

Written Testimony of Milton B. Lee
General Manager and CEO
CPS Energy – San Antonio, Texas
Before the U.S. House Committee on Energy and Commerce
March 15, 2007

Good afternoon Mr. Chairman and Members. My name is Milton Lee, and I am General Manager and CEO for CPS Energy. I appreciate the opportunity to address the committee today, and hope I can make a positive contribution to your deliberations.

Background: CPS Energy is a Municipal Electric and Gas Utility owned by the citizens of San Antonio, Texas. As a municipal utility, CPS Energy belongs to a class of utilities termed public power utilities. Public power utilities have no stockholders or shareholders: no investors. Our owners are the citizens of our communities and they expect their public power utilities to represent their interests by providing reliable, affordable power in an environmentally sound fashion.

Numerically, public power utilities are the most numerous utility types – representing over 60% of the more than 3,200 electric utilities operating in the US. Numerous though we are, the overwhelming majority of public power utilities are small distribution utilities that have no capability of generating their own power. Public power serves about 16% of the US electric load, and only the largest public power entities, such as CPS Energy generate their own electricity. However, data collected by the American Public Power Association (APPA), a trade group representing public power interests, clearly demonstrates that public power leads the nation in operating cleaner power plants,

investment in renewables and conservation and by being quick to adopt new environmental initiatives that serve the interests and demands of our customers. Our commitment to environmental excellence is second to none.

Public power makes no profit; we exist to serve the needs of our customers by providing them with reliable and affordable power. Our prices are set, not at what the market will bear, but at a level sufficient to cover our costs and sustain a reasonable reserve for repairs and replacement of capital equipment. Some public power entities, such as CPS Energy, also contribute to their city's general fund. Public power's straight forward system of financing projects combined with a conservative, low risk approach to conducting business, results in very favorable bond ratings which, in turn, leads to low interest rates – that are passed on to our constituents in the form of lower costs for electricity.

Of course public power is subject to the same economic realities that affect all sectors of the economy. When the price of an important fuel increases, such as natural gas, those increases must be paid and passed along to the ultimate consumer. This has happened in Texas and, in fact, is the subject of significant discussion by the Texas Legislature, currently in session. Gas price increases have fueled electric rate increases all across Texas.

Public power utilities are governed either by elected public officials such as city councils or by boards of appointed or elected individuals – it is truly local governance, subject to open meetings and open records requirements that assures that local issues are adequately addressed. Public power utilities treat their revenues as public funds, are subject to strict purchasing regulations and major decisions are well vetted within the

community. Consequently, decisions are made in a deliberate and conservative fashion that is open to full public disclosure. Major capital programs can take significantly longer to develop under public governance than under private management. The longer decision making timeframes required by public power utilities need to be accounted for in any policies mandating major capital expenditures or fixed deadlines. Furthermore, policymakers should recognize that the principle vehicle used to spur environmental enhancement and alternate energy programs in the past has been through the granting of tax credits. These tax credits are not available to public power so any legislation envisioning the use of tax credits to spur development should include comparable provisions for public power.

An Example: the case of CPS Energy and the citizens of San Antonio. I would like to cite a recent example from our history in San Antonio. San Antonio, by current population estimates, is the seventh largest city in the US and is growing at a rate of about 18% each decade. However, San Antonio is not blessed with great economic wealth. Personal income is only 87% of the national average and about 18% of our citizens live below the poverty level. Furthermore, San Antonio's summers can be brutal with daily temperatures often exceeding 100 degrees – and can climb to above 110 degrees on occasion. Air conditioning is not just a luxury in San Antonio, it is a necessity and air conditioning requires a lot of electricity. This then is CPS Energy's challenge – to provide reliable, affordable and environmentally sound energy to a constituency that is economically disadvantaged to a significant degree. How well has CPS Energy met this task? Last year CPS Energy generated more than 22 billion KWH

of electricity, enough to meet all our customer' demands, and the average cost paid by our residential consumers was less than 8 cents per KWH. This rate is the second lowest of the 20 largest cities in America. While maintaining these low rates, CPS Energy operates one of the most optimally diversified generating portfolios in the nation, consisting of renewable energy (wind and landfill gas), natural gas, nuclear and coal. About 40% of CPS Energy's generation is produced without any air emissions at all. CPS Energy's generation mix produces electricity with emissions of regulated pollutants that are 60% lower than the national average and that are 13% lower than the national average for CO₂ emissions. (Note: I will be referring to CO₂ emissions throughout this testimony. I use CO₂ as a surrogate representing all greenhouse gases.) Also, CPS Energy's existing coal units are substantially cleaner than the national average as well. CPS Energy is currently building a coal unit that will be cleaner than any coal unit presently operating or under construction in the U.S.

In some areas of the country there is significant and growing opposition to the construction of new coal units, but in San Antonio our new coal unit did not incur widespread opposition. Support for the coal plant was gained through substantial effort that began in 2001 with the development of a strategic energy plan that called for more renewables, more conservation and more coal. This plan was then subjected to public scrutiny for two years, including the creation of a citizen's advisory committee and conducting numerous public meetings in every sector of the community. Finally, two more years were spent during the formal licensing process before the Texas Commission on Environmental Quality (TCEQ). The final permit was issued on December 28, 2005 – almost 5 years after beginning the new unit process.

CPS Energy's constituents made it clear that, additional coal generation was acceptable only if it would be as clean or cleaner than any coal unit previously built and only if new emissions were more than offset by reductions from other CPS Energy coal units. CPS Energy has agreed to build the cleanest coal unit in the nation, achieve 15% renewables by 2020 and embark upon a \$500 million environmental improvement program that will result in an emissions reduction of 60% from baseline levels, even including the emissions from the new plant. This is how a public power utility serves its constituency and wins support for new projects – by listening and responding to the concerns voiced by its constituents. When all these programs are completed, CPS Energy will own the cleanest fleet of coal units in the nation, will have one of the highest percentages of non-hydroelectric renewables in its generation portfolio of any major utility in the nation and will still have the lowest cost of electricity of any major city in the state.

Recommendations on climate change regulation: Since CPS Energy has recently begun construction of a new coal plant, a plant that was subject to a most rigorous public involvement program, many of the issues now being dealt with by this Committee were at issue during the public phase of our recent project. Accordingly, CPS Energy's engineers and consultants have given careful thought to these matters and have relied upon the most current available information in forming their opinions. As I said previously, the new CPS Energy coal plant currently under construction and scheduled for completion in late 2009 will be the cleanest coal unit in the nation – based upon the permit conditions imposed for the regulated pollutants. At the time the permit application

was submitted (November 2003), CPS Energy could find no permit, existing or proposed, that contained more stringent limitations, in total, for the entire suite of regulated pollutants covered by the permit application for any project that was subsequently built or started. Even recently issued permits do not match the emission levels proposed by CPS Energy more than 3 years ago.

The regulated pollutants included in the permit for CPS Energy's new plant do not include CO₂. Although CO₂ issues were considered during the 2 year permitting process, there was no regulatory or technological means to regulate these emissions. Furthermore, after exhaustive analysis, CPS Energy's engineers and consultants concluded that the technology for removing CO₂ emissions from the flue gas was not sufficiently developed to warrant serious consideration during the permitting process. The studies indicated that CO₂ removal would increase the cost of a new coal plant by 50% and would lower its efficiency by more than 40%. These economic and operational penalties would be unprecedented in the history of air pollution control regulation and provide a clear signal that additional research and development is needed before CO₂ removal could be considered a viable option. However, CPS Energy is providing financial support for CO₂ capture research currently being undertaken by EPRI and other utilities.

Also considered during the licensing phase was the construction of an Integrated Gasification Combined Cycle (IGCC) unit instead of the pulverized coal unit that was ultimately selected. IGCC units are often discussed around the nation but discussion seems to be about as far as the process gets for that particular technology. When CPS Energy began its strategic planning process back in 2001, there were only two operating

coal fired IGCC units in the US and only 4 coal fired IGCC units in the world. Today, some five years later there are still only 4 coal fired IGCC units in the world. During the preparation of the permit application, CPS Energy engineers identified about a half dozen or so IGCC units that either had construction permits or had their permits in the works. Today, more than 3 years later none of those IGCC units have begun construction in earnest.

During our strategic planning process, CPS Energy identified IGCC as a technology that had some promise but which was not yet ready for “prime time”. Nothing in the ensuing 5 or 6 years has caused us to question that evaluation. Today, IGCC a promising technology which appears to be significantly more expensive to build and operate than a conventional pulverized coal unit, is predicted to be less reliable than a pulverized coal unit and apparently provides no materially significant reduction in CO₂ emissions over a pulverized coal unit.

CPS Energy did commission the first detailed evaluation comparing IGCC and pulverized coal technologies with carbon capture when using coals such as subbituminous and lignite. This study was performed by the Electric Power Research Institute (EPRI) and the engineering firm of Burns and McDonnell and produced the finding that a pulverized coal unit with carbon capture shows promise of being less expensive and more reliable than an IGCC with carbon capture, at least when burning subbituminous and lignite coals. CPS Energy funded this study for a cost of about \$600,000 and is available from the public access section of the EPRI website.

The investigations and evaluations conducted by CPS Energy over the last several years provide an opportunity for us to express a few opinions regarding the current

discussions of greenhouse gas policy and how it relates to the utility sector. Those opinions and recommendations now follow:

Recommendation 1). Given the extreme complexity and seriousness of the issues at hand and taking into account the multiplicity of desirable outcomes of any legislation – protection of the environment, preservation of economic health and vitality, national security and global cooperation, the committee should undertake its deliberations with all due consideration and without regard to artificially imposed or impractical deadlines or timelines. Congress deals with many complex issues, and certainly this issue has national and global economic implications. Improperly done, this legislation could adversely impact the economic health of the US with no positive impact on climate change. Proceed, but proceed with caution.

Recommendation 2). Global climate change policy and regulation should include all greenhouse gases. This would include methane, nitrous oxide, sulfur hexafluoride, the hydrochlorofluorocarbons and any other contributing greenhouse gases, not just CO₂. Priority consideration should be given to the major contributors that provide the best opportunity to decrease future greenhouse projections.

Recommendation 3). Global climate change should include all members of the global community and they should be expected to commit to a program of greenhouse gas emissions reduction. In the event that other significant emitters fail to meet goals and objectives, legislation should provide a safety valve, perhaps by extending any self imposed deadlines that would preserve the economy of the US while steps are taken to assure that the rest of the global community remains on track with their emissions reductions.

Recommendation 4). Some have suggested that the climate change legislation be aimed at only one industry – the electric utility industry. This would be a mistake because that approach fails to recognize that electric utilities emit roughly a third of the nation’s CO₂ emissions. Also, the electrical industry contributes almost none of the very potent and climatically significant other greenhouse gases which may be the most economically effective approach to take during the initial years of any long term climate protection program. Any legislation must be applicable to all sectors of the economy, not limited to just the electric utility industry.

Recommendation 5). Current technology for carbon capture and sequestration for fossil fuel generation does not adequately support the effective implementation of a cap and trade program for CO₂ at the present time. Additional technology research, development and demonstration programs must precede any effective implementation of a cap and trade program.

Recommendation 6). Coal, which represents approximately 95% of this country’s fossil fuel reserves and is used to produce approximately 50% of the electric power, should be recognized as a vital energy resource for the foreseeable future. Legislation should not limit our flexibility to rely on this domestic fuel source.

Recommendation 7). Legislation should be based upon a phased approach to resolving the problem. The first phase should be predicated on slowing the future increasing rate of greenhouse gas emissions and development of base load generating technologies that can reduce CO₂. The second phase should be based upon stabilizing the levels of greenhouse gas emissions and should entail demonstration and deployment of new technologies. The third phase should begin to see reductions in the levels of

greenhouse gas emissions. Congress should develop a reasonable timeline for these phases based upon the objectives of preserving economic growth, developing the technologies needed to accomplish these goals and allowing time to deploy these technologies.

Recommendation 8). Public power and private utilities have different governance structures that has led to discrepancies in the availability of certain federal incentives. Policymakers should recognize that the principle vehicle used to spur environmental enhancement and alternate energy programs in the past has been through the granting of tax credits. These tax credits are not available to public power so any legislation envisioning the use of tax credits to spur development should include comparable provisions for public power.

Mr. Chairman, that concludes my prepared remarks. Thank you again for the opportunity to address the committee. I am available to answer any questions you may have at this time.