

Thermal Maintenance Scheduling

Taking into regional and subregional reserve availability

- Calculate daily reserve = 90% (user input) of daily minimum available capacity – daily peak of netload, if less than zero, set to zero
 - Available capacity: Thermal seasonal capacity, hydro, PSH, Battery (capacity or average)
 - NetLoad: $\text{netload} = \text{hourly load} - \text{wind} - \text{solar} - \text{hydro given schedule}$
- Consider user's inputs on schedule windows or avoid windows
- Schedule the thermal capacity within daily reserve to maximize the minimum of daily reserves
- Adjust daily reserve based on scheduled thermal maintenance
- Coordinate maintenance across the regions, reserve sharing regions, and system

Battery Operation Constraints

- Minimum Downtime
 - Downtime between charging and discharging
- Daily cycle
 - How to define the cycle?