



www.nukefreetexas.org

DON'T NUKE THE ALAMO

How Much Will a New Nuclear Plant Cost? *Who Are We Supposed to Believe?*

CPS Energy is eager to sell San Antonio on new nuclear plants, but can we trust their numbers? A new report on the costs of new nuclear plants by economist Mark Cooper shows two disturbing trends:

1. Cost estimates for nuclear plants are skyrocketing even before any plant has been approved, mirroring the last time utilities tried to build nuclear plants in the 70's and 80's.
2. Utilities and the nuclear industry consistently low-ball estimates in an effort to gain public support.

CPS and NRG estimates for new nuclear reactors follow these same trends. The chart below shows that CPS and NRG estimates are consistently below independent analysts' estimates. There could be many reasons for this. For example:

- CPS and NRG could be underestimating the future cost of materials like steel, copper and cement.
- The cost of borrowing money is extremely high. Were interest rates included in previous estimates? If so, what were they and what was the assumption behind the estimate?
- Were construction delays, an inherent problem with large multi-stage projects factored into the estimate?
- Were operations and maintenance costs factored into the estimates? In other words, did they calculate the total cost of putting electricity into the grid?

CPS Energy and NRG have not shown the public how they arrived at their estimates. They should show the public the detailed assumptions on which they base their estimates. Otherwise, it's just hype.

A Brief History of Cost Estimates in Chronological Order

Utility Estimate	\$5.4 billion August 2007 Source: NRG (at Atomic Safety & Licensing Board hearing June 2009)
Utility Estimate	\$6-7 billion: August 2007 Source: NRG (Reuters)
Independent Estimate	\$12.1-17.5 billion: September 2008 Source: Dr. Arjun Makhijani (Institute for Energy & Environmental Research)
Utility Estimate	\$8 billion: February 2009 Source: NRG (Reuters)
Independent Estimate	\$20-22 billion: April 2009 Source: Clarency Johnson (Former Public Utility Counsel official)
Utility Estimate	\$13 billion: June 2009 Source: CPS Energy (www.cpsenergy.com)

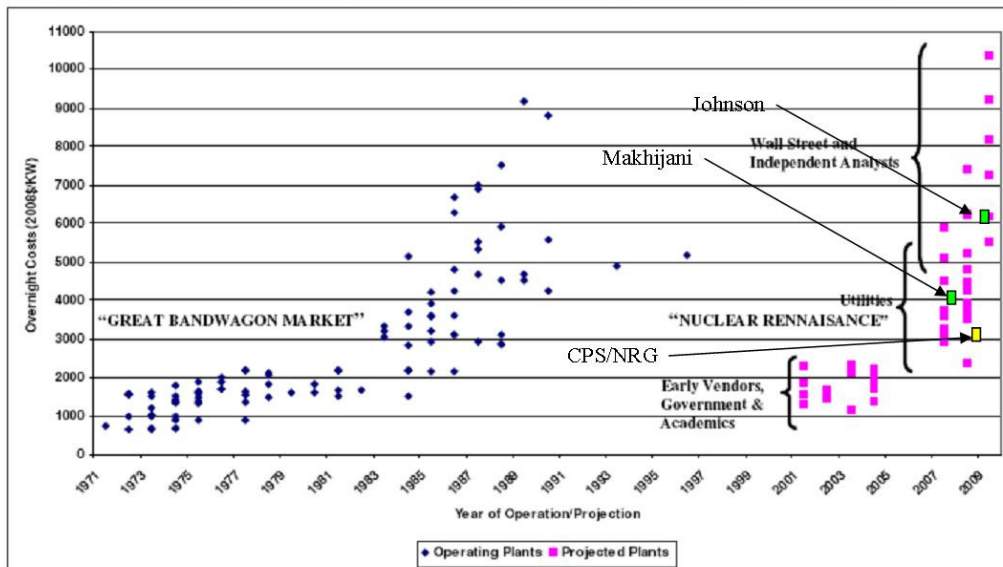


www.nukefreetexas.org

DON'T NUKE THE ALAMO

Cooper's report charts the history of how much nuclear reactors actually cost when the existing reactors were built during the 70's and 80's (blue dots). Back then, cost estimates turned out to be 100-600% too low. The South Texas Project in Bay City, which supplies San Antonio with power, cost 6 times more than estimated. Fast forward to today. The estimated costs of building new reactors (pink dots) are beginning to mirror the upward climb of the actual costs of constructing existing reactors. The chart below illustrates this and also shows the difference in who is making the estimates. Recent utility estimates are consistently lower than independent and Wall Street analysis, leading us to believe that companies like CPS and NRG (yellow dots), who are openly soliciting the sale of nuclear power, are intentionally low-balling cost estimates in order to gain public support for nuclear power. Independent cost estimates of South Texas Project expansion (green dots) fall more in line with national independent and Wall Street projections.

Figure ES-1: Overnight Cost of Completed Nuclear Reactors Compared to Projected Costs of Future Reactors



Sources: Koomey and Hultman, 2007, Data Appendix; University of Chicago 2004, p. S-2, p. S-8; University of Chicago estimate, MIT, 2003, p. 42; Tennessee Valley Authority, 2005, p. I-7; Klein, p. 14; Keystone Center, 2007, p.42; Kaplan, 2008 Appendix B for utility estimates, p. 39; Harding, 2007, p. 71; Lovins and Shiekh, 2008b, p. 2; Congressional Budget Office, 2008, p. 13; Lazard, 2008, Lazard, p. 2; Moody's, 2008, p. 15; Standard and Poor, 2008, p. 11; Severance, 2009, pp. 35-36; Schlissel and Biewald, 2008, p. 2; Energy Information Administration, 2009, p. 39; Harding, 2009. PPL, 2009; Deutch, et al., 2009, p. 6. See Bibliography for full citations.

Cheaper, more stable options exist for San Antonio

Low-income weatherization	High-efficiency appliance rebates	Retrofit program for apartments	Solar on homes, businesses and parking lots	More wind energy
Advanced green building incentives	Air-conditioning rebates	Low interest loans for home and business retrofits	Expanded peak saver thermostats	Refrigerator recycling incentives

All of these options together are cheaper than nuclear, create local green jobs and help save the planet. Call, visit or email Mayor Castro (210-207-7060; mayorjuliancastro@sanantonio.gov) and your city councilmember (<http://www.sanantonio.gov/council/?res=1024&ver=true>).