

Environmental
and
bat activity data

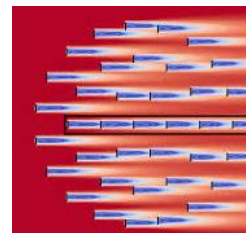
Startup / Shutdown / Idling / Normal operation



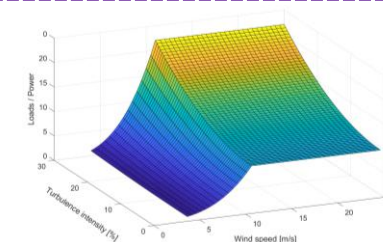
Apply bat-protection
logic and determine
turbine operating states



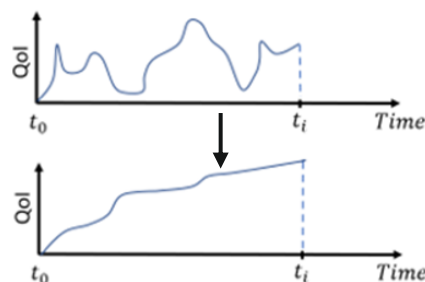
Calculate local inflow
and power production
per turbine with
engineering flow models



Predict turbine level
fatigue load metrics
using structural
response surrogates



Repeated for
each time interval



Aggregate energy,
fatigue, and operational
indicators over time