Sam Bridwell

Mechanical Option

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Thesis Presentation Outline

- Introduction (1slide)
- Project Overview (2 Slides)
  - Project background
  - Building statistics
- Proposal (2 Slides)
  - Conclusions drawn from fall analyses
  - Proposal elements
- CHP Plant implementation Depth
  - Utility data collection and analysis (2 Slides)
    - Trends
    - Predictions based on further expansion
  - DOE CHP selection Process (1 Slide)
    - Assumptions
    - Subjective criteria as well as objective
  - Iterations chosen for analysis (1 Slide)
    - Advantages/disadvantages
  - Financial feasibility of each iteration (4 Slides)
    - Energy use
    - Equipment and labor cost
    - Payback period
    - Sensitivity study for future utility price fluctuations
  - Carbon footprint of each iteration (1 Slide)
  - Non-quantifiables (1 Slide)
    - Resizing of basement
    - Operability
- Power interconnect and Black start capability breadth
  - Power interconnect (1 Slide)
    - Design
  - Black start capability (2 Slides)
    - Equipment needed
    - Add to price of chosen chp config
- Alternative project delivery method (3 Slides)
  - Background on AIA ruling and project issues
  - Research results
  - Financial analysis- o&p vs delay and litigation cost
- Final Recommendations (1 Slide)
- Conclusion/acknowledgements (1 Slide)

Total: 23 slides