

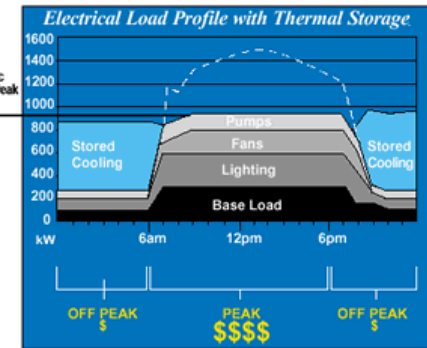
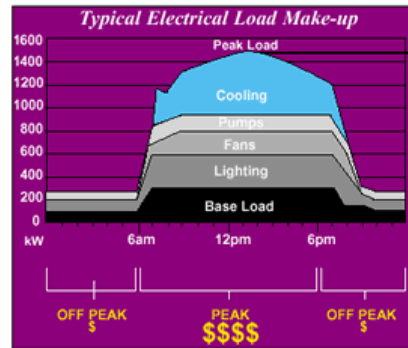
Modeling, Optimization and Control Systems for Thermal Energy Storage Systems

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Research Goals:

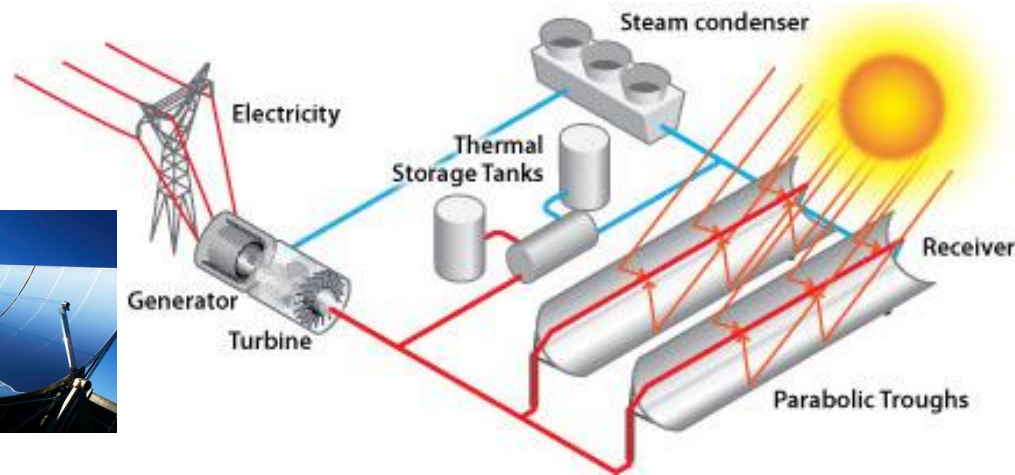
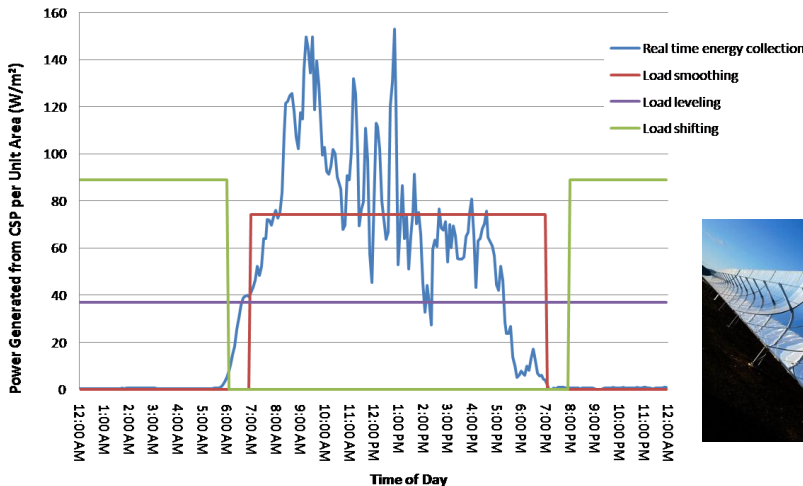
- Modeling, control, and optimization of systems that use thermal energy storage

- Solar thermal systems
- Energy storage for peak shifting
- Combined heat and power



Thermal Energy Storage can be used for cooling applications. Ice is made at night, which is then used during the day to cool buildings.

Thermal Energy Storage can be used with Concentrated Solar Power Plants to level electricity generation rates and extend generation periods to when the sun is not shining.



Modeling systems that use thermal storage can provide insight into economics and design. By applying advanced control and optimization, the performance of these systems can be improved resulting in energy and financial savings.