Answers to questions for lab 2

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1. a. Based on a net present value analysis using the estimated costs as known cash flows, which system is preferred and why (assuming all other factors are equal)?

In the first case the gas option provided better results with a savings of about $200 over 5 years. The system is preferred because, all other factors aside, we saved money. There is no variability.

1. What is the average and the standard deviation of the difference NPV(gas)-NPV (electric) generated from the simulation? Make sure this figure is labeled and highlighted in your spreadsheet. Which system is preferred and why?

In the second trial with randomized variability we came to the result that you would still want to pick the gas method due to the savings.

Our data for the difference between gas NPV and Electricity NPV were as follows:

The average was $597.84 and the standard deviation was $781.70