

## **SOLAR POWER AND WILDLIFE PROTECTION**

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Relations**

## Two BIG Issues:

- **Cost of Solar**

- Four times more than coal
- Twice as much as wind power

- **Land Requirements**

- Extensive land that must be clear of vegetation
- Broad exclusionary areas
- Concerns about significant impacts on desert ecosystems

## The Big Issue: Land Required

- For every megawatt of solar power approximately **8.0** acres of land are required
- This compares with **0.05** acres per megawatt for a gas fired plant and about **1.0** acre/MW for a nuclear plant
- The viable solar areas are often located in desert environments which are sensitive to disturbance



## But What is Missing From These Land Requirements?



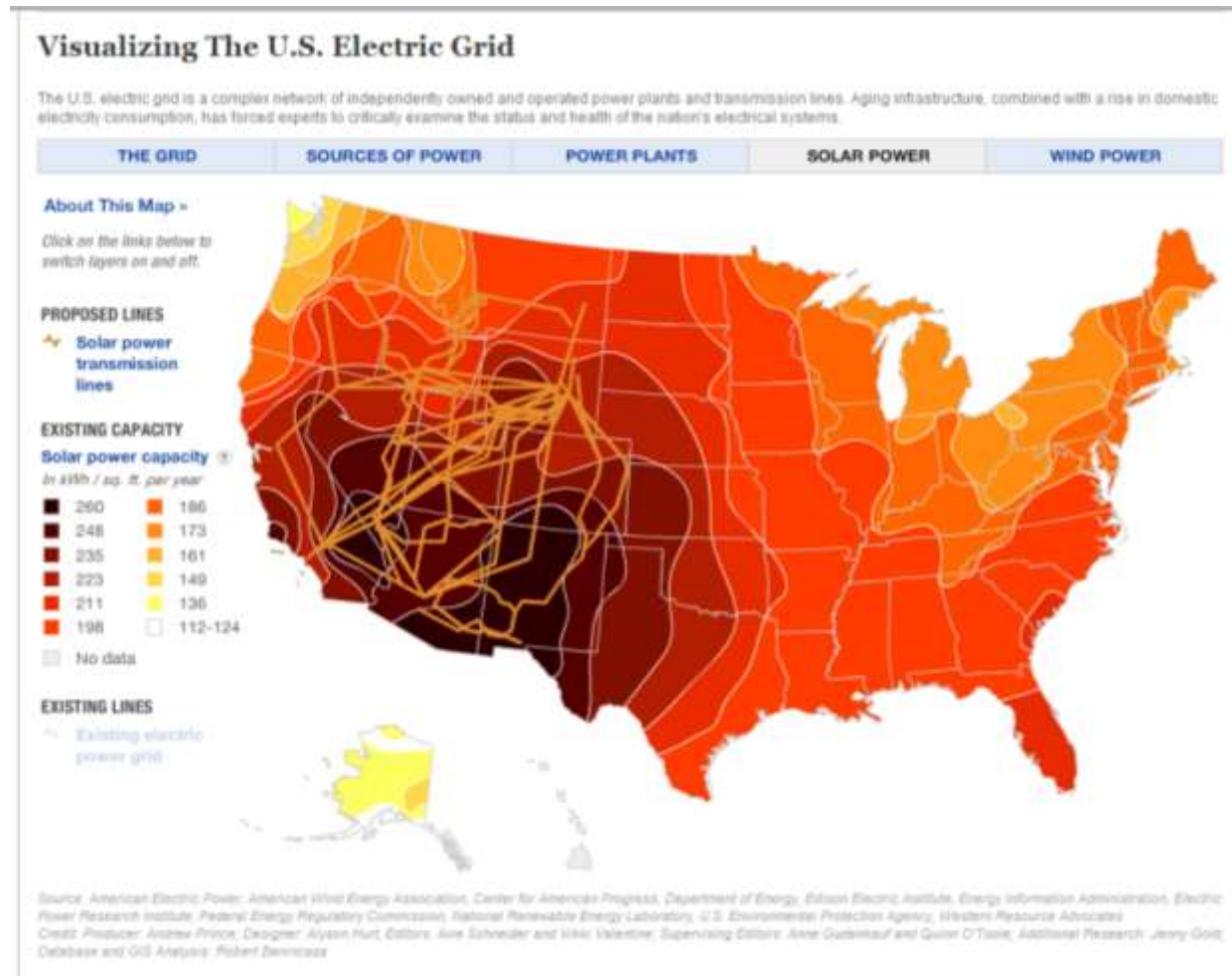
## The Fuel Source



# Ancillary Equipment



# The Solar Dilemma



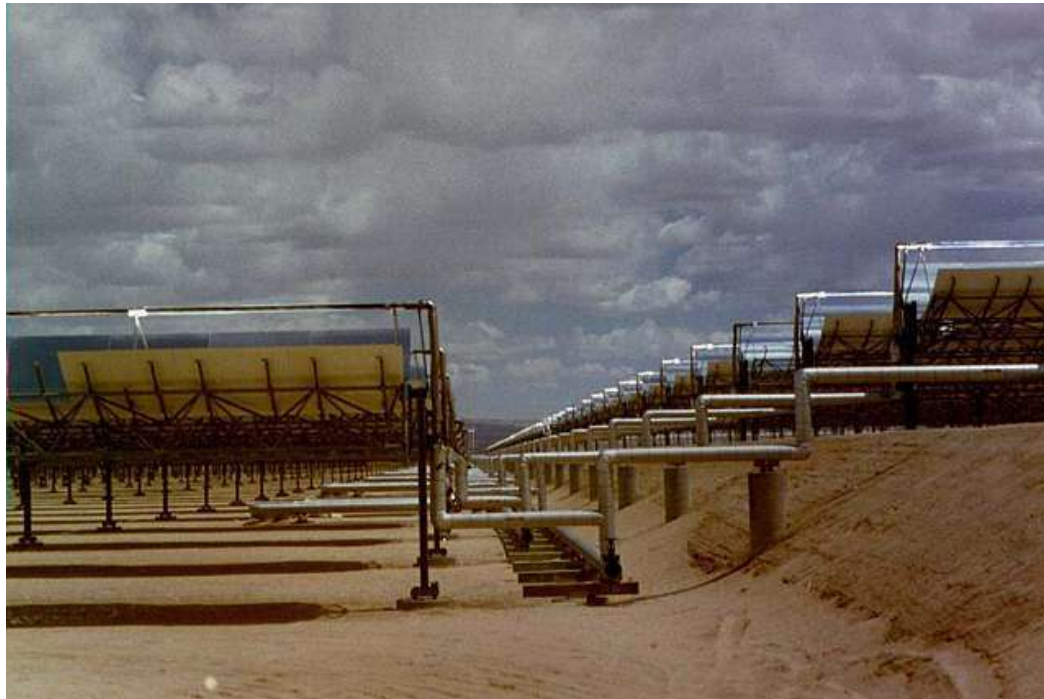
# Mojave Desert's Competitive Challenges



Traffic passes on Interstate 15 along the eastern Mojave Desert in California.

Reed Saxon/AF

## Commercial Scale Solar is Huge



## NextEra's SEGs Plant in California



## Types of Commercial Solar Power: Solar Troughs



# Concentrated Solar



# Photovoltaic



# FPL's Photovoltaic Plant in DeSoto County, Florida



# Rooftops Around





gwz10116 www.fotosearch.com

## Rooftop Solar



## The Required Balance

- **Energy Efficiency**
  - Power Plants
  - End Users
- **Conservation—with the help of “smart meters”**
- **Renewable Energy**
  - Wind
  - Solar
  - Existing Hydro
  - New technologies—tidal, etc

# Questions?

