## **History of Cost Overruns** – excerpted from:

## Business Risks and Costs of New Nuclear Power Craig A. Severance

## **History of Cost Overruns**

It is more than legend that the original wave of U.S. nuclear power plants ordered in the 1960's and 1970's experienced massive cost overruns compared to original estimates.

The U.S. Energy Information Agency (EIA) studied the record of this generation of plants (but did *not* include the worst cases such as Comanche Peak, Seabrook, and Vogtle), breaking up the results into two-year periods. EIA set out to compare original estimates to actual costs (levelized to constant dollars), and the results were dramatic. It was not a few isolated cases, but a clear pattern of an industry that regularly and catastrophically underestimated its costs:

The EIA found average *actual realized* nuclear construction costs were 209% - 380%, i.e. over 2 to almost 4 times, the estimates originally presented at start of construction:

Average Estimated and Realized Overnight Costs of Nuclear Power Plants By Year of Construction Start, 1966-1977 (1982 Dollars per Kilowatt-Electric)

		Estimated Per-Plant Costs at Different Stages of Completion					Stages
Year of Construction Start	# of <u>Plants</u>	<u>0%</u>	<u>25%</u>	<u>50%</u>	<u>75%</u>	90%	Realized Costs
1966–1967	. 11	298	378	414	558	583	623
1968–1969	26	361	484	552	778	877	1,062
1970–1971	. 12	404	554	683	982	1,105	1,407
1972–1973	. 7	594	631	824	1,496	1,773	1,891
1974–1975	. 14	615	958	1,132	1,731	2,160	2,346
1976–1977	5	794	914	1.065	1.748	1.937	2.132

Source: Energy Information Administration, An Analysis of Nuclear Power Plant Construction Costs, DOE/EIA-0485 (Washington, DC March 1986) p. 18, as quoted in "Commercial Nuclear Power in the United States

Problems and Prospects", U.S. Energy Information Administration, August 1994

If you hired a contractor to build homes for you and he regularly ran 2 to 4 times his budget, you would fire him. We know the utility industry did in fact walk away from the nuclear industry, for 30 years.