Hourly generation dispatch by technology in FRA Renewables share $= 0.32 \ge 0.32$ CO2 reduction $= 0.989 \ge 0.55$ wind_on wind_off 8.0×10^4 solar biomass nuclear coal gas_cc gas_oc hydro 6.0×10^4 4.0×10^4 2.0×10^4 0 50 100 0 150