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Mariposa Energy, LLC

California Energy Commission
Informational Hearing

October 1, 2009

Mariposa Energy Project Presentation Summary

-  Ownership structure
-  Design features
-  Project justification
-  Site selection process
-  Environmental impacts

Mariposa Energy Project Ownership

-  Owned by Mariposa Energy LLC
-  Subsidiary of Diamond Generating Corporation
-  DGC is a subsidiary of Mitsubishi Corporation
-  DGC headquartered in Los Angeles, CA
-  DGC owns/operates 9 power plants in the US, with about 2,000 MW of net equity
-  DGC owns 2 other peaking projects in CA
-  DGC developing both renewable and gas-fired projects

Larkspur Energy: Another DGC Project Similar to Mariposa, in San Diego



Mariposa Energy Project Design Features

-  194 MW (net) natural gas peaking project
-  4 GE LM6000 PC-Sprint combustion turbine generators and associated equipment
-  Water usage minimized by use of dry cooling and wastewater recycling
-  BACT for NO_x and CO control

Mariposa Energy Project Laterals Are Minimized

-  New 0.7-mile 230-kV transmission line from MEP to PG&E's Kelso Substation
-  580-foot 4-inch gas pipeline connecting to PG&E Line 2, located within the parcel
-  New 1.8-mile 6-inch water supply line from Byron Bethany Irrigation District

Need for Peaking Power in Region

- 🍌 Peaking plants like Mariposa support installation of renewables and ensure integrity of transmission system
- 🍌 Peakers are designed to provide capacity and ancillary services, rather than baseload energy
- 🍌 Quick-start (<10 min start) needed to smooth load when wind dies down or demand surges
- 🍌 Provides energy during super-peak periods
- 🍌 Helps utility meet reserve margin requirements economically and efficiently
- 🍌 Provides energy during emergencies

Energy Action Plan – 2003-2006

05/03	Energy Action Plan adopted by CPUC and CEC
04/04	CPUC orders investor-owned utilities to file resource plans that implement EAP
12/04	CPUC approves PG&E's Long-Term Procurement Plan, which includes adding 2,200 MW of peaking power through 2010 concurrently with renewables
11/06	CPUC approves 3 PG&E PPAs with peaking projects, among others

4 plants subsequently not built



Need remains unmet

Regulatory Chronology of PPA Between Mariposa Energy and PG&E

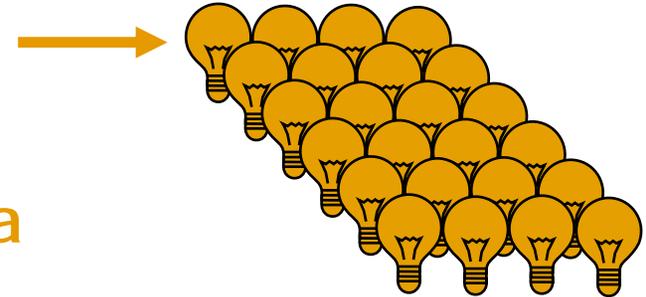
09/05	Energy Action Plan II adopted by CPUC and CEC
12/07	<p>CPUC approves PG&E LTPP for 2007-16 to procure up to 1,200 MW of additional new resources, including:</p> <p>“DISPATCHABLE RAMPING RESOURCES THAT CAN BE USED TO ADJUST FOR THE MORNING AND EVENING RAMPS CREATED BY THE INTERMITTENT TYPES OF RENEWABLE RESOURCES.”</p>
04/08	PG&E issues 2008 Long Term Request for Offers to obtain up to 1,200 MW of new, dispatchable, and operationally flexible resources
10/08	Mariposa Energy Project is shortlisted
04/09	Contract signed, submitted to CPUC for approval

Rationale for Mariposa in PG&E's Application 09-04-001 for Approval

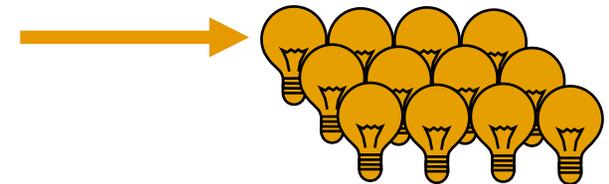
-  CPUC concluded PG&E needs 800-1,200 MW of new flexible, dispatchable resources by 2015
-  MEP, as a dispatchable and operationally flexible resource, critical to meet load variations and integrate intermittent resources into PG&E portfolio
-  Necessary to maintain 17% Planning Reserve Margin (PRM), especially given 4 unbuilt plants

Mariposa Energy Site Selection Process

Identify electrical system locations indicating a need for reinforcement within PG&E's service area



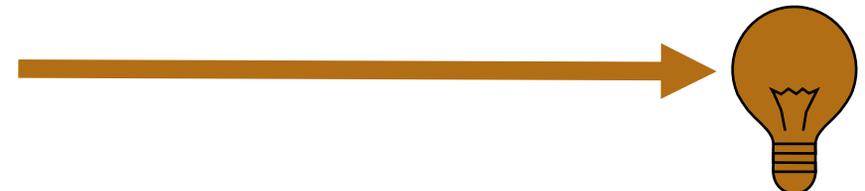
Identify sites that minimize laterals, have appropriate zoning



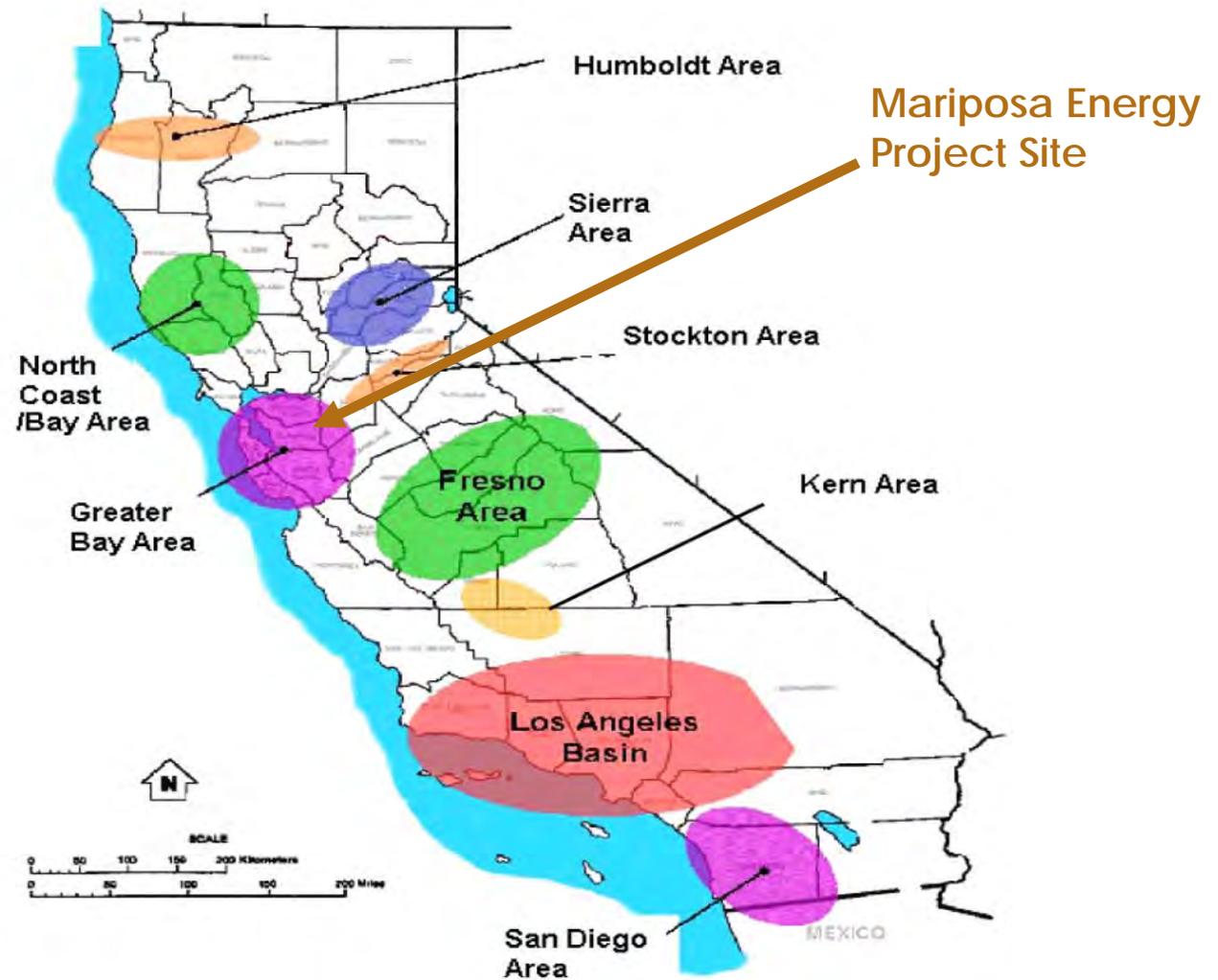
Then, address other environmental issues



Select Site



The Greater Bay Area is a Load Pocket



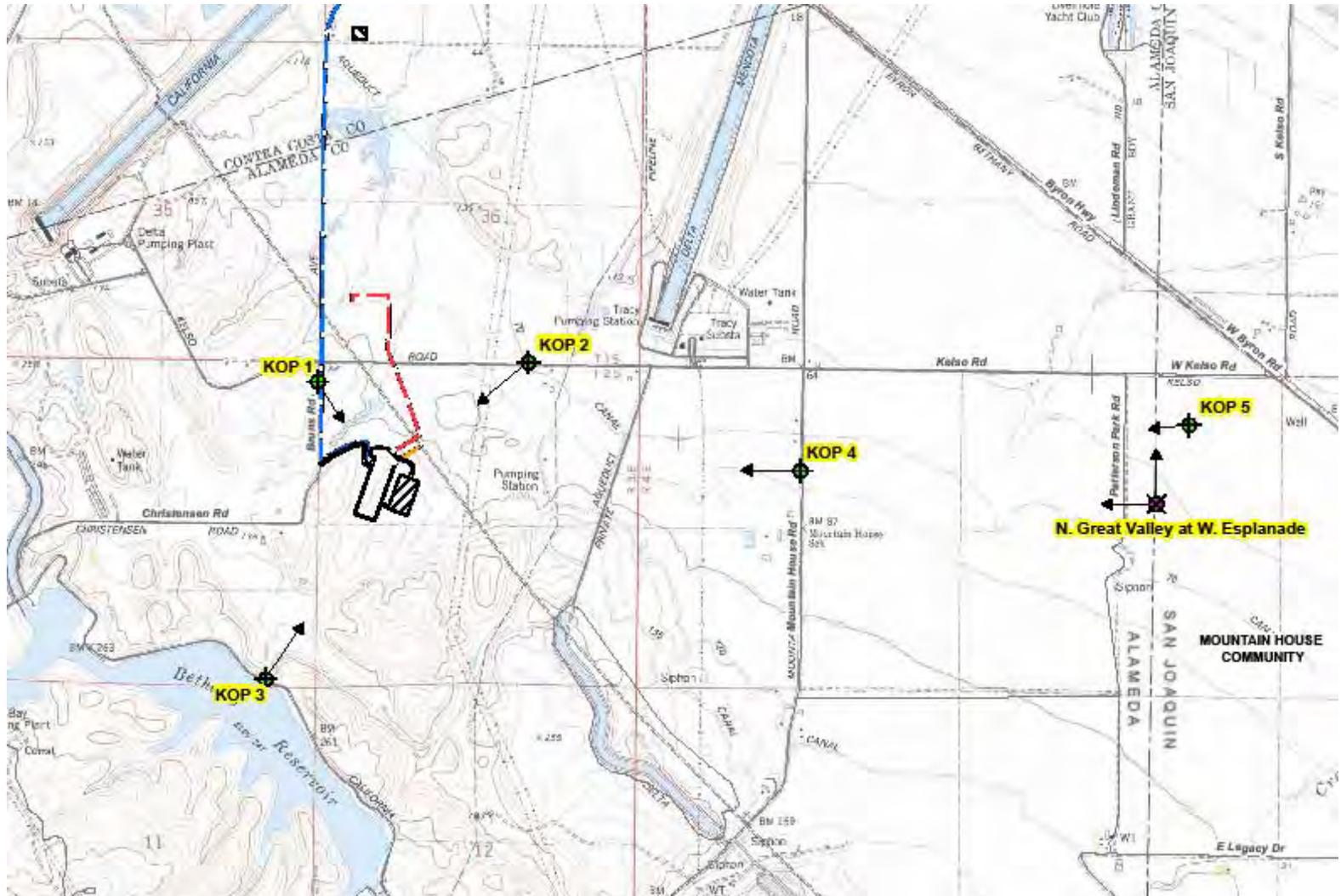
Mariposa Energy Project Chosen Site Best Met All Criteria

- 👉 In Greater Bay Area Load Pocket
- 👉 In Altamont Pass Wind Resource Area
 - Proximity to intermittent renewable energy, wind to the south and west, potential solar to the east
- 👉 Shortest laterals for interconnections
- 👉 Best met environmental criteria
- 👉 Not near, nor visible from densely populated areas
- 👉 Site already disturbed site – cogen, abandoned wind farm
- 👉 Land use compatible with existing utility and water infrastructure in the area

Mariposa Energy Project Location



Map of Key Observation Points



Key Observation Point 1 Current View



Key Observation Point 1 Simulated View



Key Observation Point 2 Current View



Key Observation Point 2 Simulated View



Key Observation Point 3 Current View



Key Observation Point 3 Simulated View



Key Observation Point 4 Current View



Key Observation Point 4 Simulated View



Key Observation Point 5 Current View



Key Observation Point 5 Simulated View



Mariposa Has No Significant Unmitigated Environmental Impacts

-  Minimized visual and noise impacts
-  Minimal water usage
-  Zero liquid discharge
-  Compatible land use
-  Maximized open space and agricultural preservation

Mariposa Has No Significant Unmitigated Environmental Impacts

-  No significant air quality impacts
-  Minimized hazard materials use and storage
-  Minimal use of local services
-  No growth inducing effects
-  Minimized construction and operational traffic

Mariposa Affords the Region Many Socio Economic Benefits



During construction (2011-2012)

- \$12 million of local purchases
- \$16.3 million of construction payroll, of which \$14.7 million will remain in the area
- Average of 89, peak of 177 direct jobs
- 229 indirect and induced jobs created



During operations (2012-2050)

- Annual local spending on payroll, materials, and supplies of \$2.47 million
- 8 direct jobs created
- 12 indirect and induced jobs created
- Approximately \$2.5 million of property taxes annually

Mariposa Energy Project Resources

Bo Buchynsky Executive Director	b.buchynsky@dgc-us.com
Paula Zagrecki Director, Finance	p.zagrecki@dgc-us.com
Application for Certification	http://www.energy.ca.gov/sitingcases/mariposa/index.html