BILL ANALYSIS

C.S.S.B. 7
By: Schwertner
State Affairs
Committee Report (Substituted)

BACKGROUND AND PURPOSE

After Winter Storm Uri, the 87th Texas Legislature, Regular Session, passed S.B. 3 with the intention of enhancing the reliability of the Texas electric grid. However, certain issues still remain.

For instance, in a 2023 evaluation of the challenges facing the Texas electric grid, the Federal Reserve Bank of Dallas stated, "ERCOT will be challenged to balance supply and demand during severe weather events because of the growing mismatch between rising renewable capacity and dispatchable, completely reliable resources." To address this risk to reliability, C.S.S.B. 7 seeks to direct ERCOT to implement a program to ensure minimum performance standards for new generation resources during times of high reliability risk due to low operating reserves.

In addition, in the 2021 State of the Market Report, the ERCOT Independent Market Monitor (IMM) noted that "as the levels of renewable generation increase and ERCOT's conservative operations continue, these operational needs and out-of-market costs are likely to rise substantially." To address this, the IMM recommended the use of a targeted two to four hour ancillary service. Building on this recommendation, C.S.S.B. 7 seeks to direct ERCOT to consider implementing a new ancillary services program to procure dispatchable reliability reserve services intended to address these operational reliability issues.

Finally, during the interim, the Public Utility Commission of Texas (PUC), in conjunction with its consultant, evaluated the wholesale market design of the ERCOT power region to determine how to better improve system reliability. Following this review, the PUC adopted the Performance Credit Mechanism (PCM) reliability service. However, the PUC also decided to delay implementation of the PCM until the 88th Legislature had an opportunity to weigh in on the merits of the proposed reliability service. C.S.S.B. 7 seeks to provide this guidance to the PUC and ERCOT in implementing the PCM.

CRIMINAL JUSTICE IMPACT

It is the committee's opinion that this bill does not expressly create a criminal offense, increase the punishment for an existing criminal offense or category of offenses, or change the eligibility of a person for community supervision, parole, or mandatory supervision.

RULEMAKING AUTHORITY

It is the committee's opinion that rulemaking authority is expressly granted to the Public Utility Commission of Texas in SECTION 4 of this bill.

ANALYSIS

C.S.S.B. 7 amends the Utilities Code to require the Public Utility Commission of Texas (PUC) to require ERCOT to consider implementing an ancillary services program to procure dispatchable reliability reserve services on a day-ahead and real-time basis to account for market uncertainty. The program to be considered by ERCOT may:

- determine the quantity of services necessary based on historical variations in generation availability for each season based on a targeted reliability standard or goal, including intermittency of non-dispatchable generation facilities and forced outage rates, for dispatchable generation facilities;
- develop criteria for resource participation that require a resource to:
    - be capable of running for at least four hours at the resource's high sustained limit or for more than four hours as ERCOT determines is needed;
    - be online and dispatchable not more than two hours after being called on for deployment; and
    - have the dispatchable flexibility to address inter-hour operational challenges; and
- reduce the amount of reliability unit commitment by the amount of procured dispatchable reliability reserve services.

The PUC must require ERCOT to implement this program not later than December 1, 2024.

C.S.S.B. 7 requires the PUC to require ERCOT to develop and implement a program to ensure minimum generation performance during times of high reliability risk due to low operating reserves. The program must:

- apply to each electric power generation resource in the ERCOT power region that enters into a signed generator interconnection agreement after January 1, 2026;
- be independently evaluated by the wholesale electric market monitor, including a historical analysis;
- allow entities, at the portfolio level, to meet the performance requirements by supplementing or contracting with on-site or off-site resources, including battery energy storage resources and load resources;
- provide penalties for failing to comply with the performance requirements and financial incentives for exceeding those requirements, except that penalties may not apply to resource unavailability due to planned maintenance outages or physical transmission outages or during hours when the resource would not be expected to perform based on the resource type; and
- exempt battery energy storage resources from the generation performance requirements.

The bill requires the PUC to implement these provisions not later than September 1, 2024, and requires the wholesale electric market monitor, not later than December 31, 2024, to submit to the legislature recommendations regarding the implementation of the program. The bill authorizes ERCOT to implement this program and the ancillary services program simultaneously.

C.S.S.B. 7 requires the PUC, not later than December 1 of each year, to file a report on dispatchable and non-dispatchable generation facilities with the legislature that includes the following:

- the estimated annual costs incurred by dispatchable and non-dispatchable generators to guarantee that a firm amount of electric energy will be provided for the ERCOT power grid;
- as calculated by the independent system operator, the cumulative annual costs that have been incurred in the ERCOT market to facilitate the transmission of dispatchable and non-dispatchable electricity to load and to interconnect transmission level loads;
- documentation of the status of the implementation of provisions of the Public Utility Regulatory Act providing for the market structure of the electric utility industry as part of the restructuring of that industry, including whether the rules and protocols adopted to implement those provisions have materially improved the reliability, resilience, and transparency of the electricity market; and
- recommendations for any additional legislative measures needed to empower the PUC to implement market reforms to ensure that market signals are adequate to preserve

existing dispatchable generation and incentivize the construction of new dispatchable generation sufficient to maintain reliability standards for at least five years after the date of the report.

The bill establishes that the PUC is required to prepare such documentation and recommendations only for reports due on or after December 1, 2024.

C.S.S.B. 7 prohibits the PUC from requiring retail customers or load-serving entities in the ERCOT power region to purchase credits designed to support a required reserve margin or other capacity or reliability requirement until ERCOT and the wholesale electric market monitor complete an updated assessment on the cost to and effects on the ERCOT market of the proposed reliability program and ERCOT begins implementing real time co-optimization of energy and ancillary services in the ERCOT wholesale market. The bill requires the assessment to include the following:

- an evaluation of the cost of new entry and the effects of the proposed reliability program on consumer costs and the competitive retail market;
- a compilation of detailed information regarding cost offsets realized through a reduction in costs in the energy and ancillary services markets and use of reliability unit commitments;
- a set of metrics to measure the effects of the proposed reliability program on system reliability;
- an evaluation of the cost to retain existing dispatchable resources in the ERCOT power region;
- an evaluation of the planned timeline for implementation of real time co-optimization for energy and ancillary services in the ERCOT power region; and
- anticipated market and reliability effects of new and updated ancillary service products.

C.S.S.B. 7 prohibits the PUC from implementing such a reliability program unless the PUC by rule establishes the essential features of the program, including requirements to meet the reliability needs of the power region, and the program:

- requires ERCOT to procure the credits centrally in a manner designed to prevent market manipulation by affiliated generation and retail companies;
- limits participation in the program to dispatchable resources with the specific attributes necessary to meet operational needs of the ERCOT power region;
- ensures that a generator cannot receive credits that exceed the amount of generation bid into the forward market by that generator;
- ensures that an electric generating unit can receive a credit only for being available to perform in real time during the tightest intervals of low supply and high demand on the grid, as defined by the PUC on a seasonal basis;
- establishes a penalty structure, resulting in a net benefit to load, for generators that bid into the forward market but do not meet the full obligation;
- provides the wholesale electric market monitor with the authority and resources necessary to investigate potential instances of market manipulation by any means, including by financial or physical actions;
- ensures that any program reliability standard reasonably balances the incremental reliability benefits to customers against the incremental costs of the program based on an evaluation by the wholesale electric market monitor;
- establishes a single ERCOT-wide clearing price for the program and does not differentiate payments or credit values based on locational constraints;
- does not assign costs, credit, or collateral for the program in a manner that provides a cost advantage to load-serving entities who own, or whose affiliates own, generation facilities;
- requires sufficient secured collateral so that other market participants do not bear the risk of non-performance or non-payment;

- ensures that the cost of all credits paid to dispatchable resources is allocated to loads based on an hourly load ratio share; and
- removes any market changes implemented as a bridge solution for the program not later than the first anniversary of the date the program was implemented.

C.S.S.B. 7 prohibits the PUC and ERCOT from adopting a market rule for the ERCOT power region associated with the implementation of the applicable reliability program that provides a cost advantage to load-serving entities who own, or whose affiliates own, generation facilities. The bill requires the PUC and ERCOT to ensure that the net cost imposed on the ERCOT market for the program credits does not exceed $1 billion annually, less the cost of any interim or bridge solutions that are lawfully implemented, except that the PUC may adjust the limit proportionally according to the highest net peak demand year-over-year with a base year of 2026 and for inflation with a base year of 2026. The bill requires the wholesale electric market monitor biennially to evaluate the incremental reliability benefits of the program for consumers compared to the costs to consumers of the program and the costs in the energy and ancillary services markets and to report the results of each evaluation to the legislature.

EFFECTIVE DATE

On passage, or, if the bill does not receive the necessary vote, September 1, 2023.

COMPARISON OF SENATE ENGROSSED AND SUBSTITUTE

While C.S.S.B. 7 may differ from the engrossed in minor or nonsubstantive ways, the following summarizes the substantial differences between the engrossed and committee substitute versions of the bill.

The substitute omits the provisions from the engrossed requiring the PUC to ensure that ERCOT allocates the cost of providing procured ancillary and reliability services on a semiannual basis among dispatchable generation facilities, non-dispatchable generation facilities, and load serving entities in proportion to their contribution to unreliability during the highest net load hours in the preceding six months, as determined by the PUC based on a number of hours adopted by the PUC for that period, as follows:

- for each dispatchable generation facility, the difference between the forced outage rate of the facility and the forced outage rate of the facility during the corresponding season for the three years prior to the current season, multiplied by the installed capacity of the facility;
- for non-dispatchable generation facilities, the difference between the mean of the lowest quartile generation for each non-dispatchable generation facility and the mean generation of the facility; and
- for each load serving entity, the difference between the mean of the highest quartile of total ERCOT load and the mean of total ERCOT load during the net load hours, multiplied by the load ratio share of each load serving entity during the net load hours.

The substitute also omits the provisions included in the engrossed establishing that this requirement does not apply to electric energy storage and applies only to a generation facility or load serving entity that has participated in the ERCOT market for at least one year, including a load serving entity whose parent company or affiliate has participated in the ERCOT market for at least one year.

Whereas the engrossed required the PUC to require ERCOT to develop and implement an ancillary services program to procure dispatchable reliability reserve services on a day-ahead and real-time basis to account for market uncertainty, the substitute requires only that the PUC require ERCOT to consider implementing such a program. The engrossed required ERCOT, under the required program, to take certain specified actions. The substitute retains the list of actions but instead authorizes the program to be considered by ERCOT to include those same actions.

The substitute includes provisions not in the engrossed requiring the PUC to require ERCOT to develop and implement a program to ensure minimum generation performance during times of high reliability risk due to low operating reserves and setting out requirements for that program. The substitute also includes a requirement for the wholesale electric market monitor to submit to the legislature recommendations regarding the implementation of the program not later than December 31, 2024, which was not in the engrossed. Moreover, whereas the substitute sets a September 1, 2024, deadline for implementation of this program and authorizes ERCOT to implement this program simultaneously with the ancillary services program, the engrossed made that deadline applicable to the engrossed version's provisions relating to allocating the cost of providing ancillary services and reliability services on a semiannual basis among certain facilities in proportion to their contribution to unreliability during the highest net load hours in the preceding six months and authorized the PUC to adopt additional programs under those provisions at the same time as the ancillary services program.

The engrossed included provisions prohibiting the PUC from adopting a reliability program for the ERCOT power region that requires the purchase of capacity credits earned by generators to support a reserve margin mandate unless the PUC ensures that certain criteria regarding the design and effect of the program are met. The substitute instead prohibits the PUC from requiring retail customers or load-serving entities in the ERCOT power region to purchase credits designed to support a required reserve margin or other capacity or reliability requirement until certain actions are taken and further prohibits the PUC from implementing such a reliability program unless the PUC by rule establishes the essential features of the program, including requirements to meet the reliability needs of the power region, and the program satisfies certain criteria set out by the bill. Specific differences with respect to the required actions and the required program criteria are as follows:

- the substitute includes provisions not in the engrossed requiring ERCOT and the wholesale electric market monitor to have completed an updated assessment on the cost to and effects on the ERCOT market of the proposed reliability program before the program may be implemented and prescribing the contents of that assessment;
- whereas the engrossed required the PUC to ensure that the cost to the ERCOT market of the program credits does not exceed $500 million annually, the substitute requires the PUC and ERCOT to ensure that the net cost imposed on the ERCOT market for the program credits does not exceed $1 billion annually, less the cost of any interim or bridge solutions that are lawfully implemented, and also authorizes the PUC to make certain adjustments to that limit;
- whereas the engrossed required that program credits be available only for dispatchable generation, excluding load resources and electric energy storage, the substitute requires that program participation be limited to dispatchable resources with the specific attributes necessary to meet operational needs of the ERCOT power region;
- whereas the engrossed required that the cost of credits assigned to generation facilities and load serving entities be assigned according to the provision included in the engrossed regarding the allocation of the cost of providing ancillary services and reliability services, the substitute requires that the costs of all credits paid to dispatchable resources be allocated to loads based on an hourly load ratio share;
- whereas the engrossed required that the program include appropriate penalties for a failure to perform during a reliability event caused by factors within the reasonable control of the generator, including a requirement for a generator to buy back credits that the generator sold but for which the generator did not provide the required capacity, the substitute requires that the program establish a penalty structure, resulting in a net benefit to load, for generators that bid into the forward market but do not meet the full obligation;
- whereas the engrossed required all elements of the program to be initially implemented on a single starting date, the substitute does not;

- whereas the engrossed required that under the program all generators who receive credits be prohibited from self-arranging credit exchanges with any affiliated competitive retail electric providers, the substitute does not;
- whereas the engrossed required that secured financial credit and collateral requirements be adopted for the program to ensure that other market participants do not bear the risk of nonperformance or nonpayment, the substitute requires that the program require sufficient secured collateral so that other market participants do not bear that risk;
- whereas the engrossed required that under the program qualifying generators do not receive credits that exceed the amount of generation bid into the forward market on an individual resource basis, the substitute requires the program to ensure that a generator cannot receive credits that exceed the amount of generation bid into the forward market by that generator;
- whereas the engrossed required that under the program the wholesale electric market monitor have the authority and necessary resources to investigate potential instances of market manipulation by program participants, including financial and physical actions, and recommend penalties to the PUC, the substitute omits the language regarding the recommendation of penalties; and
- the substitute includes the following requirements for the program absent from the engrossed:
    - a requirement that the program require ERCOT to procure the credits centrally in a manner designed to prevent market manipulation by affiliated generation and retail companies;
    - a requirement that the program ensure that an electric generating unit can receive a credit only for being available to perform in real time during the tightest intervals of low supply and high demand on the grid, as defined by the PUC on a seasonal basis;
    - a requirement that the program ensure that any program reliability standard reasonably balances the incremental reliability benefits to customers against the incremental costs of the program based on an evaluation by the wholesale electric market monitor;
    - a requirement for a single ERCOT-wide clearing price to be established for the program and for the program to not differentiate payments or credit values based on locational constraints; and
    - a requirement that the program remove any market changes implemented as a bridge solution for the program not later than the first anniversary of the date the program was implemented.

The engrossed included among the required program criteria that the terms of the program and any associated market rules do not assign costs, credit, or collateral for the program in a manner that provides a cost advantage to load serving entities who own, or whose affiliates own, generation facilities. The substitute omits the reference to market rules in that provision and includes a separate provision prohibiting the PUC and ERCOT from adopting a market rule for the ERCOT power region associated with the implementation of a reliability program that provides such a cost advantage.

The substitute omits the following provisions present in the engrossed regarding the reliability program:

- the provision establishing that the bill does not require the PUC to adopt a reliability program that requires an entity to purchase capacity credits; and
- the provision requiring the PUC and ERCOT to consider comments and recommendations from a technical advisory committee established under ERCOT bylaws that includes market participants when adopting and implementing an applicable reliability program, if any.

The substitute omits the provision in the engrossed requiring the PUC, if it adopts an applicable reliability program, not later than January 1, 2029, to require the wholesale electric market monitor to submit to the PUC and the legislature a report on the costs and benefits of continuing the program. The substitute includes instead a provision requiring the wholesale electric market monitor biennially to evaluate the incremental reliability benefits of the reliability program for consumers compared to the costs to consumers of the program and the costs in the energy and ancillary services markets and to report the results of each evaluation to the legislature.