

Presentation to

Arizona Chapter of ASFMRA

February 26, 2010



Harvesting the

SUN

for a Brighter Future



NextLight Renewable Power, LLC

NextLight Renewable Power

- The largest independent utility-scale solar developer in the U.S.
 - Technology-neutral
 - Develop, construct, own, and operate solar generating facilities
 - Formed in late 2007 by Energy Capital Partners
 - The experienced development team has built over 8,000 MW of fossil fuel and renewable generating facilities in the Western U.S.
 - NextLight management has procured over 3,000 MW of renewable contracts for utilities

Energy Capital Partners

- Superior access to capital and financing expertise
 - \$2.25 billion private equity fund based in Short Hills, NJ
 - 120 investors include pension funds and university endowments

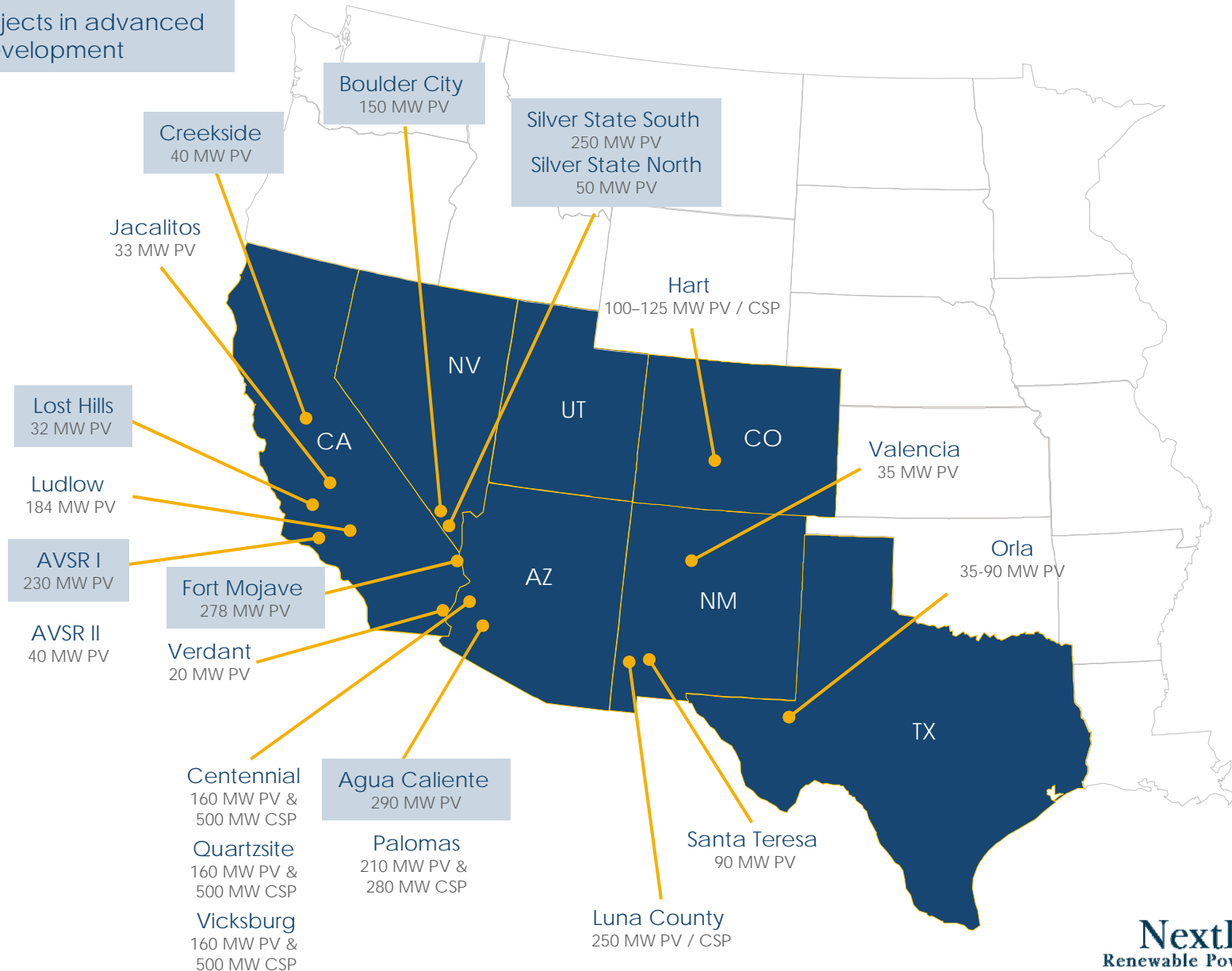
NextLight Project Portfolio

- An advanced development portfolio of 1,320 MW
 - Eight projects in three states
 - Five of the eight can start construction in 2010
 - 570 MW under PPA
 - 3,487 MW in early development throughout the Western U.S.



NextLight's Geographic Footprint

Denotes projects in advanced stages of development



Solar Technology – CSP



http://www.nrel.gov/csp/troughnet/pdfs/2007/lden_ses_dish_stirling.pdf

http://news.cnel.com/ibto/20090223/image00_610x378.jpg



<http://greenlight.greentechmedia.com/wp-content/uploads/2008/12/csp-ausra1.jpg>



Solar Technology – Photovoltaic



<http://haliklig.com/wp-content/uploads/2008/05/121nanosolarfoil.png>



ARTIST RENDERING | EXAMPLE OF SOLAR PHOTOVOLTAIC TECHNOLOGY
SUNPOWER T20 TRACKER



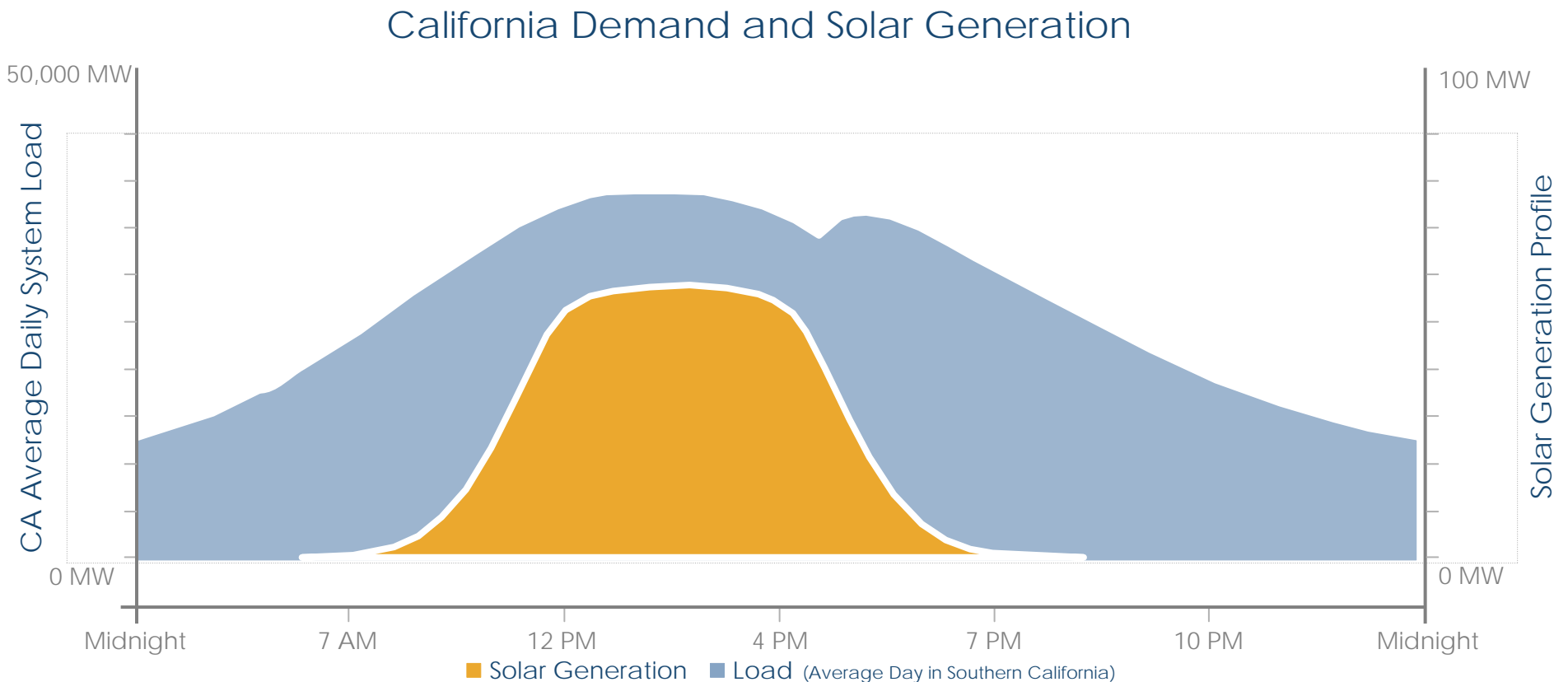
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The Value of Solar Power



- Solar power is generated when demand is at or near its highest
- Valuable form of generation for utilities and consumers
- Solar thermal projects can incorporate thermal storage to better coincide with demand peaks
- Solar plants are compensated for providing super-peak power through time-of-day adjustments to a fixed payment under a long-term power purchase agreement

Public Policy Drives Solar Power Development

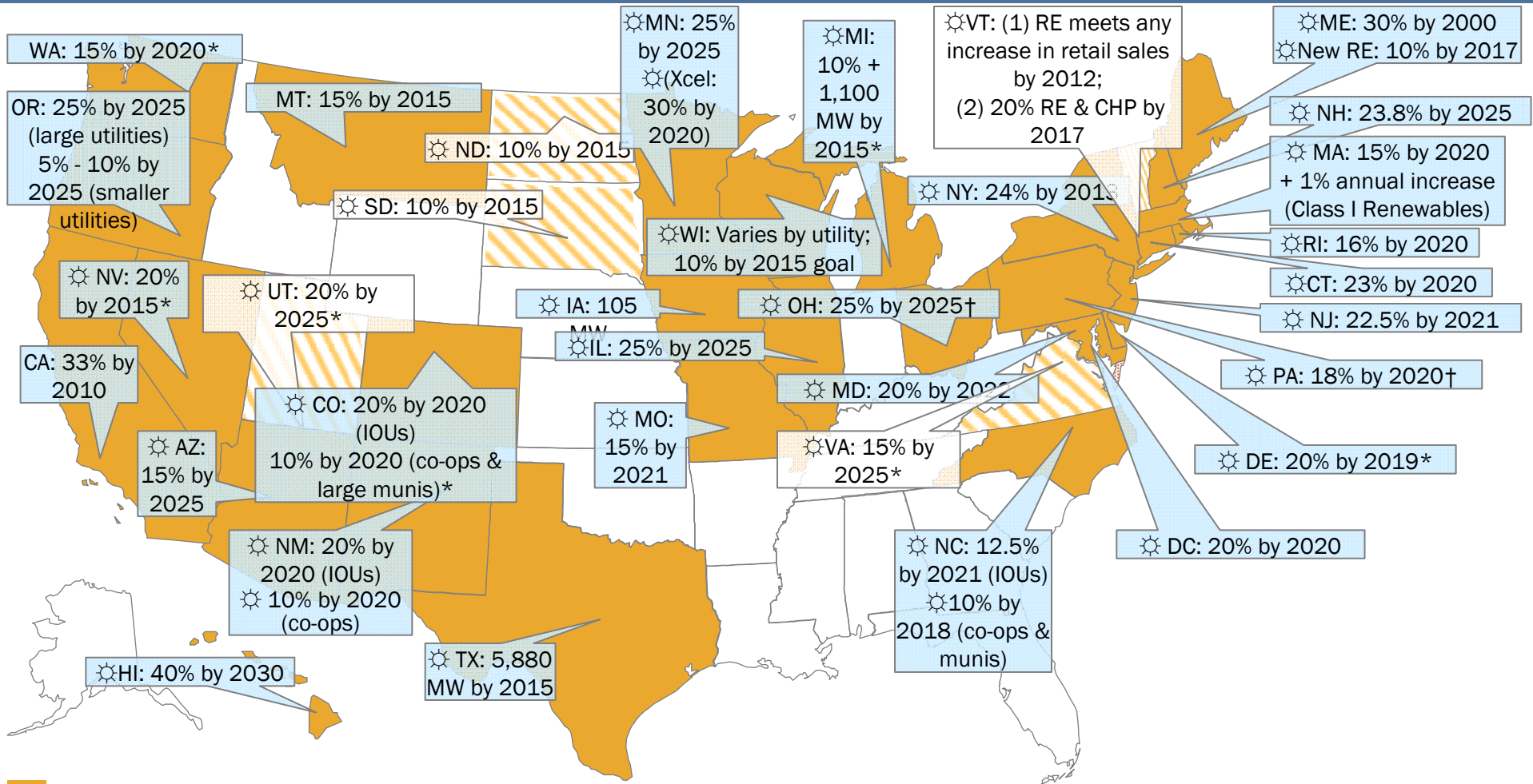


- Tax benefits
- Wholesale price regulation (FERC)
- Transmission access (FERC)
- Environmental permitting (BLM)

- Renewable Portfolio Standards (RPS)
- Resource planning
- Regulation of retail rates
- Transmission siting
- Environmental permitting

- Zoning and land use planning
- Environmental permitting
- Local public opinion

State Policy Drives Demand for Renewable Energy



State renewable portfolio standard
 State renewable portfolio goal

☀ Minimum solar or customer-sited requirement

* Extra credit for solar or customer-sited renewables

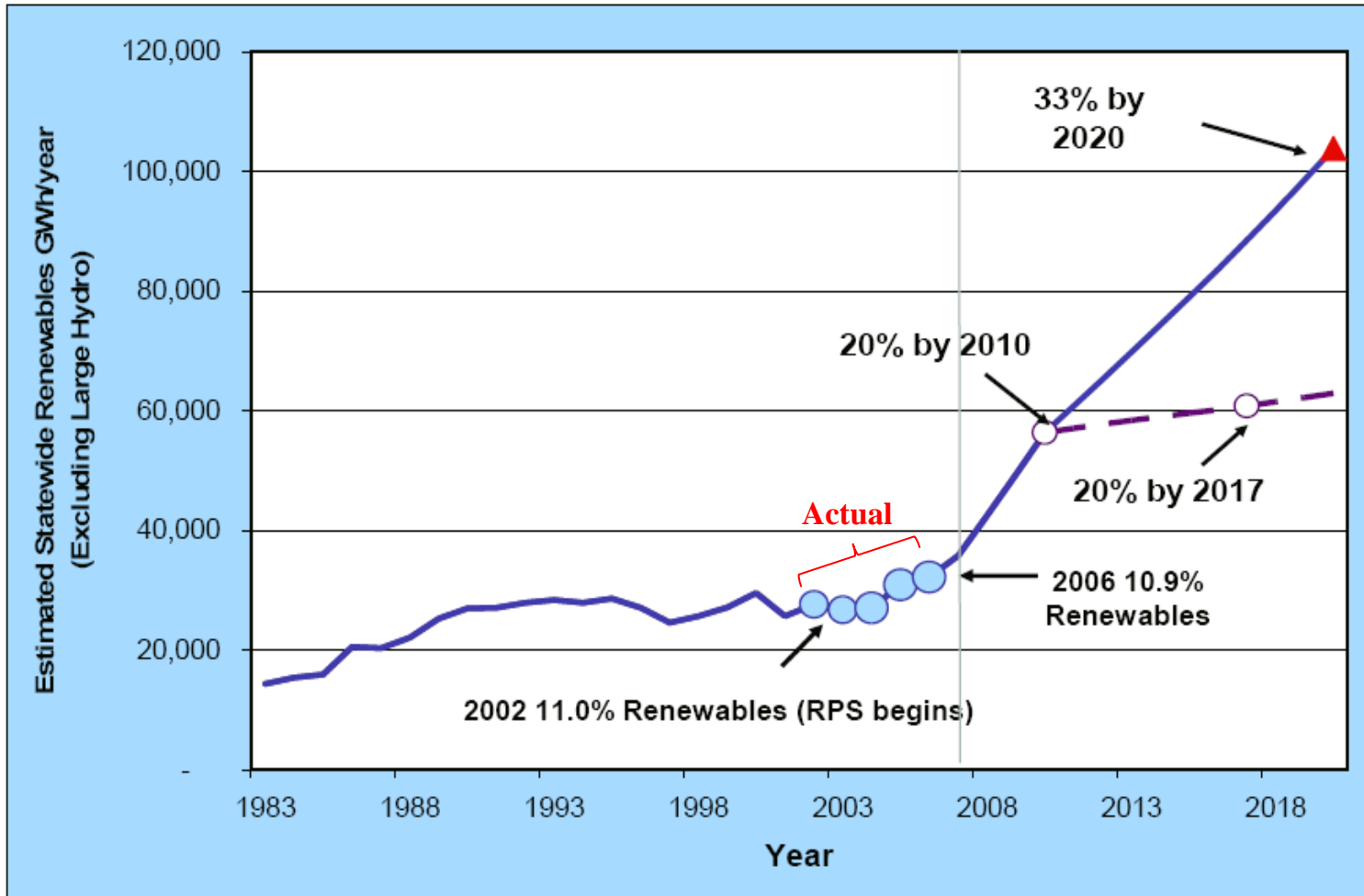
† Includes separate tier of non-renewable alternative resources

Elements of a “Typical” RPS Program – California

Eligibility	Solar, wind, geothermal, biomass, tidal, small hydro
Target	20% of retail energy sales served by renewable resources in 2010
Obligated Entities	Investor-owned utilities (e.g., SCE, PG&E); energy service providers; community choice aggregators must meet RPS. Publicly owned utilities (e.g., LADWP) have no obligation
Geographic Limits	Renewable power must be generated in California or produced for California consumers by plants located in neighboring states
Manner of Purchase	Annual solicitations for long-term (i.e., 10 years or more); bids are rank ordered by cost and “fit”; some bilateral and short term contracts permitted, subject to cost cap; unbundled Renewable Energy Credits do not count for regulatory compliance
Noncompliance Penalties	Up to 5 cents/kWh capped at \$25 million annually
Cost Caps	Market Price Referent (an administratively-determined reasonableness benchmark based on long-term cost of a new combined cycle turbine) established annually; costs in excess of MPR capped at \$700 million

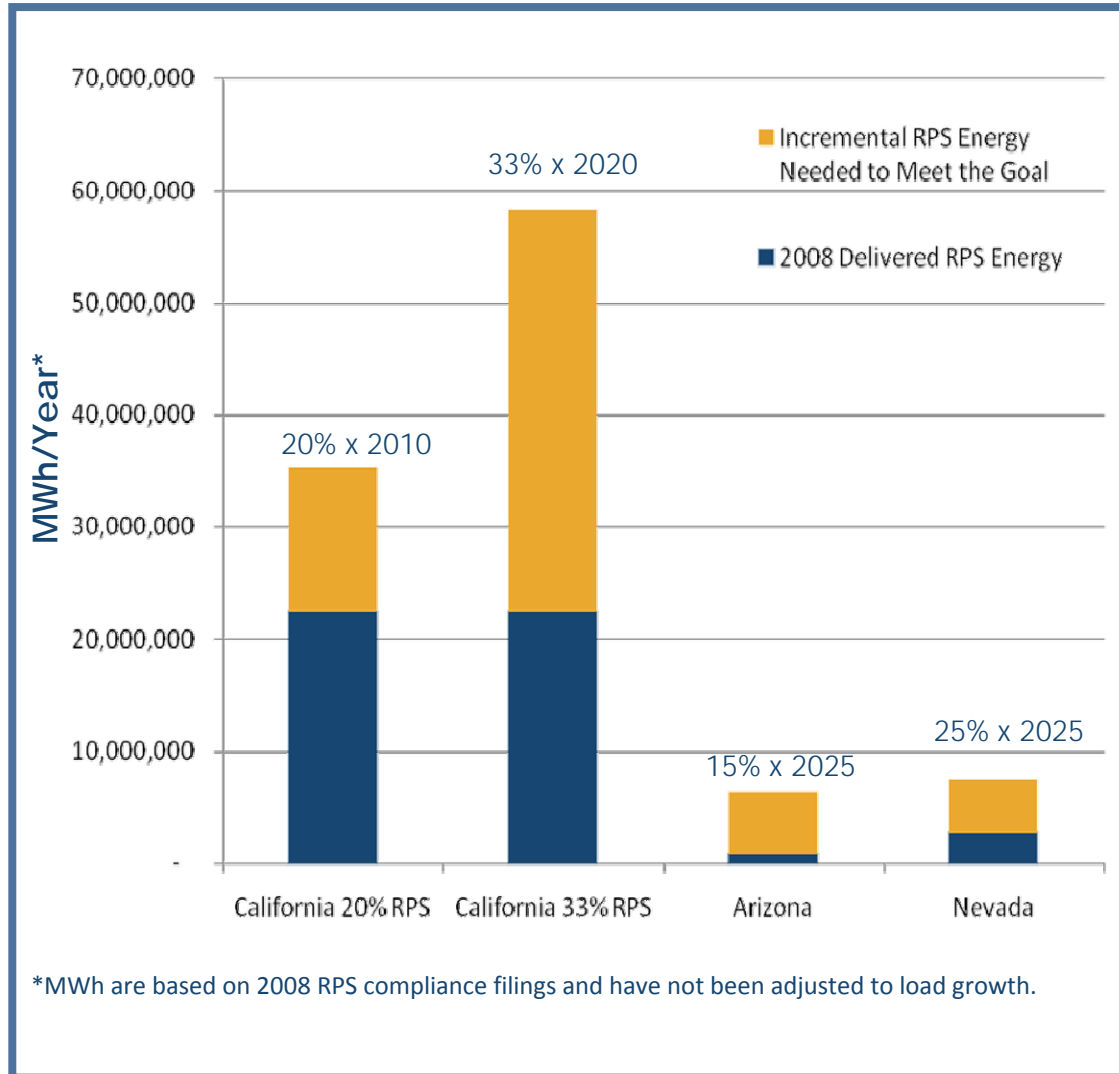


Impact of Adopting 33% RPS in California



The CPUC reported to the California legislature that achieving a 33% RPS may require a \$60 billion investment

Western States: Demand for Renewable Power



*MWh are based on 2008 RPS compliance filings and have not been adjusted to load growth.

Over the next decade
Arizona will become
a net exporter of
Renewable Energy

From Market Need to Generation Resource

Siting

- Solar resource
- Customer access and marketability
- Environmental compatibility
- Community acceptance
- Site control

Development

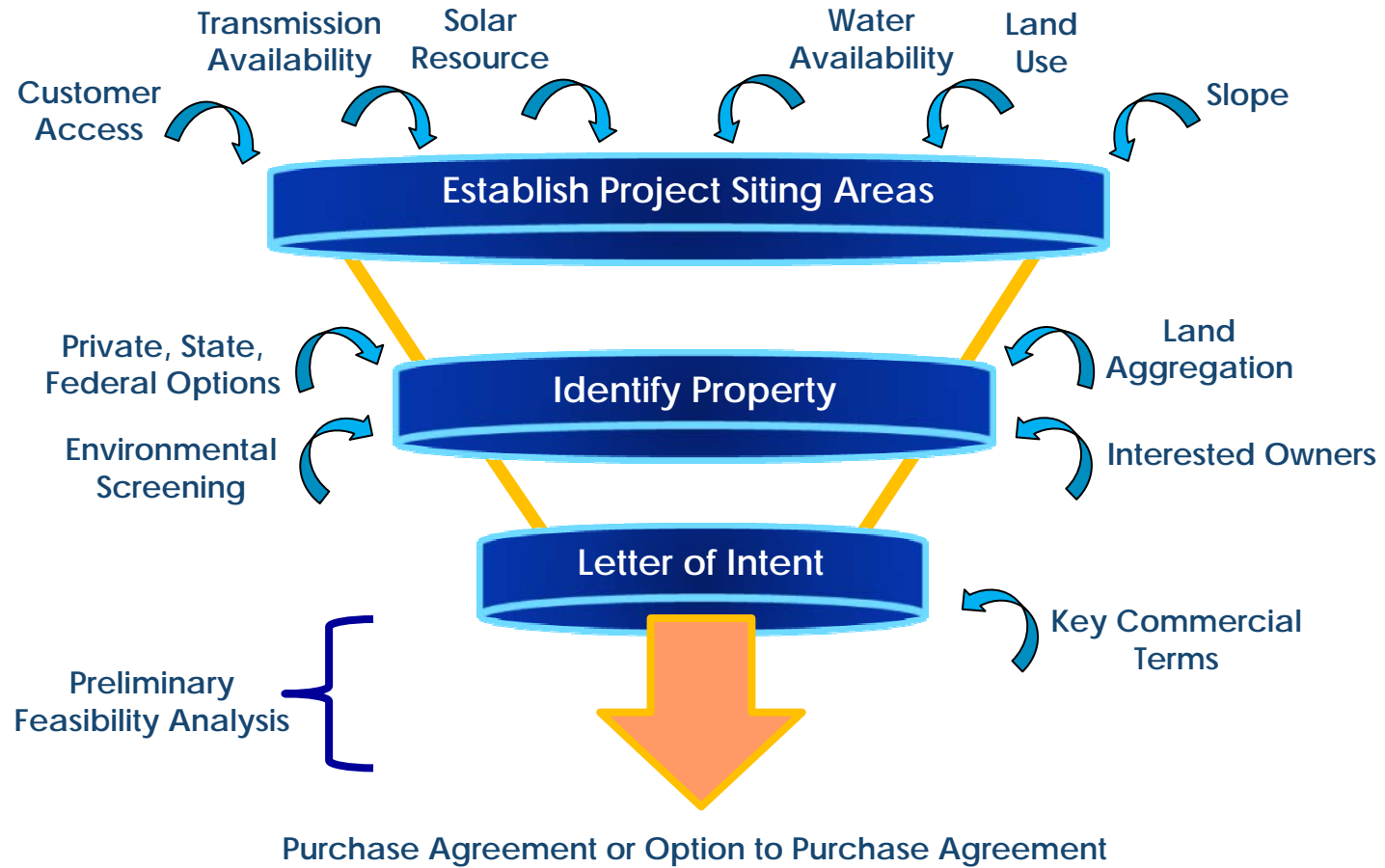
- Permitting
- Community outreach
- Transmission interconnection
- Power Purchase Agreement
- EPC agreement(s)
- Interconnection agreements and other major contracts
- Owner procured equipment
- Construction financing

Construction

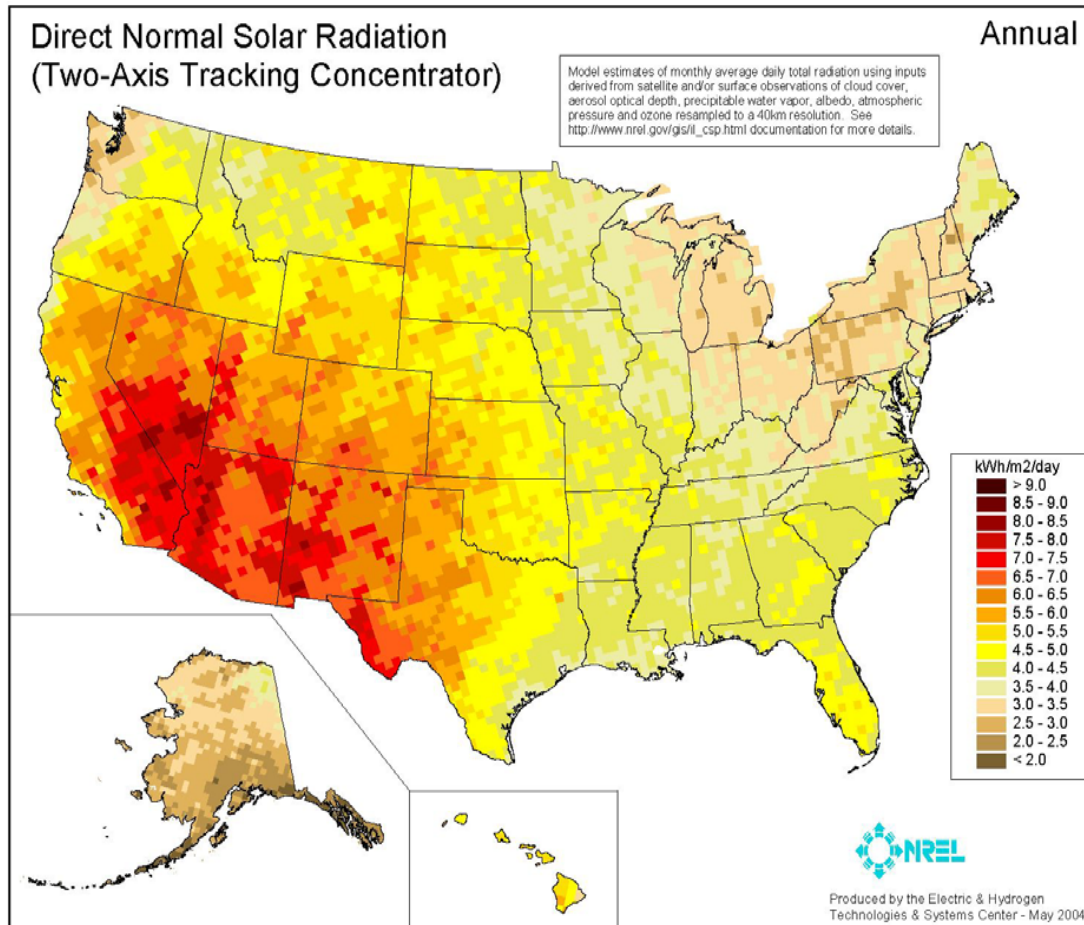
- Contracts management
- PPA
- EPC
- Field construction management
- O&M staffing
- Performance testing/commissioning
- Permanent financing



Siting Process

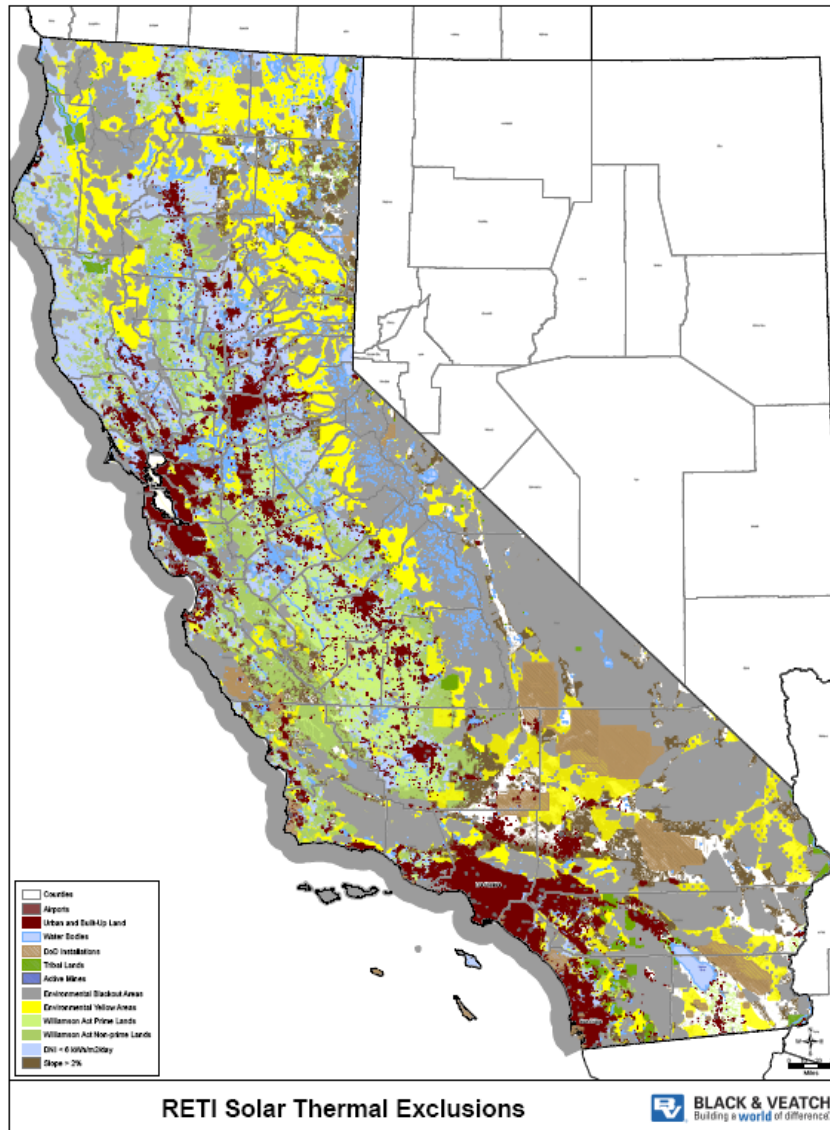


Strong Solar Resource Where RPS Demand is High



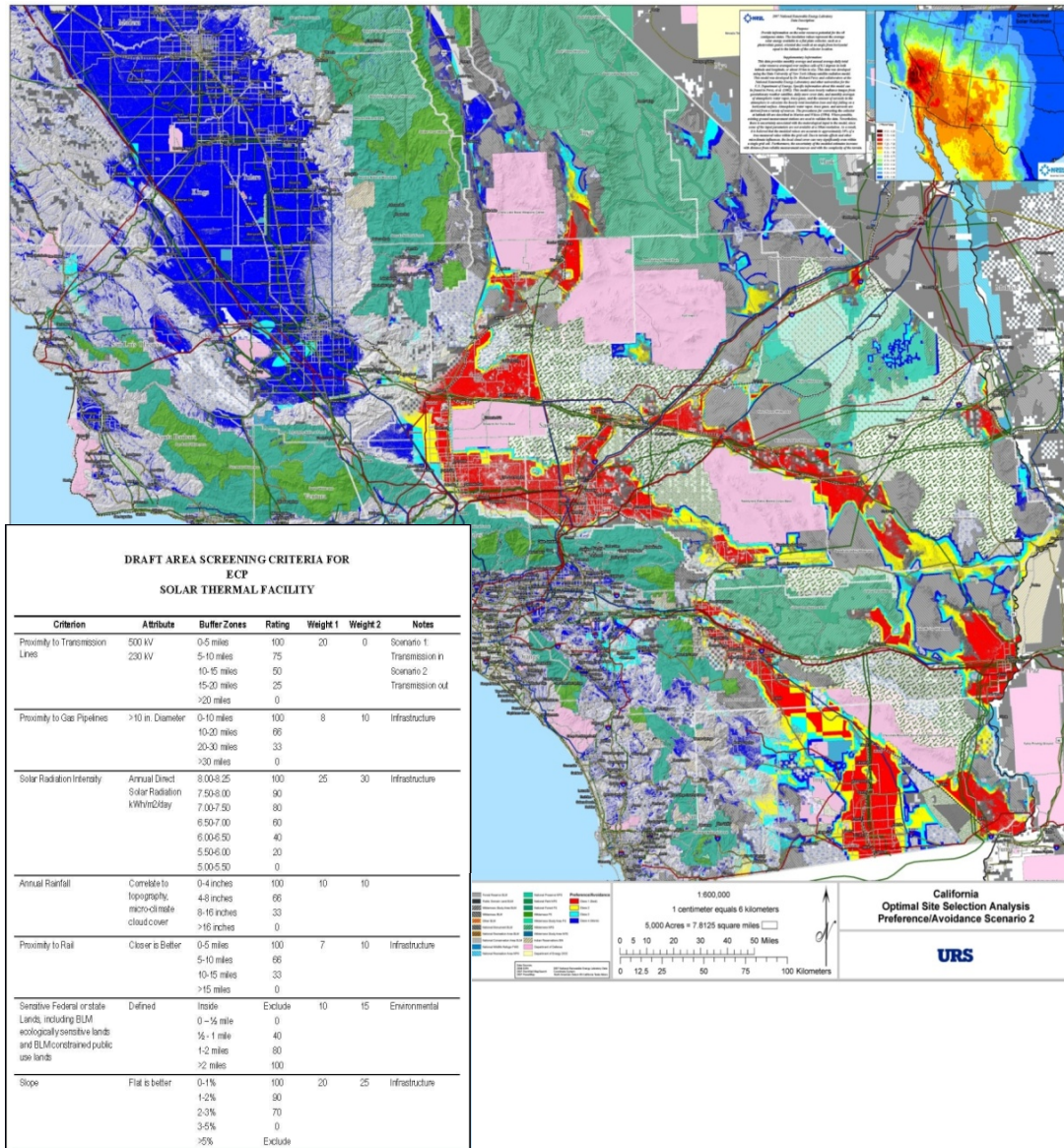
- Southwest solar resource is world class
- +7.5 KWh/m2/day
- Highest direct normal insolation is located in areas of high RPS: CA, AZ, NM, NV, CO, UT
- Solar energy is the most widely distributed of all renewable resources
- Approximately 50,000 MW solar thermal capacity per pixel

Development Lands are Scarce



- Environmentally Sensitive
- Critical Habitat
- DOD installations
- Urban Areas
- Airports
- Tribal lands
- Water Bodies and Rivers
- Slope greater than 5%
- Williamson Act lands

Detailed Screening is Necessary to Identify Solar Areas



- Geographical information system analysis is utilized to identify high value areas
- Exclusionary criteria
- Avoidance criteria
- Preference criteria:
 - High solar resource
 - Low slope, water supply
 - Near transmission, gas
 - Low value land
- Field investigation is the next step

Arizona Site Control Options

Private Land

Pros

- State and local jurisdiction for major permits
- Immediate site control

Cons

- Holding costs and potential property purchase during development period

Site control of 3,800 acres; 5,400 acres in LOI/Feasibility Phase

BLM Lands

Pros

- Limited or no land holding costs during development

Cons

- Federal jurisdiction and NEPA process for major permits
- Record of Decision grants Right of Way at end of permit and development process

80,000 acres of BLM land serialized in Arizona

Tribal Lands

Partnered with Tribal consortium to advance projects on Tribal lands

State Lands

Pros

- State and local jurisdiction for major permit

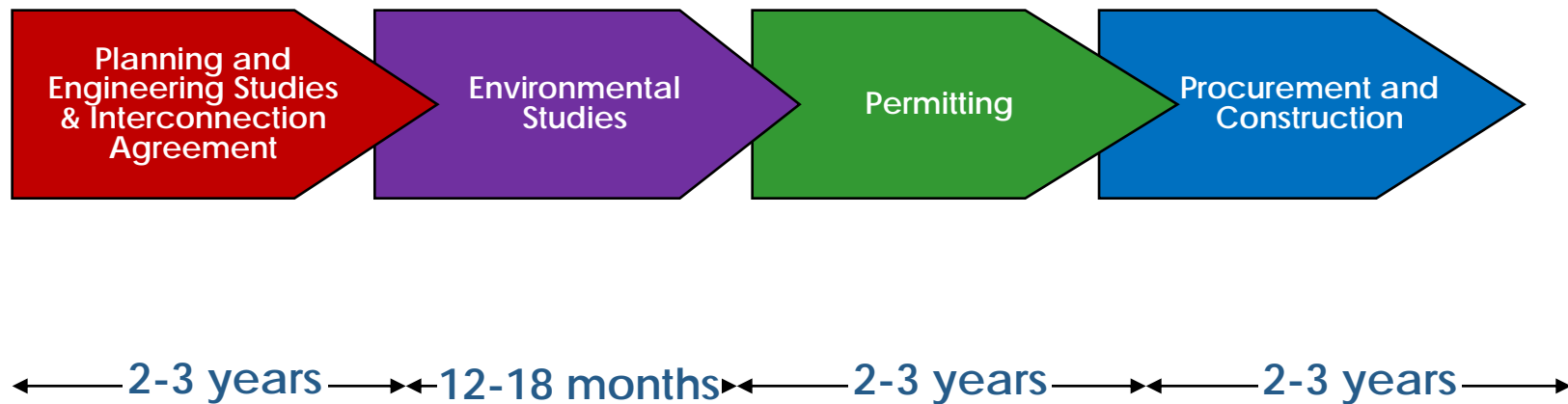
Cons

- Arizona requires auction process to establish site control (12-18 months)

Stand alone lease or complement to private land acquisitions

The Transmission Development Timeline is Long

- A new regional transmission line takes 7 – 10 years to develop and construct
- A power plant takes only 3 – 5 years to develop and construct



Arizona Needs More Transmission to Access Renewables

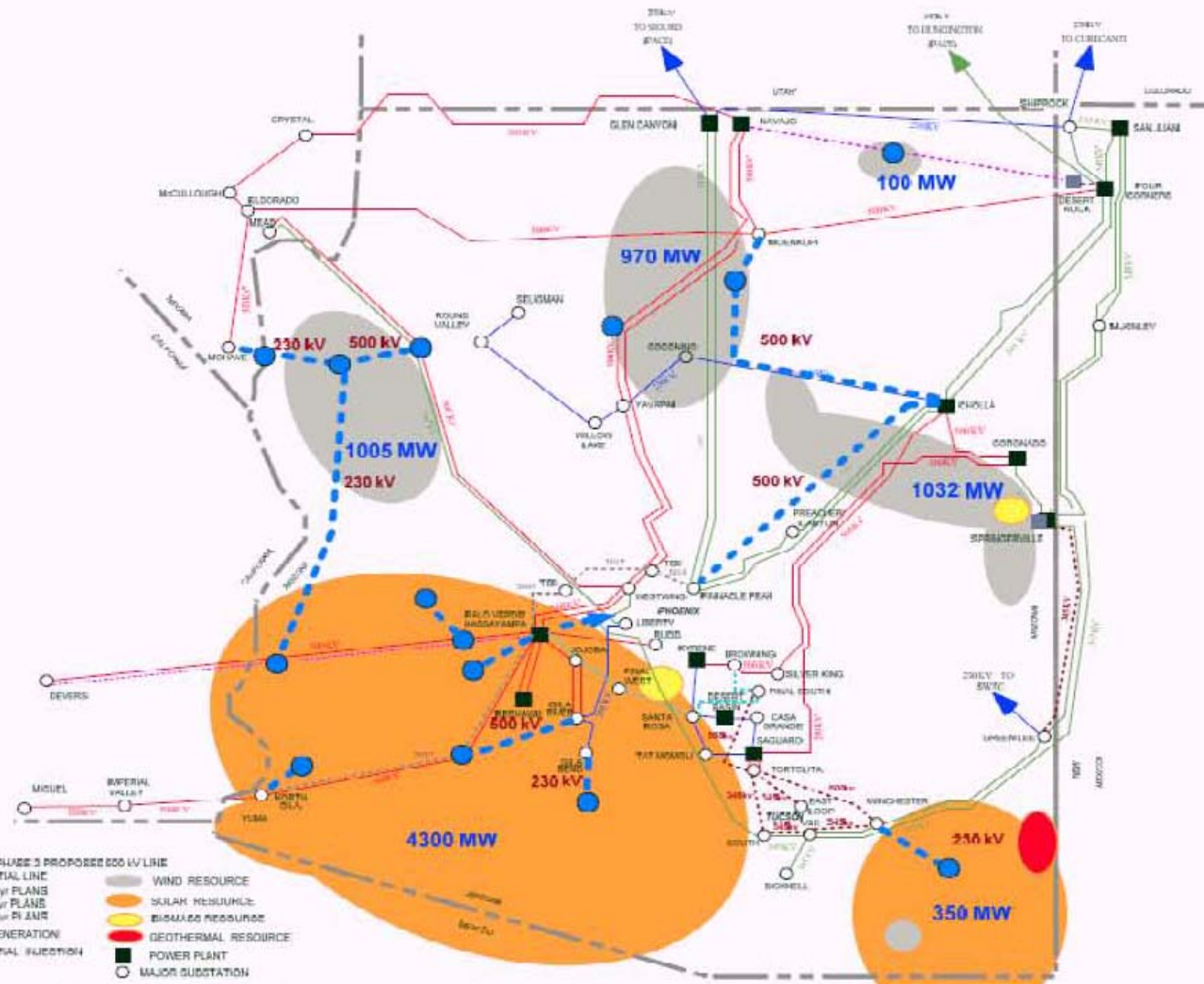
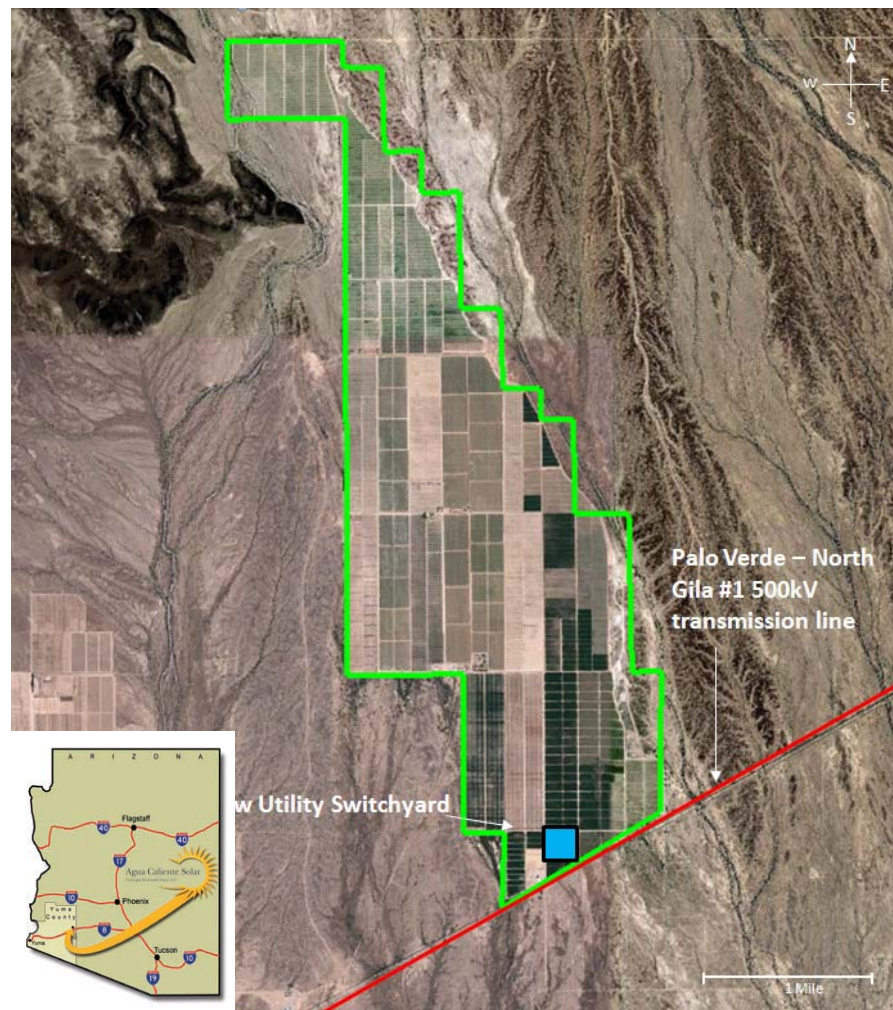


Figure 3: A Potential Configuration for Transmission to Serve All Available Renewable Resources in Arizona

*Fifth Biennial Transmission Assessment, for 2008-2017.
July 18, 2008. Docket E00000D-07--0376*

Agua Caliente Solar Project

- 290 MW PV technology
- Excellent Solar Insolation
- Located 65 miles east of the City of Yuma, near the communities of Dateland and Hyder
- 3,800 acre site, historically used for agriculture, is level
- SUP and CEC obtained in Fall 2009
- Interconnecting to the Hassayampa-North Gila 500 kV TX line, the project uses existing transmission infrastructure
- Delivery to the CAISO makes project eligible for CA RPS
- 25 year contract with PG&E
- Construction beginning in 2010,



Project Benefits

Economic Benefits

- Job Creation
 - Hundreds of jobs during construction
 - Between 20 & 50 permanent full time jobs during operations
- Capital Cost Basis of over \$1 billion

Environmental Benefits

- PV technology - very low water use
- Located on previously disturbed land. No environmental issues.
- Minimal air emissions associated with power generation
- Low maintenance

Public Policy

- Contributes to Federal and State goals to increase renewable energy and reduce greenhouse gas emissions
- Supports regional energy diversity and creates near term green jobs



Agua Caliente Solar Project



Questions?



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