California Energy Commission
Activity Overview

Bob Therkelsen
February 10, 2004
2003 IEPR Conclusions

• Electricity - adequate through 2009 under normal conditions

• Natural Gas - increasingly vulnerable

• Fuels - tight supplies and price fluctuations likely to get worse
Energy Commission
Responsibilities

• Provide information, assessments, and policy recommendations regarding energy systems today and in the future

• Implement programs to help ensure reliable supplies of energy that promote general welfare, protect health, safety, and environment
FY 03-04 Program Focus

• *Increasing energy efficiency*

• *Developing new or alternative resources*

• *Improving energy infrastructure*
Energy Efficiency

• Electricity and natural gas
  – Energy efficiency standards
  – Demand response collaboration
  – Energy efficiency bond program
  – Energy efficiency R&D

• Transportation fuels
  – CAFÉ Standards
Efficiency Program Impacts

Impact of the Energy Efficiency Standards

Megawatts (MW) Saved

Year


- 2,000 4,000 6,000 8,000 10,000 12,000

Pre-2001 Standards 2001 Stds 2005 Stds
Transportation Fuels Demand

Goal: 15% below 2003 Demand

Near-Term Options
Near-Term & FT Diesel
Near-Term & FT Diesel & 40 MPG
Near-Term & FT Diesel & 40 MPG & 20% FCVs by 2030
New or Alternative Sources

- Energy Facility Siting
- Renewable Electricity Generation
  - RPS Guidelines & Project Tracking
  - Renewable Development Accounts
  - Renewable Technology R&D
- Transportation Alternatives
  - Alternative Vehicles
  - Hydrogen Infrastructure Issues
- Natural Gas Supplies
  - LNG Information and Coordination
## Energy Facility Siting

<table>
<thead>
<tr>
<th>Permitted Projects Status</th>
<th>Total</th>
<th>MW</th>
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</thead>
<tbody>
<tr>
<td>Operational</td>
<td>24</td>
<td>8,311</td>
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<tr>
<td>Construction</td>
<td>6</td>
<td>2,459</td>
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<tr>
<td>Financing</td>
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<td>731</td>
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<tr>
<td>On hold by developer</td>
<td>9</td>
<td>6,604</td>
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<tr>
<td>Canceled by developer</td>
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<td>294</td>
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<tr>
<td><strong>Total Projects Permitted</strong></td>
<td>44</td>
<td>18,399</td>
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<tr>
<td><strong>Total Projects Currently in Review</strong></td>
<td>13</td>
<td>4,212</td>
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</table>
Proposed LNG Projects

- Humboldt Bay
  - Calpine Energy
  - 1,000 MMcfd Capacity LNG Terminal

- Off-shore, Oxnard
  - Crystal Energy, Small Ventures, et al.
  - 500 MMcfd Capacity Offshore LNG Terminal
  - BHP Billiton
  - 800 MMcfd Capacity, Offshore LNG Terminal

- Long Beach Harbor
  - Mitsubishi Corporation
  - 700 MMcfd Capacity LNG Terminal

- Vicinity Tijuana, Baja California
  - ChevronTexaco
  - 750 MMcfd Capacity LNG Terminal

- Ensenada, Baja California
  - Sempra & Pacific LNG Consortium/Shell Group
  - 1,000 MMcfd Capacity LNG Terminal

(From CALIFORNIA ENERGY COMMISSION, January 2004)
Energy Infrastructure

- Transportation Fuels
  - Emergency Response
  - Permitting Options
- Natural Gas
  - Project Tracking
- Electricity
  - Permitting Options
  - Transmission R&D
FY 03-04 Policy Focus

• 2003 Energy Report
• 2004 Energy Report Update
• 2005 Energy Report
2003 Energy Report

- Overview of trends and issues
- Foundation of state energy policy
  - CPUC procurement
  - ISO transmission assessment
  - CPUC natural gas OIR
  - LNG permitting task force
  - Tri-state climate change initiative
2004 Energy Report Update

- Progress on 2003 Energy Report
- Aging power plants
- Renewables
- Transmission
2005 Energy Report

- Update trends and issues
- Foundation for CPUC procurement
- Critical energy issues
- Policy recommendations