An Additional Review by M. D. Campbell and Associates, L.P. (http://www.mdcampbell.com)

Key to Comments:
Black = Original Article Content
Yellow = Particular Offending words or phrases
Red = C&A Mining Group Comments

Article in Question:

Two Strikes Against New Nuclear Reactors

Web Posted: 10/24/2007

By Lara Cushing San Antonio Express-News

Recent editorials in the Express-News urge CPS Energy to pursue its plans to invest in two new nuclear reactors (<u>"CPS Energy showing the value of diversity,"</u> Oct. 10, and <u>"CPS should advance more nuclear power,"</u> Sept. 5). However, they ignore serious economic and environmental concerns that call into question whether more nuclear power generation is the best choice for San Antonio.

Research published by MIT and the U.S. Energy Information Administration concluded that nuclear energy will cost more per kilowatt hour than energy generated from coal, natural gas or wind. The Express-News reported that energy bills will go up \$4 to \$5 a month just to pay for CPS's \$206 million in initial design work. While total construction costs for the reactors are estimated at \$6 billion, according to the Department of Energy, the average final cost of new reactor construction is more than three times the original estimate.

- [1. The reporter states that the recent San Antonio Express-News editorials "ignore serious economic and environmental concerns" regarding nuclear-power costs. This alarmist claim should alert the reader that what follows in the article is suspect and likely to contain misrepresentations in supporting an unspecified agenda.
- 2. If the author were to look into the references she cited, as we have, she would find that the citations do not support the author's representations to any significant extent. The author has selected a few cost items and presented them out of context. To evaluate how the author has misrepresented the studies cited, see the following sources:
 - 1. University of Chicago Report (Here)
 - 2. MIT Report #1 (Here)

MIT Report #2 (<u>Here</u>) – This report states "The realized historical construction costs reflected a combination of regulatory delays, redesign requirements, construction management and quality-control problems." Many of these problems

have been corrected. Regulatory delays should be minimal due to experience with the rules and regulations involved. In the early years, 10% of the engineering once was accomplished prior to construction, now it's 50%. In addition, the plant and reactor designs of the 1970's were all unique. Today's designs are standardized, which will help to reduce or eliminate redesign requirements, and minimize construction management and quality-control problems.

MIT Report #3 (Here)

- 3. UIC Presentation (Here)
- 4. NEA Plans (Here)].

At the same time, prices for uranium skyrocketed from \$8 to \$138 a pound between 2002 and June of this year.

[We don't know what the author's point is here concerning the fuel price except to insinuate that higher fuel price means higher electrical costs to the consumer, which is patently false. The cost of fuel is extremely small compared to the cost of transmission and construction and permitting. Furthermore, the cost of fuel has decreased since June, 2007 (Here). The cost is likely to remain at the present levels for the foreseeable future (Here).]

Nuclear also carries with it a huge unknown: what to do with tons of radioactive waste. No one knows the future cost of disposing of it properly because viable sites or methods have still not been identified by the industry or regulators. Texas' current agreement sending low level radioactive waste to South Carolina expires in 2008. In the meantime, high level radioactive waste, which stays deadly for hundreds of thousands of years, will be stored at the reactor site, a huge health and safety risk.

[The total volume of radioactive waste now being stored at the plants around the country would only occupy a football field to a depth of about 10 feet. A sense of perspective is needed here. The total present waste occupies a volume of about 450,000 cubic feet. Making the assumption that the liquid waste weighs about 70 pounds per cubic foot (water weighs about 62 pounds per cubic foot), there is about 16,000 tons of waste on that football field. Then, assuming a suitable container built to be carried by railroad car can hold 5,000 cubic feet (~ 175 tons of waste), one (1) unit train (of ~ 90 cars) could carry all present radioactive waste to the Yucca Mountain Storage Facility. Although the site at Yucca Mountain is in political, not scientific, limbo at present, prognoses are good that the issues will be resolved soon (see Here). The waste will be stored and not disposed of because it represents a future source of energy that will likely be of value within 100 years to fuel "breeder" reactors.]

San Antonio is being presented with a false choice: nuclear or energy starvation. According to the State Energy Conservation Office, Texas could harness 250,000 megawatts of energy per year from wind alone, four times what's generated from all sources right now. Instead of taking us backward, CPS should be striving to lead the nation in developing sustainable renewable energy like wind and solar power.

[Once again, the author's separate agenda (the wind-energy lobby) emerges at the expense of nuclear power. However, a mix of energy sources is needed and the available alternative sources of energy do have their place in the U.S. energy solution. For example, wind and solar energy have their roles to play in remote areas of the U.S. but nuclear power is best suited to supply the national power grid in and around the major population areas of the U.S. The main power grid is best illustrated at night, see (Here).]

About the reporter: Lara Cushing works with affected communities on issues of environmental justice as an organizer with the Southwest Workers Union. She has an undergraduate degree in biology from UC Berkeley. The SWU is a non-profit advocacy group based in San Antonio, Texas working to empower people of color, workers, youth and grassroots communities.

XXX