1. Data Input:
   1. RPS Target (0-100%) by state and by year
      1. Data viz for entry
      2. Logic /data entry for choosing target for an in-between year
   2. Base year demand number (MWh) by state
      1. Calculated from our process to the county level
      2. Validation numbers from EIA at the state level
      3. Validation numbers (if any) from other sources (e.g. CEC)
   3. Demand growth (MWh or %) by state
      1. From a report like CEC’s
      2. From a forecast (e.g. 1% per year)
   4. State-by-state definitions of “renewables” and “clean”
      1. California does NOT include large hydro as renewable energy, but does as clean
      2. Nuclear sometimes counts as renewable, but for others not
   5. Uncounted renewable and/or clean energy (MWh)
      1. California counts rooftop solar, but we do not include that in our model
   6. “Previous” simulation capacity (MW) and generation (MWh) by state
   7. Estimated Additional Curtailment (0-100%) by state (data viz, dropdown, …)
2. Calculations
   1. Scenario demand (MWh) = f(Base year demand, demand growth)
   2. State RenGen Target (MWh) = RPS Target \* Future demand
   3. Base Year RenGen (MWh) = Base Year Simulated RenGen + Uncounted Renewable and Clean Generation
      1. The rules for counting RenGen and CleanGen will need to be consistent across this process
   4. INITIAL Additional RenGen Needed (MWh) = State RenGen Target – Base Year RenGen
   5. INCREMENTAL Additional RenGen Needed (MWh) = State RenGen Target – Previous Sim RenGen
   6. Capacity Factors assuming NO curtailment, by state (0-100%)
      1. Calc 1 – from our Base Year simulation, which includes curtailment
      2. Calc 2 – direct from our wind profiles
   7. Curtailment value from our simulation (0-100%) = Expected RenGen – Sim RenGen
3. Output of Process: Increasing Solar and Wind Generation
   1. Total MW of solar and wind to add to previous scenario’s capacities