Date of Hearing: May 7, 2025

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY
Cottie Petrie-Norris, Chair
AB 1301 (Petrie-Norris) – As Introduced February 21, 2025

SUBJECT: Electricity: Power Exchange

SUMMARY: Updates numerous sections of the Public Utilities Code to reflect the current state of electric markets in California.

Specifically, **this bill**:

1) Removes references to the defunct Power Exchange (PX) and its duties as an electric market operator.

EXISTING LAW:

1) Establishes that the Federal Energy Regulatory Commission (FERC) has exclusive jurisdiction over the transmission of electric energy in interstate commerce. Also, establishes the process and procedures for establishing transmission of electric energy in interstate commerce by public utilities, i.e., the rates, terms, and conditions of interstate electric transmission by public utilities. (Federal Power Act §§§ 201, 205, 206 (16 USC 824, 824d, 824e))

2) Provides for the restructuring of the electricity industry and creates several entities: the Energy Oversight Board (not operational), the Power Exchange (defunct), and the Calfornia Independent System Operator (CAISO). (Public Utilities Code §§ 334, et. seq.)

3) Establishes the CAISO governing board with five members appointed for three-year terms by the governor and subject to confirmation by the Senate. (Public Utilities Code §§ 337, et. seq.)

4) Charges CAISO with management of the transmission grid and related energy markets in order to ensure the reliability of electric service and the health and safety of the public. (Public Utilities Code § 345.5)

5) Establishes the Power Exchange as a nonprofit public benefit corporation to provide an efficient competitive auction for wholesale electricity, open on a nondiscriminatory basis to all suppliers of electricity that meet loads of all of its customers at efficient prices. (Public Utilities Code § 355)

FISCAL EFFECT: None. This bill is keyed non-fiscal.

CUSTOMER COST IMPACTS: Negligible.

Restructuring California's Electricity Market. California began the formal process of restructuring its electricity market in 1994.[1] In doing so, the state was building on federal actions dating back to the late 1970s that were intended to increase competition in electricity markets and lower electricity prices across the nation. At the time of the restructuring, California's electricity rates were on average 50% higher than any other state.[2] The restructuring plan under AB 1890 (Brulte, Chapter 854, Statutes of 1996), transitioned California from a system of regulated monopolies to a competitive wholesale electricity market. While the state continued to regulate retail rates based on the cost of providing service, FERC had implemented a market-based system in the wholesale markets, moving California away from cost-based pricing to market-based pricing.

AB 1890 codified numerous regulatory changes and initiatives that include:

- Requiring the state's three major investor-owned utilities — Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas and Electric (SDG&E) — to sell half of their fossil-fuel capacity (they eventually sold all of it, excluding nuclear, hydroelectric and some other generation assets);
- Transferring control of electricity transmission to a newly created nonprofit corporation, the California Independent System Operator (CAISO);
- Creating another nonprofit corporation, the California Power Exchange (PX), to run wholesale auctions of electricity;
- Recovering of "stranded costs" (costs that were anticipated to be above future market prices) through a "competitive transition charge" investor-owned utilities to be paid by all retail customers; and,
- Freezing retail electricity prices until 2002 (or such time as the utilities recover certain costs).

Before passage of AB 1890, the three investor-owned utilities (IOUs) provided power to 77%[3] of the state, pursuant to strict price regulation based on the cost of providing the service. The other 23%[4] of the state obtained power from publicly owned, or municipal, utilities, which were not covered by the restructuring plan, and typically provided power on a cost-of-service basis.[5] The state also imported power. In the summer months, approximately 20% of California's power was imported, mostly from northwestern hydroelectric sources. In winter, flows typically reversed, with California power producers supplementing Northwest supplies.

This restructuring plan was based on the assumption that greater competition among independent power generators would cause wholesale prices for electricity to fall; and that supposition seemed reasonable in part because in the mid-1990s, generating capacity in the Western states exceeded the demand for electricity by roughly 20%.[6]

---

[1] The California Public Utility Commission (CPUC) begins a formal rulemaking procedure to consider approaches to restructuring the state's electricity market. That action builds on changes in federal law and regulation that began with the Public Utilities Regulatory Policy Act of 1978 and continued with the Energy Policy Act of 1992.
[2] Frontline, "The California Crisis," https://www.pbs.org/wgbh/pages/frontline/shows/blackout/california/
[3] Attorney General Bill Lockyer, "A LAW ENFORCEMENT PERSPECTIVE ON THE CALIFORNIA ENERGY CRISIS." April 2004
[4] Ibid

[6] Congressional Budget Office, "Causes and Lessons of the California Electricity Crisis" September 2001

California Power Exchange (PX). Created by 1890 (Brulte), the PX was a not-for-profit public benefit corporation that provided a competitive auction for wholesale electricity. The PX trading floor was open to all suppliers on a somewhat non-discriminatory basis, much like a commodities exchange. The IOUs had to purchase wholesale electricity from the PX for "day-ahead" purchases, and the CAISO (also created by AB 1890) for "real-time" purchases to balance the transmission system. The PX day-ahead auction was intended to provide the IOUs with the lowest-priced wholesale electricity, which in turn would be passed on to retail customers.

2000–2001 California Electricity Crisis. The PX began to operate at the end of March 1998 and between August 1998 and March 1999, reports began circulating expressing concern about the functioning of California's wholesale electricity market.[7] Multiple factors such as a Pacific Northwest drought,[8] unexpected outages at nuclear power plants, and high natural gas prices, created instability in the supply of electricity generation. This downward shift in supply (either intended or not) combined with transmission constraints and higher-than-expected demand due to changes in weather patterns and economic growth, set the stage for what some called, "the perfect storm." The state became vulnerable to generators who exercised market power to manipulate wholesale electricity prices. In 1999, the first full year of deregulation, California paid $7.4 billion for wholesale electricity. A year later, these costs rose 277%— $27.1 billion.[9] Hydroelectric power became limited due to the drought in the Pacific West. The state faced its first energy emergency on June 14, 2000. While the public was alerted to the possibility of power shortages, the rolling blackouts began on January 17, 2001.

The PX Bankruptcy: The PX generated its operating revenue based on the volume of electricity traded. Since the FERC relieved the IOUs from the mandatory purchase requirement, the PX's revenue significantly declined. In addition, the PX could not get the IOUs to pay their bills because they were on the brink of bankruptcy (the IOUs' revenue was limited by retail price caps that remained in place even while wholesale prices skyrocketed). The PX could not settle the transactions due to lack of IOU payments and open FERC refund proceedings brought about by the California parties, which left the PX virtually paralyzed. Following a FERC order in December 2000, the PX ceased operating its markets and declared bankruptcy in January 2001.

The California Independent System Operator (CAISO). The plan's other new institution, the CAISO took over the task of coordinating supply and demand in the state's electricity transmission system—a job that had formerly been done by the IOUs that owned the transmission lines. Electric Transmission requires the continuous balance of power supply with customer demand (or load): too much or not enough power at any moment can crash the electric system (hence blackouts). The vertically integrated utilities that owned the lines had managed to balance that task. However, with open access to transmission lines, there was concern that the IOUs would give preference in scheduling to power from their own generators. A primary goal for the CAISO was to ensure nondiscriminatory access. Besides scheduling power supplies from

---

[7] Ibid

[8] A drought in the Pacific Northwest significantly decreased the amount of electricity available for import from hydroelectric power plants to California. This drove up the price for electricity in the market, making electric companies in the other states reluctant to sell to California. In addition, a hotter than usual summer led to spikes in demand that California's system could not handle.

[9] Pg.6, "Attorney General's Energy White Paper"; April 2004

various sources for the next day (consistent with projections of next-day demand), the CAISO is responsible for acquiring access to additional supplies to meet unanticipated surges in demand or losses of generation. To that end, the CAISO operates a real-time market—an auction for acquiring power supplies in the next hour, separate from the auctions formerly run by the PX.

As a result, the PX remains defunct, has no activities, and no operational footprint.

COMMENTS:

1) *Author's Statement*. According to the author, "AB 1301 would update the Public Utilities Code to reflect current state of electric markets in California. This bill would remove references to duties assigned to the defunct Power Exchange (PX) as an electric market operator given that the California Independent System Operator (CAISO) has assumed the responsibilities of the PX. As such, AB 1301, is a code clean up that would have no effect on present electricity markets and operations."

2) *Code Cleanup.* This bill deletes a series of references in the Public Utilities Code to the defunct Power Exchange, which has not been operational for more than two decades.

3) *Prior Legislation.*

   AB 1890 (Brulte) transitioned California from a system of regulated monopolies to a competitive wholesale electricity market, and created the Power Exchange. Status: Chapter 854, Statutes of 1996.

REGISTERED SUPPORT / OPPOSITION:

Support

None on file.

Opposition

None on file.

Analysis Prepared by: Lina V. Malova / U. & E. / (916) 319-2083