DALLAS -- Texas Utilities Co. said it discovered new problems at its Comanche Peak nuclear power plant that will increase the plant's cost and delay the start of operations beyond mid-1988.

In a filing with the Securities and Exchange Commission, Texas Utilities said the problems were discovered in several design areas, which will require reanalysis of existing design calculations, reinspection and, in some cases, repairs. It didn't elaborate on the areas under review.

The company said it couldn't predict how long the work will take or what it will cost. However, it said the plant won't be operating in time for the summer of 1988.

It also said construction on Unit 1 probably won't be finished until the second quarter of 1987, instead of the end of this year, as earlier estimated. Unit 2 is expected to be completed about six months after Unit 1 begins operating.

The company's last projections, made in November 1985, estimated Unit 1 would be operating by mid-1987 and the two units would cost a total of $5.46 billion. In April, the company said it would have to modify about 30% of the pipe supports in Unit 1 and replace sleeves where electrical wires run through walls in the containment buildings, delaying the project and increasing the cost.

Each additional month's delay in the plant's completion costs $35 million in financing costs, taxes, insurance, staff and utilities.

Texas Utilities owns 87.8% of Comanche Peak, about 75 miles southwest of Dallas.