

SUBJECT: Combined heating and power systems for critical governmental facilities.

COMMITTEE: Energy Resources — favorable, without amendment

VOTE: 11 ayes — Keffer, Crownover, Burnam, Canales, Craddick, Dale, P. King, Lozano, Paddie, R. Sheffield, Wu

0 nays

WITNESSES: For — Rich Herweck, Texas CHP Initiative; (*Registered, but did not testify*: Rita Beving and David Power, Public Citizen; Paul Cauduro and Tommy John, Texas CHP Initiative; Raymond Deyoe, Integral Power LLC; Liza Firmin, Chesapeake Energy; Cyrus Reed Lone Star Chapter - Sierra Club; Susan Ross, TREIA)

Against — None

On — (*Registered, but did not testify*: Dub Taylor, State Energy Conservation Office)

BACKGROUND: Government Code, sec. 2311.001 defines a “combined heating and power (CHP) system” as a system located on the site of a facility that is the facility’s primary source of electricity and thermal energy, can provide all of the electricity needed to power the facility’s critical emergency operations for at least 14 days, and has an overall efficiency of energy use that exceeds 60 percent.

It defines a “critical government facility” as a building owned by the state or a political subdivision that is, among other things, expected to be continuously occupied and to serve a critical public health or safety function during a natural disaster or emergency situation.

Sec. 2311.002 requires an entity that is building or extensively renovating a critical government facility or replacing major heating, ventilation, and air conditioning to determine whether installing a CHP system would save more in energy costs over a 20-year period than the cost of the construction, renovation, or installation of the system. The entity may equip the facility with a CHP system if expected energy savings exceed expected costs.

Education Code, sec. 61.003 defines institutes of higher education as any public technical institute, public junior college, public senior college or university, medical or dental unit, public state college, or other agency of higher education as defined in the code.

DIGEST:

HB 1864 would direct the State Energy Conservation Office (SECO) to establish guidelines to evaluate whether projected energy savings from installing a critical government facility with a CHP system would be more than the cost of installing and operating the system over a 20-year period.

The bill would add buildings at institutions of higher education to the list of those defined as a critical government facilities required to consider installing a CHP system for new construction or extensive renovation.

The bill would take effect September 1, 2013.

**SUPPORTERS
SAY:**

HB 1864 would allow the SECO to provide clear, universal guidelines for critical state buildings to determine the cost-effectiveness of installing an energy-efficient combined heating and power (CHP) system.

This would provide statewide standards for proper consideration of CHP technology when building or making major renovations to critical government facilities. Currently, evaluation criteria are not clearly defined and lack meaningful oversight. Evaluations range from cursory reviews of CHP systems to extensive and costly engineering reviews. The bill would allow the SECO to develop a consistent method for evaluations and provide technical expertise to ensure critical steps were taken to determine if CHP should be installed.

The SECO would be the appropriate agency to create standards, which would consider return on investment and rigorous cost-benefit analysis to determine if a CHP were suitable. The SECO already oversees a revolving loan program for energy efficiency upgrades and approves energy savings performance contracts for state agencies. The agency easily could provide clear, measurable guidelines for new construction and renovations with no additional cost to the state.

Natural gas-fueled CHP systems would promote energy efficiency and serve as a safeguard against power outages caused by natural disasters and other disruptions to the power grid. CHP systems offer an integrated

approach known as “cogeneration” that produces heat and electricity. Unlike conventional backup generators that rely on diesel fuel and may not start during a power outage, CHP systems can be designed to maintain critical systems, operate independently of the grid during emergencies, and be capable of black start (the ability to come online without relying on external energy sources).

Colleges and universities should be required to consider installing CHP systems to ensure operation during emergencies and to save energy. State campuses increasingly have critically important buildings, such as medical and biological research labs and student dormitories, that need to maintain electricity even in emergencies.

Allowing the SECO to develop CHP guidelines would provide a template to continue the state’s consistent, measured approach to energy efficiency and security.

**OPPONENTS
SAY:**

HB 1864 should require that critical government facilities install CHP systems and not be given the option of using more traditional standby generators or other systems. CHP technology is well developed and has a proven track record of energy savings and reliability.

NOTES:

During the 82nd Legislature in 2011, an identical bill, HB 2623 passed the House but was left pending in the Senate's Committee on Transportation and Homeland Security.