

Texas Business for **Clean Air**

Protecting Air Quality for all Texans

Balancing Business and Environmental Interests



2010 CHP Partnership Meeting

November 2, 2010

Units in MW	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Resources	75,749	77,894	77,918	78,843	78,843	78,843	78,843	78,843	78,843	78,843	78,843	78,843	78,843	78,843	78,843
Total Demand with Reserve	73,157	74,724	76,213	77,437	79,015	80,555	82,126	83,728	85,360	85,360	88,722	90,452	92,216	94,014	95,847
Difference	2,593	3,170	1,705	1,406	-172	-1,712	-3,283	-4,885	-6,517	-6,517	-9,879	-11,609	-13,373	-15,171	-17,004
Energy Efficiency															
Appliance Standards															
Old	112	167	203	238	264	290	316	341	368	393	419	445	460	475	490
Proposed	37	56	68	79	88	97	105	114	122	131	140	148	153	158	163
Building Codes	166	334	476	622	754	899	1,054	1,177	1,282	1,394	1,498	1,754	1,932	2,148	2,362
CHP	238	463	677	881	1,075	1,258	1,433	1,599	1,756	1,906	2,048	2,183	2,312	2,434	3,750
Expand LoanSTAR	85	170	257	344	433	523	616	704	796	888	988	1,088	1,188	1,292	1,398
EEPS	254	528	859	1,188	1,514	1,836	2,156	2,472	2,794	3,112	3,430	3,746	4,060	4,374	4,686
Total Energy Efficiency Savings	892	1,718	2,539	3,352	4,128	4,903	5,680	6,407	7,118	7,824	8,523	9,364	10,105	10,881	12,849
Projected Gap	3,485	4,888	4,244	4,758	3,956	3,191	2,397	1,522	601	1,307	-1,356	-2,245	-3,268	-4,290	-4,155
Renewables (Solar and Wind)	784	789	1,063	813	1,313	1,813	2,313	2,313	2,313	2,813	2,813	3,313	3,813	3,813	3,813
Demand Response	1,130	1,595	2,148	2,775	3,463	4,209	4,955	5,766	6,566	7,573	8,650	9,735	10,858	12,050	13,241
Total	5,399	7,272	7,454	8,346	8,731	9,213	9,665	9,601	9,480	11,693	10,107	10,803	11,403	11,573	12,899
Total NOx savings	3,343	6,362	9,482	12,505	15,423	18,332	21,330	24,374	27,157	30,020	32,690	35,708	38,544	41,375	44,163

Katrina



Katrina – The Hospitals

- In some two dozen hospitals, patients had to be evacuated because of the loss of power, water, and sewage service, and many of these hospitals required external assistance that was slow to arrive. Meanwhile, patients' need for care continued unabated. Some hospitals evacuated all patients successfully, but by the end of that long week, some had become places of death.

Katrina – The Jails

- Unfortunately, when the levees broke, the water rushed into the jail and swamped all the generators, along with the major mechanical and electrical systems located in the basement.
- As floodwaters rose in the OPP buildings, power was lost, and entire buildings were plunged into darkness. Deputies left their posts wholesale, leaving behind prisoners in locked cells, some standing in sewage-tainted water up to their chests ...

Rita



Rita

- It is estimated that two million people lost electricity. Total damage is estimated at approximately \$10 billion, making Rita the ninth-costliest storm in U.S. history.

HB 1831/4409

CHAPTER 2311. ENERGY SECURITY TECHNOLOGIES FOR CRITICAL GOVERNMENTAL FACILITIES

Sec. 2311.001. DEFINITIONS. In this chapter:

- (1) "Combined heating and power system"
- (2) "Critical governmental facility" means a building owned by the state or a political subdivision

Critical Governmental Facility

- (i) command and control center;
- (ii) shelter;
- (iii) prison or jail;
- (iv) police or fire station;
- (v) communications or data center;
- (vi) water or wastewater facility;
- (vii) hazardous waste storage facility;
- (viii) biological research facility;
- (ix) hospital; or
- (x) food preparation or food storage facility.

- When constructing or extensively renovating a critical governmental facility or replacing major heating, ventilation, and air-conditioning equipment for a critical governmental facility, the entity with charge and control of the facility shall evaluate whether equipping the facility with a combined heating and power system would result in expected energy savings that would exceed the expected costs of purchasing, operating, and maintaining the system over a 20-year period. The entity may equip the facility with a combined heating and power system if the expected energy savings exceed the expected costs.

Responses to Bills

- <http://www.txsecurepower.org>
- No known CHP projects
- No known feasibility studies

Next Steps ?????

- Move Rulemaking authority to SECO
- Ask SECO to write guidelines
- Provide incentives
- Link LoanStar funding to CHP projects
- Address required backup generation
- Make CHP BACT
- Require by law