophic loss of power in the state.

12 (b) The recommended plan must include:

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

17 (2) recommendations for installing, replacing, or
18 upgrading industrial control systems and associated networks, or
19 the use of compensating controls or procedures, in critical
20 facilities to address cyber vulnerabilities and associated costs
21 for these recommendations;

22 (3) recommendations for installing, replacing, or
23 upgrading extra high-voltage power transformers and supervisory
24 control and data acquisition systems to withstand 100
25 kilovolts/meter E1 electromagnetic pulses and 85 volts/kilometer
26 E3 electromagnetic pulses and associated costs for these
27 recommendations;

1 (4) long-term grid resilience provisions for
2 supporting industries including:

3 (A) nuclear reactors, materials, and waste;

4 (B) fuel supply;

5 (C) health care;

6 (D) communications;

7 (E) water and sewer services;

8 (F) food supply; and

9 (G) transportation; and

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

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

14 Sec. 44.007. GRID RESILIENCE REPORT. (a) Not later than
15 January 1 of each year, the security commission shall prepare and
16 deliver a nonclassified report to the legislature, the governor,
17 and the commission assessing natural and man-made threats to the
18 electric grid and efforts to mitigate the threats.

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

22 Sec. 44.008. MICRO-GRIDS. The security commission shall
23 establish resilience standards for micro-grids and certify a
24 micro-grid that meets the standards. The standards must be
25 developed for both alternating current and direct current
26 micro-grids.

27 SECTION 2. Chapter 380, Local Government Code, is amended

1 by adding Section 380.004 to read as follows:

2 Sec. 380.004. FIVE STAR GOLD RESILIENT COMMUNITIES. (a)
3 After the Texas Grid Security Commission develops grid resilience
4 recommendations under Section 44.005, Utilities Code, the grid
5 security commission in consultation with diverse stakeholder
6 groups composed of industry experts from various populations and
7 industry types shall develop grid resilience recommendations for
8 municipalities in the following essential services areas:

- 9 (1) emergency services;
- 10 (2) communications systems;
- 11 (3) clean water and sewer services;
- 12 (4) health care systems;
- 13 (5) financial services;
- 14 (6) energy systems; and
- 15 (7) transportation systems.

16 (b) Recommendations for energy systems under Subsection (a)
17 must include provisions to ensure that energy, electric power, and
18 fuel supplies are protected and available for recovery in the event
19 of a catastrophic power outage.

20 (c) On the application of a municipality for the
21 designation, the Texas Grid Security Commission may designate a
22 municipality that meets the resilience recommendations in the
23 applicable service area as:

- 24 (1) a Resilient Emergency Services Community;
- 25 (2) a Resilient Communications Systems Community;
- 26 (3) a Resilient Clean Water and Sewer Services
27 Community;

1 (4) a Resilient Health Care Systems Community;

2 (5) a Resilient Financial Services Community;

3 (6) a Resilient Energy Community; or

4 (7) a Resilient Transportation Community.

5 (d) The Texas Grid Security Commission may designate a
6 municipality that meets the resilience recommendations in five of
7 the seven service areas as a Five Star Gold Resilient Community.

8 (e) A municipality may not use a resilient community
9 designation in advertising, marketing, or economic development
10 initiatives unless the Texas Grid Security Commission has awarded
11 the municipality with the designation in the applicable service
12 area or as a Five Star Gold Resilient Community.

13 SECTION 3. Not later than January 1, 2023, the Texas Grid
14 Security Commission shall prepare and deliver a report to the
15 legislature on the progress of implementing resilience
16 recommendations developed under Section 44.005, Utilities Code, as
17 added by this Act.

18 SECTION 4. This Act takes effect immediately if it receives
19 a vote of two-thirds of all the members elected to each house, as
20 provided by Section 39, Article III, Texas Constitution. If this
21 Act does not receive the vote necessary for immediate effect, this
22 Act takes effect September 1, 2021.