**MICROGRID & GRID RESILIENCY ACT**

An act relating to public utilities; providing for the creation of microgrid zones; providing for the creation of microgrids; providing for the creation of demand response programs, secondary frequency response programs, and primary frequency response programs within microgrids and microgrids zones; enabling the sale of electricity to public utilities; providing for the exemption of rate regulation and service territory requirements for electrical service as specified; providing a definition; specifying applicability; making conforming amendments; requiring rulemaking; amending obsolete provisions related to public utilities; and providing for effective dates.

Be It Enacted by the Legislature of the state of \_\_\_\_\_\_\_\_\_\_\_

This act shall be known as “The Microgrid & Grid Resiliency Act”

**Section 1.**

MICROGRID & GRID RESILIENCY ACT

Definitions.

(i) "Microgrid" means a local energy grid with control capability, energy generation, the full ability to distribute power to its customers, has a specific service boundary, can be connected or disconnected from the traditional grid and operate in tandem with or autonomously from the grid, can be operated with or without the coordination of the local utility power provider.

(ii) "Microgrid zone" means an area of designated land for which the minimum size will be set at one hundred (100) acres. Each microgrid zone shall reside within a single county and within which some statutory and regulatory exemptions from public utilities and service commissions are available.

(iii) “Community Level Microgrid” means an area of residential zoning which wishes to secure their energy through local generation for which the minimum size shall be set by the Public Utility Commission.

(iiii) “Demand Response” (DR) means a change in the power consumption of a microgrid to help ensure the demand for power is met on the grid during peak demand

(v) “Secondary Frequency Response” (SFR) means to respond to a signal from the grid operators in order to help protect the grid during unplanned changes in frequency that are attributed to sudden and unpredictable decreases in supply. SFR can also apply when there are sudden decreases in supply or increases in supply such as when a power asset goes offline or when demand spikes due to unpredictable weather patterns.

(vi) “Primary Frequency Response” (PFR) means to respond automatically or instantaneously to help protect the grid during unplanned changes in frequency that are attributed to sudden and unpredictable decreases in supply. PFR can also apply when there are sudden decreases in supply or increases in supply such as when a power asset goes offline or when demand spikes due to unpredictable weather patterns.

(vii) “Microgrid operator” means any individual, business, co-opt, utility, or firm who manages the operations of the microgrid

(viii) “Grid Operator” means a utility, public service commission, midcontinent independent system operator, independent transmission system operator, or any entity that is responsible for managing the stability of the grid in a given area or region

**Section 2.**

Designation of land for “microgrid zones”

(a) The board of county commissioners in each county may petition the state board of land commissioners to designate no more than 3 areas of unincorporated state land within the county constituting not less than one hundred (100) continuous acres as a microgrid zone. The designated land shall not include any part of a municipality or land outside the boundaries of the county. A petition may be filed under this subsection to modify as well as create a microgrid zone. The county board of commissioners may also petition the state board of land commissioners to lower the minimum size to ensure each county has the ability to participate in the creation of a microgrid zone.

(b) Prior to petitioning the board of land commissioners under subsection (a) of this section, the board of county commissioners shall hold at least one (1) public hearing with notice of the time and place of the hearing being given by publication in a newspaper of general circulation in the county not less than one (1) time and not less than fourteen (14) days before the date of the hearing.

(c) The commission shall provide the board of land commissioners with an analysis of the potential impact the microgrid zone may have on retail customers outside of the zone and nonparticipating retail customers within the zone and any other information required by rule promulgated by the board of land commissioners.

(d) The board of land commissioners may consider the analysis provided under subsection (c) of this section and any other factors it deems relevant in determining whether to approve a petition submitted pursuant to this section. The board of land commissioners shall not approve a petition that does not meet the requirements of subsection (a) of this section but may otherwise approve or deny a petition at its discretion.

Application and approval for “microgrids”

(a) The utility commission shall oversee individual microgrids built within and outside the microgrid zone

(b) When applying for approval of a microgrid, the commission shall review the application to determine if the microgrid can meet a threshold for approval which will cover:

(i) the microgrids ability to reasonably improve the local utilities electrical efficiency, resilience, reliability, and security once it has connected to the grid

(ii) the microgrids ability to perform demand response and frequency response once connected to the grid

(iii) reasonably expected to improve the clean or renewable energy mixture of the local utility such as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Regulation exemptions; limitations.

(a) Microgrid operators within the microgrid zone upon the point of grid connection must be willing to provide up to 20% of their generation in a demand response program in order to ensure grid stability

(i) All electricity provided from the microgrid zone back to the grid or public utility for demand response shall be provided at a regular rate of return consistent with local power pricing set by the public service commission.

(ii) Grid operators shall give at least 30 mins of warning to microgrid operators within microgrid zones for usage of up to 5% of the microgrids operating capacity

(iii) Grid operators shall give at least 120 mins of warning to microgrid operators for any usage over 5% and up to 20% of the microgrids supply capacity

(iiii) Demand Response shall be available from \_\_\_\_\_\_\_\_\_\_ dates to \_\_\_\_\_\_\_\_\_\_ dates and from \_\_\_\_\_\_\_\_\_\_ times to \_\_\_\_\_\_\_\_\_\_\_\_\_ times

(b) Microgrid operators within the microgrid zone upon the point of grid connection must be willing to participate in an secondary Frequency Response in order to ensure grid stability

(i) All electricity provided from the microgrid zone back to the grid or public utility for secondary frequency response shall be provided at current wholesale power pricing and be no less than a regular rate of return set by the public utility commission.

(ii) All power sold back to the grid for secondary frequency response shall receive fair and just compensation as put forth by FERC Order 755

(iii) Grid operators shall give at least thirty (30) seconds of advanced warning to microgrid operators for usage of up to five percent (5%) of the microgrids operating capacity for the purpose of secondary frequency response and an additional one (30) seconds of advanced warning for each additional five percent (5%)

(iiii) Grid operators may give advanced warning for up to twenty percent (20%) of the microgrids capacity for the purpose of secondary frequency response if the grid operator gives the microgrid at least five (5) mins of advanced warning.

(v) Microgrids must sustain the response for at least fifteen (15) minutes or until the utility recalls deployment, whichever occurs first, and a resource must be reset and made available for the next event within 15 minutes after deployment is ended

(c) Microgrid operators within the microgrid zone upon the point of grid connection may be able to participate in a Primary Frequency Response in order to ensure grid stability

(i) All electricity provided from the microgrid and microgrid zone back to the grid or public utility for primary frequency response shall have its price be negotiated between the utility whom/who/that is purchasing power from the microgrid and the microgrid operator

(ii) Microgrids operators are not required to enter the primary frequency response program

(iii) Primary Frequency Response must be deployed within 15 cycles after grid frequency reaches the trigger threshold to qualify for this program

(d) Except as otherwise provided in this section, the provisions of this title with respect to public service commission rate regulation shall not apply to rates charged for the sale of electricity to a customer who:

(i) Consumes the electricity entirely within a microgrid zone;

(ii) Consumes the electricity for commercial or industrial use; and

(iii) Is not purchasing the electricity to replace electrical service capacity that existed prior to the establishment of the microgrid zone.

(e) Except as otherwise provided in this section, the provisions of this title that prohibit the sale of electricity outside a specified service territory shall not apply to sales to a customer within a microgrid zone who meets the requirements of subsection (d) of this section.

(f) Nothing in this section shall be construed to reduce, modify, eliminate or otherwise alter any applicable requirements of federal law or any local, state or federal tax that may be imposed.

(g) Any public utility providing service under this section shall not recover costs associated with that service through rates imposed on retail customers outside of, or not participating in the exemptions provided by, a microgrid zone.

(h) Service provided by a public utility under this section shall not adversely affect the service provided to other retail customers not participating in the microgrid zone.

(j) The public service commission shall regulate rates charged for the use of transmission lines transmitting electricity generated outside of a microgrid to the deregulated industrial zone through transmission lines otherwise regulated by the public service commission by setting a rate that ensures other retail customers not receiving the benefits of any exemption under this section are not disproportionately paying joint and common costs of transmission.

(k) Microgrid developers are required to apply for a grid interconnection before they begin the development of the microgrid but are not required to wait for approval before building out their operations

(i) Microgrid operators who do no receive approval for their grid interconnect may continue operating up until the point at which they receive approval and may continue operating if their request is denied

(ii) If utilities are unwilling or incapable of funding the grid interconnection, microgrid operators may fund the connection at which point the microgrid operator will be exempt from any cost to maintain their connection

(m) The Public Service Commission shall be responsible for implementing and providing programs which enable communities to apply for and operate a community level microgrid.

(i) Community level microgrids shall be held to the same standards set forth for microgrids and which include sections (a) and (b), but not section (d).

**Section 3.**

Composition; powers generally.

The board of land commissioners shall consider petitions pursuant to the Microgrid & Grid Resiliency Act.

**Section 4.** This act shall not apply to contracts for utility services existing prior to \_\_\_\_\_\_\_\_\_\_ except for community level microgrids unless otherwise determined by the public service commission

**Section 5.**  The state board of land commissioners and the public service commission shall promulgate any rules necessary to implement this act on or before \_\_\_\_\_\_\_\_\_\_\_\_\_.

**Section 6.**

(a) Except as provided in subsection (b) of this section, this act is effective \_\_\_\_\_\_\_\_\_\_\_\_.

(b) Sections 5 and 6 of this act are effective immediately upon completion of all acts necessary for a 8 bill to become law.

(END)