Compressed Air Energy Storage (CAES) Analyses

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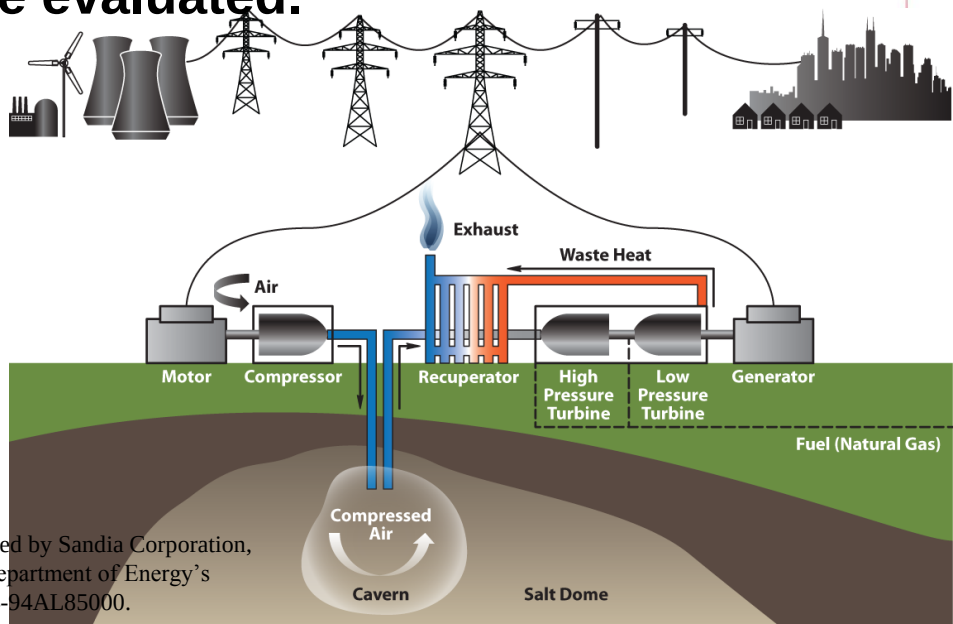
Our goal is to reduce risk associated with underground aspects of CAES by developing a fundamental understanding of the coupled Thermal-Mechanical-Hydrologic (T-M-H) response of geologic storage formations (salt caverns, depleted oil/gas reservoirs, aquifers) subjected to cyclic loading through an integrated analysis and experimental program. Pressurization/depressurization during CAES cycling results in temperature changes that may cause changes in material properties which need to be evaluated.



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