

1-1 By: Hall, et al. S.B. No. 1606  
 1-2 (In the Senate - Filed March 11, 2021; March 24, 2021, read  
 1-3 first time and referred to Committee on Business & Commerce;  
 1-4 May 6, 2021, reported adversely, with favorable Committee  
 1-5 Substitute by the following vote: Yeas 7, Nays 0; May 6, 2021, sent  
 1-6 to printer.)

1-7 COMMITTEE VOTE

	Yea	Nay	Absent	PNV
1-8				
1-9	X			
1-10	X			
1-11	X			
1-12			X	
1-13	X			
1-14			X	
1-15	X			
1-16	X			
1-17	X			

1-18 COMMITTEE SUBSTITUTE FOR S.B. No. 1606 By: Hancock

1-19 A BILL TO BE ENTITLED  
 1-20 AN ACT

1-21 relating to the resilience of the electric grid and certain  
 1-22 municipalities.

1-23 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

1-24 SECTION 1. Subtitle B, Title 2, Utilities Code, is amended  
 1-25 by adding Chapter 44 to read as follows:

1-26 CHAPTER 44. GRID RESILIENCE

1-27 Sec. 44.001. DEFINITIONS. In this chapter:

1-28 (1) "All hazards" means:

1-29 (A) terrestrial weather including wind,  
 1-30 hurricanes, tornadoes, flooding, ice storms, extended cold weather  
 1-31 events, heat waves, and wildfires;

1-32 (B) seismic events including earthquakes and  
 1-33 tsunamis;

1-34 (C) physical threats including terrorist attacks  
 1-35 with direct fire, drones, explosives, and other methods of physical  
 1-36 sabotage;

1-37 (D) cyber attacks including malware attacks and  
 1-38 hacking of unprotected or compromised information technology  
 1-39 networks;

1-40 (E) manipulation of operational technology  
 1-41 devices including sensors, actuators, and drives;

1-42 (F) electromagnetic threats through man-made  
 1-43 radio frequency weapons, high altitude nuclear electromagnetic  
 1-44 pulse, and naturally occurring geomagnetic disturbances;

1-45 (G) electric generation supply chain  
 1-46 vulnerabilities including insecure or inadequate fuel  
 1-47 transportation or storage; and

1-48 (H) insider threats caused by compromised or  
 1-49 hostile personnel working within government or the utility  
 1-50 industry.

1-51 (2) "Micro-grid" means a group of interconnected loads  
 1-52 and distributed energy resources inside clearly defined electrical  
 1-53 boundaries that act as a single controllable entity with respect to  
 1-54 the grid.

1-55 (3) "Security commission" means the Texas Grid  
 1-56 Security Commission.

1-57 Sec. 44.002. TEXAS GRID SECURITY COMMISSION. (a) The Texas  
 1-58 Grid Security Commission is composed of the following members:

1-59 (1) a representative of the Texas Division of  
 1-60 Emergency Management appointed by the chief of that division;

- 2-1                   (2) a representative of the State Office of Risk  
 2-2 Management appointed by the risk management board;  
 2-3                   (3) a representative of the independent organization  
 2-4 certified under Section 39.151 for the ERCOT power region appointed  
 2-5 by the chief executive officer of that organization;  
 2-6                   (4) a representative of the Texas Military Department  
 2-7 appointed by the adjutant general of that department;  
 2-8                   (5) a representative of the Texas Military  
 2-9 Preparedness Commission appointed by that commission;  
 2-10                  (6) a representative of the Office of State-Federal  
 2-11 Relations appointed by the director of that office;  
 2-12                  (7) a representative of the Department of Information  
 2-13 Resources appointed by the executive director of that department;  
 2-14                  (8) a representative of power generation companies  
 2-15 appointed by the chief of the Texas Division of Emergency  
 2-16 Management;  
 2-17                  (9) two representatives of transmission and  
 2-18 distribution utilities appointed by the chief of the Texas Division  
 2-19 of Emergency Management;  
 2-20                  (10) three individuals with expertise in critical  
 2-21 infrastructure protection appointed by the chief of the Texas  
 2-22 Division of Emergency Management, to represent the public interest;  
 2-23                  (11) one representative appointed by the chief of the  
 2-24 Texas Division of Emergency Management from each of the following  
 2-25 essential services sectors:  
 2-26                           (A) law enforcement;  
 2-27                           (B) emergency services;  
 2-28                           (C) communications;  
 2-29                           (D) water and sewer services;  
 2-30                           (E) health care;  
 2-31                           (F) financial services;  
 2-32                           (G) food and agriculture;  
 2-33                           (H) transportation; and  
 2-34                           (I) energy;  
 2-35                  (12) an expert in the field of higher education  
 2-36 appointed by the chief of the Texas Division of Emergency  
 2-37 Management; and  
 2-38                  (13) an expert in the field of electricity markets and  
 2-39 regulations appointed by the chief of the Texas Division of  
 2-40 Emergency Management.  
 2-41                  (b) The chief of the Texas Division of Emergency Management  
 2-42 may invite members or former members of the United States Air  
 2-43 Force's Electromagnetic Defense Task Force to the security  
 2-44 commission.  
 2-45                  (c) The Texas Division of Emergency Management shall  
 2-46 designate a member of the security commission to serve as presiding  
 2-47 officer.  
 2-48                  (d) The security commission shall convene at the call of the  
 2-49 presiding officer.  
 2-50                  (e) The security commission shall report to the chief of the  
 2-51 Texas Division of Emergency Management.  
 2-52                  (f) A vacancy on the security commission is filled by  
 2-53 appointment for the unexpired term in the same manner as the  
 2-54 original appointment.  
 2-55                  (g) To the extent possible, individuals appointed to the  
 2-56 security commission must be residents of this state.  
 2-57                  (h) The presiding officer of the security commission or the  
 2-58 chief of the Texas Division of Emergency Management may invite  
 2-59 subject matter experts to advise the security commission, including  
 2-60 individuals recognized as experts in the fields of electricity  
 2-61 markets, cybersecurity of grid control systems, electromagnetic  
 2-62 pulse mitigation, terrestrial and solar weather, and micro-grids.  
 2-63 The presiding officer may invite an individual for this purpose  
 2-64 regardless of whether the individual is a resident of this state.  
 2-65                  Sec. 44.003. GRID RESILIENCE INFORMATION. (a) Each of the  
 2-66 following members of the security commission shall apply for a  
 2-67 secret security clearance or an interim secret security clearance  
 2-68 to be granted by the federal government:  
 2-69                           (1) the representative of the independent

3-1 organization certified under Section 39.151 for the ERCOT region;  
3-2 (2) the representative of the Texas Division of  
3-3 Emergency Management; and  
3-4 (3) the representative of the State Office of Risk  
3-5 Management.  
3-6 (b) A member of the security commission listed under  
3-7 Subsection (a) who is granted an applicable security clearance  
3-8 under that subsection is a member of the information security  
3-9 working group.  
3-10 (c) The information security working group shall determine:  
3-11 (1) which information received by the security  
3-12 commission that is used in determining the vulnerabilities of the  
3-13 electric grid or that is related to measures to be taken to protect  
3-14 the grid is confidential and not subject to Chapter 552, Government  
3-15 Code;  
3-16 (2) which members of the security commission may  
3-17 access which types of information received by the security  
3-18 commission; and  
3-19 (3) which members, other than members of the working  
3-20 group, should apply for a secret security clearance or interim  
3-21 clearance granted by the federal government.  
3-22 (d) Information that the information security working group  
3-23 determines is confidential under Subsection (c) shall be stored and  
3-24 maintained by the independent organization certified under Section  
3-25 39.151 for the ERCOT power region.  
3-26 (e) The security commission must maintain a reasonable  
3-27 balance between public transparency and security for information  
3-28 determined to be confidential under Subsection (c).  
3-29 (f) Nothing in this section abrogates any rights or remedies  
3-30 under Chapter 552, Government Code.  
3-31 Sec. 44.004. GRID RESILIENCE EVALUATION. (a) The security  
3-32 commission shall evaluate, using available information on past  
3-33 blackouts in ERCOT, all hazards to the ERCOT electric grid,  
3-34 including threats that can cause future blackouts.  
3-35 (b) The security commission may create groups or teams to  
3-36 address each hazard as necessary. The security commission must  
3-37 assess each hazard both on the likelihood of occurrence of the  
3-38 hazard and the potential consequences of the hazard.  
3-39 (c) The security commission shall identify methods by which  
3-40 this state can support an overall national deterrence policy as  
3-41 proposed by the Cyberspace Solarium Commission, including by:  
3-42 (1) identifying means to ensure that all hazards  
3-43 resilience for electric utilities supports critical national  
3-44 security functions in this state; and  
3-45 (2) engaging the Texas National Guard to be trained as  
3-46 first responders to cybersecurity threats to the ERCOT electric  
3-47 grid and other critical infrastructure.  
3-48 (d) The security commission shall evaluate nuclear  
3-49 generation sites in this state, the resilience of each nuclear  
3-50 reactor to all hazards, and the resilience to all hazards of  
3-51 off-site power for critical safety systems that support the reactor  
3-52 and spent fuel. The security commission may communicate with the  
3-53 Nuclear Regulatory Commission to accomplish the evaluation.  
3-54 (e) The security commission shall evaluate current Critical  
3-55 Infrastructure Protection standards established by the North  
3-56 American Electric Reliability Corporation and standards set by the  
3-57 National Institute of Standards and Technology to determine the  
3-58 most appropriate standards for protecting grid infrastructure in  
3-59 this state.  
3-60 (f) The security commission shall investigate the steps  
3-61 that local communities and other states have taken to address grid  
3-62 resilience. The security commission may request funding to conduct  
3-63 site visits to these locations as required.  
3-64 (g) The security commission shall identify universities  
3-65 based in this state that have expertise in cybersecurity and other  
3-66 matters that can contribute to the security commission's goal of  
3-67 mitigating all hazards to the grid in this state.  
3-68 (h) In carrying out the security commission's duties under  
3-69 this section, the security commission may solicit information from:

- 4-1 (1) defense contractors with experience protecting
- 4-2 defense systems from electromagnetic pulse;
- 4-3 (2) electric utilities that have developed
- 4-4 electromagnetic pulse protections for the utilities' grid assets;
- 4-5 (3) the United States Department of Homeland Security;
- 4-6 and
- 4-7 (4) the Commission to Assess the Threat to the United
- 4-8 States from Electromagnetic Pulse (EMP) Attack.

4-9 Sec. 44.005. GRID RESILIENCE RECOMMENDATIONS. Based on the  
 4-10 findings of the evaluations and investigations conducted under  
 4-11 Section 44.004, the security commission shall develop resilience  
 4-12 recommendations for critical components of the ERCOT electric grid.

4-13 Sec. 44.006. PLAN FOR ALL HAZARDS RESILIENCE. (a) Not  
 4-14 later than January 1, 2022, the security commission shall prepare  
 4-15 and deliver to the legislature a plan for protecting the ERCOT  
 4-16 electric grid from all hazards, including a catastrophic loss of  
 4-17 power in the state.

4-18 (b) The plan must include:

4-19 (1) weatherizing recommendations to prevent blackouts  
 4-20 from extreme cold weather events, an analysis of whether these  
 4-21 recommendations would induce cyber vulnerabilities, and an  
 4-22 analysis of the associated costs for these recommendations;

4-23 (2) recommendations for installing, replacing, or  
 4-24 upgrading industrial control systems and associated networks, or  
 4-25 the use of compensating controls or procedures, in critical  
 4-26 facilities to address cyber vulnerabilities and associated costs  
 4-27 for these recommendations;

4-28 (3) recommendations for installing, replacing, or  
 4-29 upgrading extra high-voltage power transformers and supervisory  
 4-30 control and data acquisition systems to withstand 100  
 4-31 kilovolts/meter E1 electromagnetic pulses and 85 volts/kilometer  
 4-32 E3 electromagnetic pulses and associated costs for these  
 4-33 recommendations;

4-34 (4) long-term resilience provisions for supporting  
 4-35 industries including:

4-36 (A) nuclear reactors, materials, and waste;

4-37 (B) fuel supply;

4-38 (C) health care;

4-39 (D) communications;

4-40 (E) water and sewer services;

4-41 (F) food supply; and

4-42 (G) transportation; and

4-43 (5) any additional provisions considered necessary by  
 4-44 the security commission.

4-45 (c) The security commission may consult with the Private  
 4-46 Sector Advisory Council in developing the plan.

4-47 Sec. 44.007. GRID RESILIENCE REPORT. (a) Not later than  
 4-48 January 1 of each year, the security commission shall prepare and  
 4-49 deliver a nonclassified report to the legislature, the governor,  
 4-50 and the commission assessing natural and man-made threats to the  
 4-51 electric grid and efforts to mitigate the threats.

4-52 (b) In preparing the report, the security commission may  
 4-53 hold confidential or classified briefings with federal, state, and  
 4-54 local officials as necessary.

4-55 Sec. 44.008. MICRO-GRIDS. The security commission shall  
 4-56 establish resilience standards for micro-grids and certify a  
 4-57 micro-grid that meets the standards. The standards must be  
 4-58 developed for both alternating current and direct current  
 4-59 micro-grids.

4-60 SECTION 2. Chapter 380, Local Government Code, is amended  
 4-61 by adding Section 380.004 to read as follows:

4-62 Sec. 380.004. FIVE STAR GOLD RESILIENT COMMUNITIES. (a)  
 4-63 The Texas Grid Security Commission shall establish resilience  
 4-64 standards for municipalities in the following essential service  
 4-65 areas:

4-66 (1) emergency services;

4-67 (2) communications systems;

4-68 (3) clean water and sewer services;

4-69 (4) health care systems;

- 5-1 (5) financial services;
- 5-2 (6) energy systems; and
- 5-3 (7) transportation systems.

5-4 (b) Standards for energy systems under Subsection (a) must  
 5-5 include provisions to ensure that energy, electric power, and fuel  
 5-6 supplies are protected and available for recovery in the event of a  
 5-7 catastrophic power outage.

5-8 (c) On the application of a municipality for the  
 5-9 designation, the Texas Grid Security Commission may designate a  
 5-10 municipality that meets the resilience standards in the applicable  
 5-11 service area as:

- 5-12 (1) a Resilient Emergency Services Community;
- 5-13 (2) a Resilient Communications Systems Community;
- 5-14 (3) a Resilient Clean Water and Sewer Services  
 5-15 Community;
- 5-16 (4) a Resilient Health Care Systems Community;
- 5-17 (5) a Resilient Financial Services Community;
- 5-18 (6) a Resilient Energy Community; or
- 5-19 (7) a Resilient Transportation Community.

5-20 (d) The Texas Grid Security Commission may designate a  
 5-21 municipality that meets the resilience standards in five of the  
 5-22 seven service areas as a Five Star Gold Resilient Community.

5-23 (e) A municipality may not use a resilient community  
 5-24 designation in advertising, marketing, or economic development  
 5-25 initiatives unless the Texas Grid Security Commission has awarded  
 5-26 the municipality with the designation in the applicable service  
 5-27 area or as a Five Star Gold Resilient Community.

5-28 SECTION 3. Not later than January 1, 2023, the Texas Grid  
 5-29 Security Commission shall prepare and deliver a report to the  
 5-30 legislature on the progress of implementing resilience  
 5-31 recommendations developed under Section 44.005, Utilities Code, as  
 5-32 added by this Act.

5-33 SECTION 4. This Act takes effect immediately if it receives  
 5-34 a vote of two-thirds of all the members elected to each house, as  
 5-35 provided by Section 39, Article III, Texas Constitution. If this  
 5-36 Act does not receive the vote necessary for immediate effect, this  
 5-37 Act takes effect September 1, 2021.

5-38 \* \* \* \* \*