

## Consideration of Price Caps Reduction

Meeting  
of the  
Board of Governors  
of the  
California ISO

By  
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Vice President  
Enron North America Corp.  
June 28, 2000

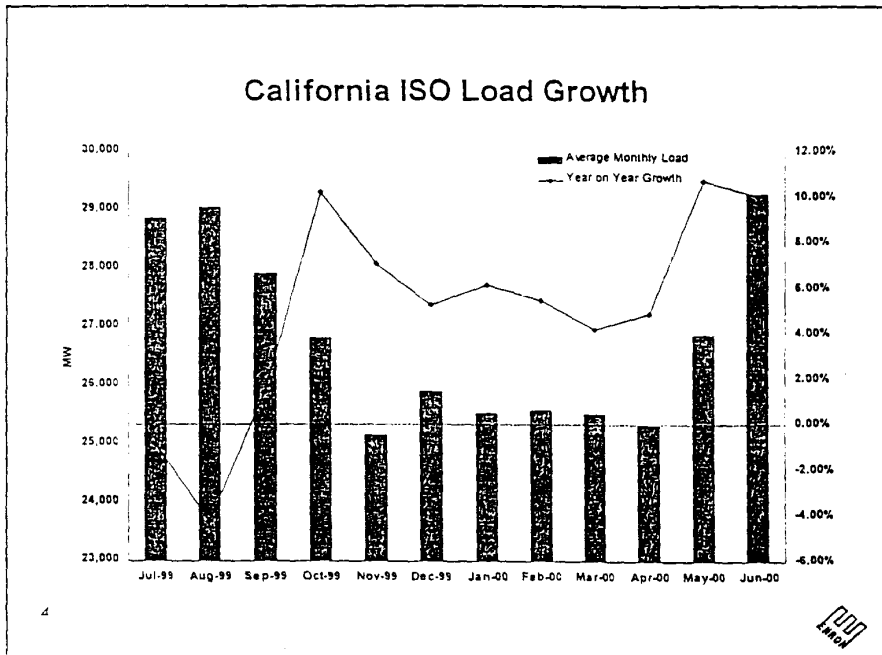
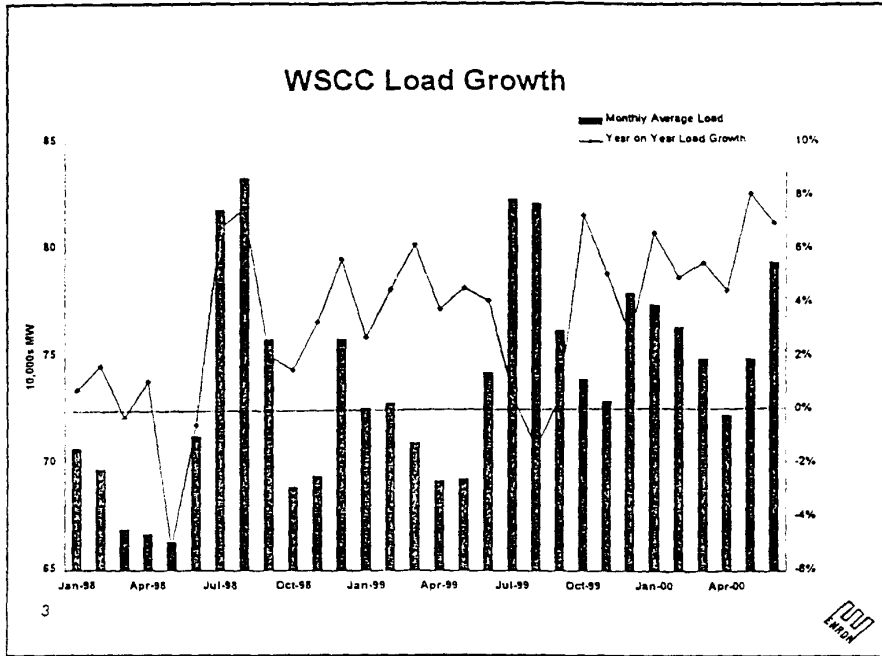


### California Is Facing an Energy Supply Crisis that a Precipitous Reduction in Price Caps Will only Heighten.

- The supply shortage is real; California desperately needs new generation.
- California has not added any significant new generation since the 1980's.
- The existing thermal generation fleet is aging:  
61% > 30 years
- Demand has exploded with the economic boom, especially in San Francisco Bay Area.
- California competes vigorously with the rest of the growing West for increasingly scarce supplies.

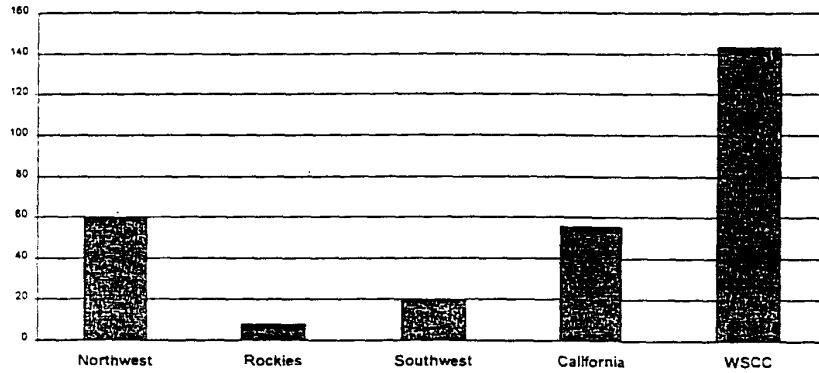
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### WSCC Loads (GW)

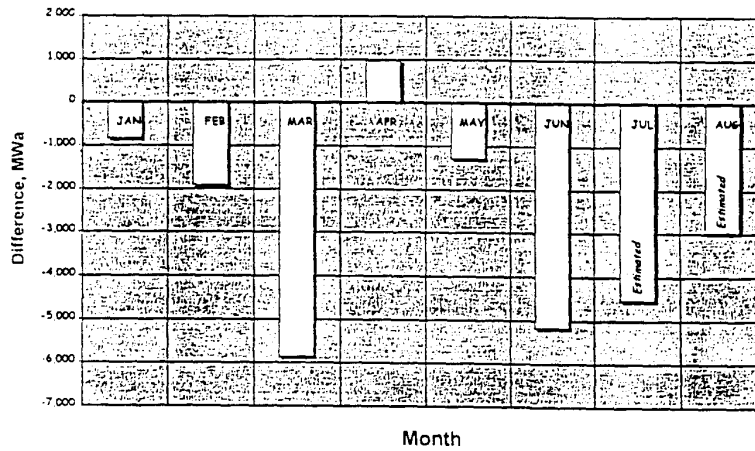
California is not an island and cannot develop a self-contained solution.



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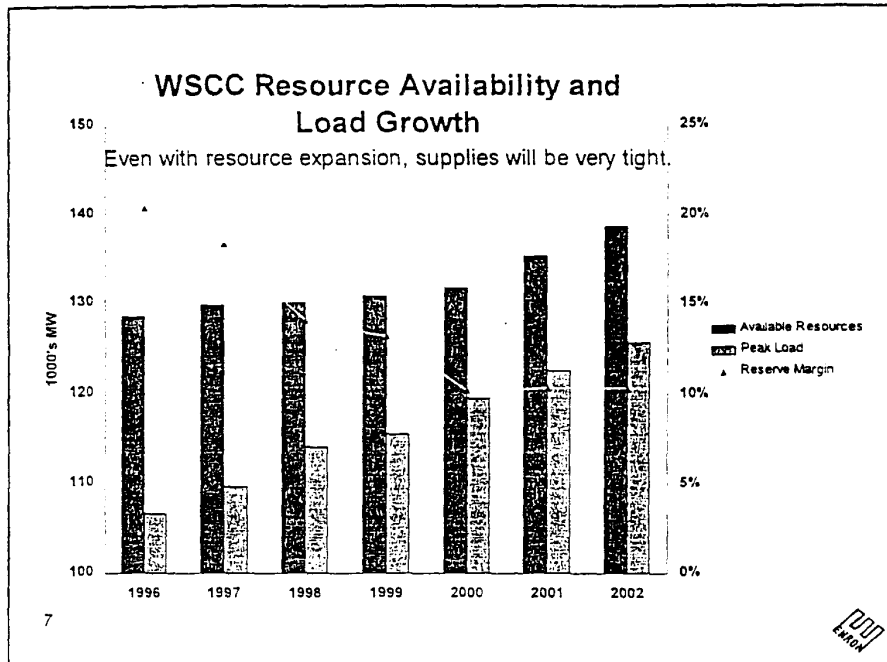


### Pacific Northwest 2000 Hydro Production Relative to 1999



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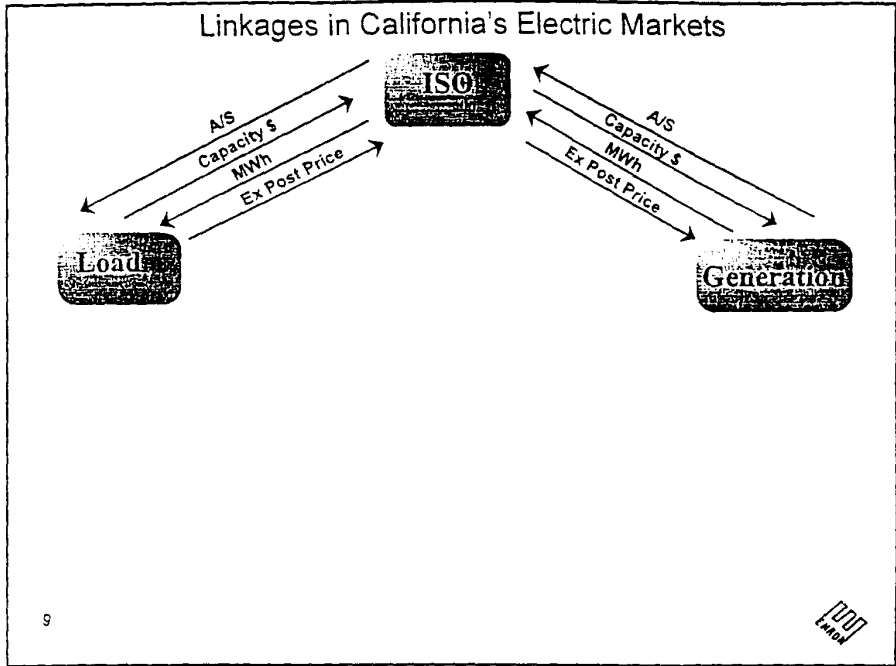




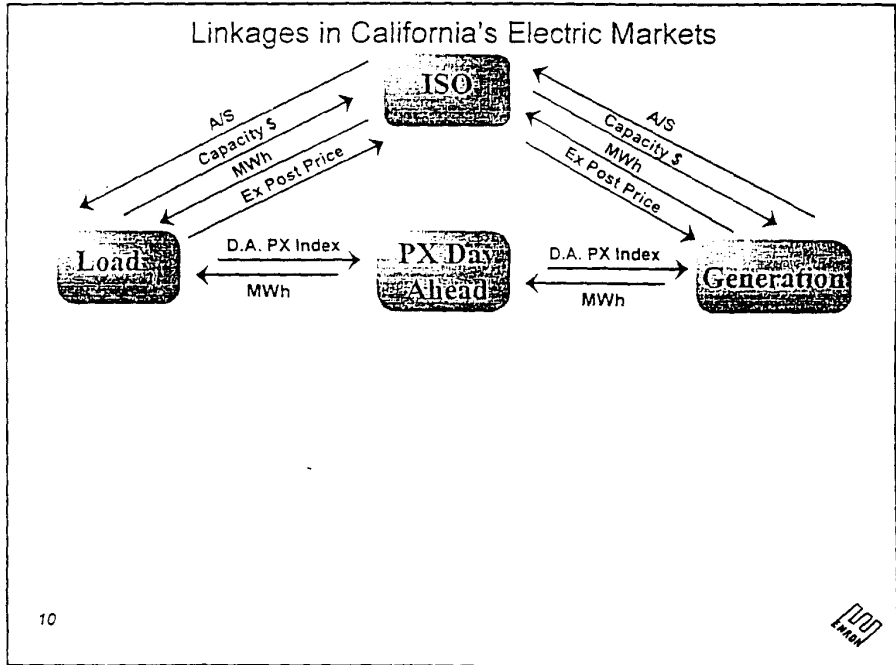
### A Price Cap Reduction Will only Increase the Pressure on Reliability of California Electric System

- Investment in power plants will go elsewhere, taking jobs, economic and reliability benefits.
- Suppliers will sell outside California where markets are more predictable and prices are higher.
- Keeping the lights on will get tougher.
- Because of the interdependent linkages in California's electric market, cannot change one aspect of structure without impacting all others.
- Uncertainty in the marketplace is the surest way to dry up the growing forward markets.

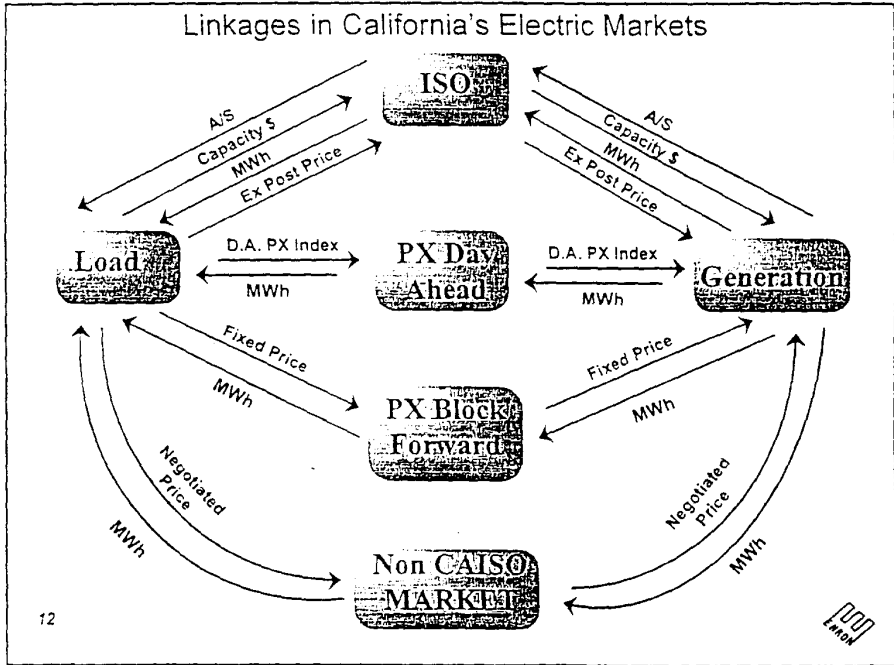
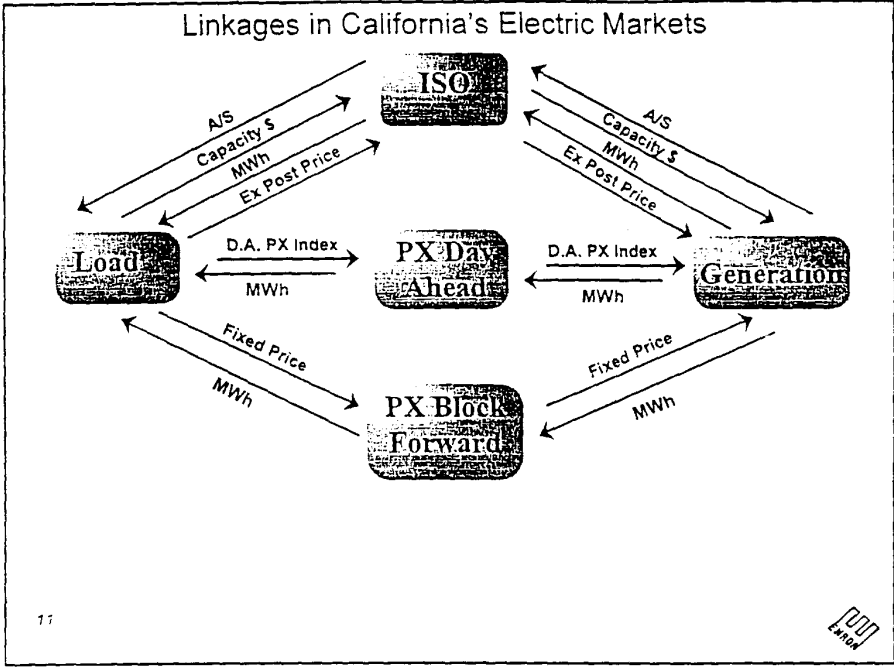
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## Gross Underscheduling of Load Is a Real Problem

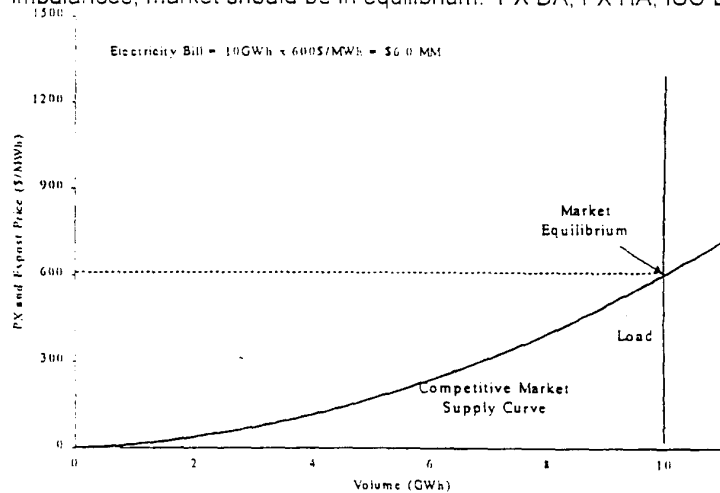
- CTC payments can theoretically be increased by underscheduling demand in the PX Day ahead markets
- However, underscheduling demand increases prices and reduces reliability for everyone
  - nearly 30% of ISO load showed up in real time on June 14, 2000
  - ISO dealt with situation with only 100 MW of blackouts—a remarkable achievement
- Underschedulers are victims of their own actions and strategies
- Assertions to the contrary notwithstanding, there have been significant opportunities to hedge forward prices
  - ~ 1800 MW in entire PX block forward for SP15 in June, 2000
  - Only ~800 MW for SCE out of 2,200 MW authorized
  - Clear market signals to hedge

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## Gross Underscheduling of Load Is a Real Problem

If all power scheduled in PX Day Ahead market, except for small imbalances, market should be in equilibrium: PX DA, PX HA, ISO Ex Post

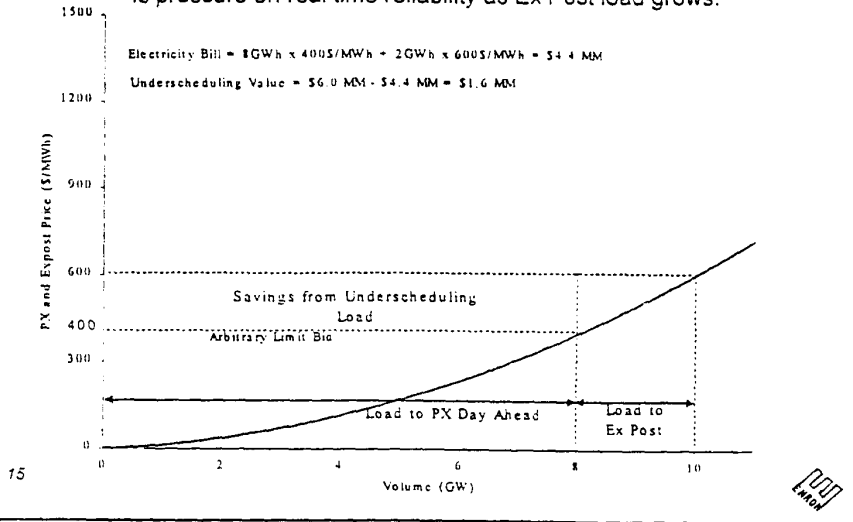


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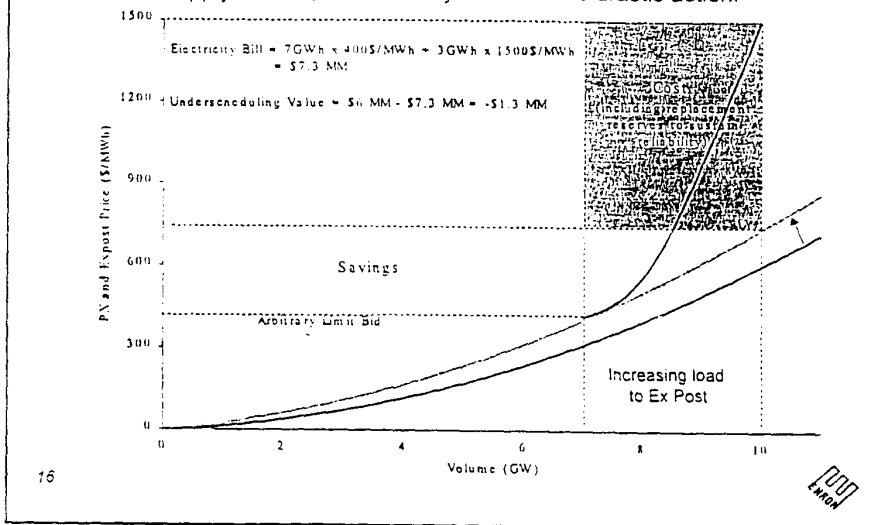
### Gross Underscheduling of Load Is a Real Problem

In actual fact, there is an incentive to underschedule, but consequence is pressure on real time reliability as Ex Post load grows.



### Gross Underscheduling of Load Is a Real Problem

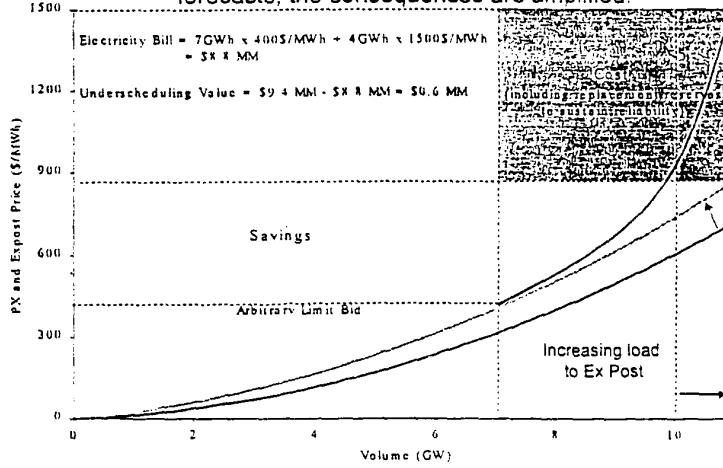
But when there is massive underscheduling in a tight supply market, the ISO may have to take drastic action.





### Gross Underscheduling of Load Is a Real Problem

And, when load is growing faster than forecasts, the consequences are amplified.

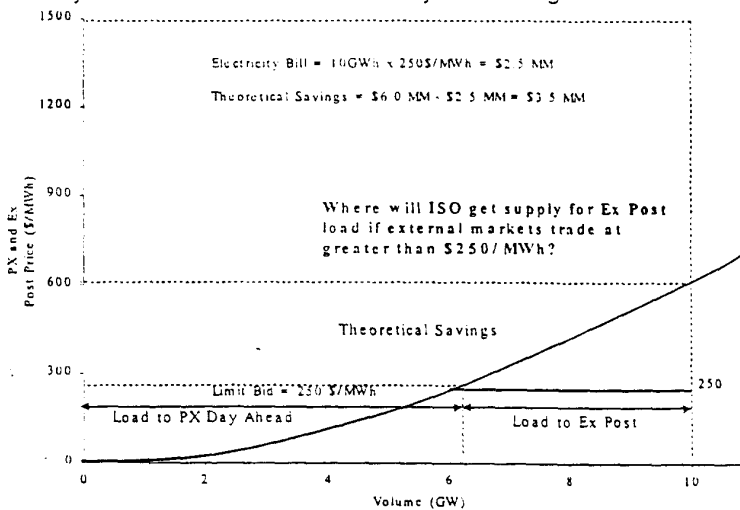


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### Gross Underscheduling of Load Is a Real Problem

If price caps are reduced to \$250/MWh in a scarce supply market, ISO may not be able to maintain reliability due to magnitude of Ex Post load.



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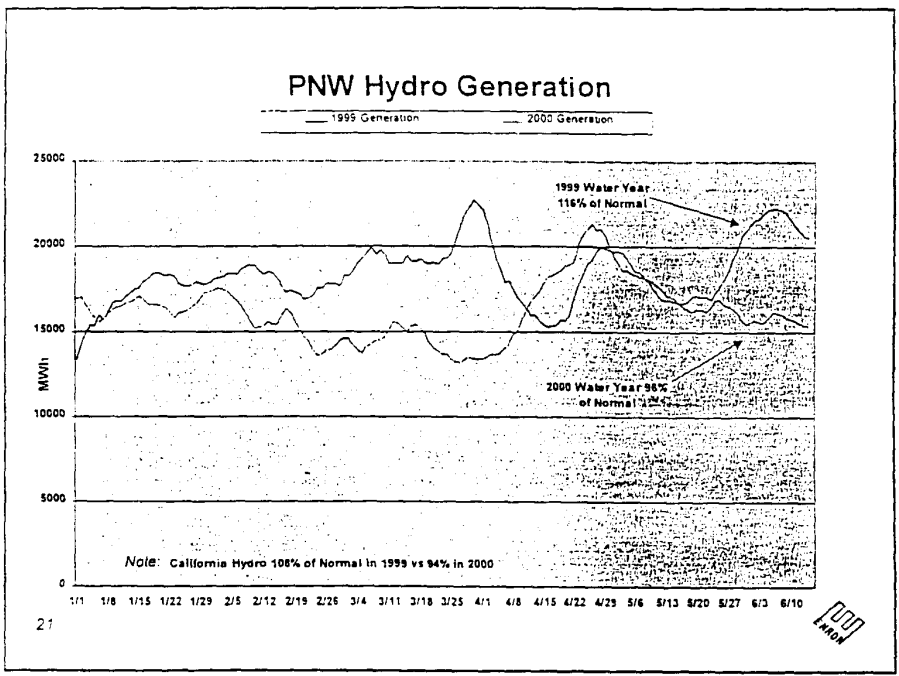
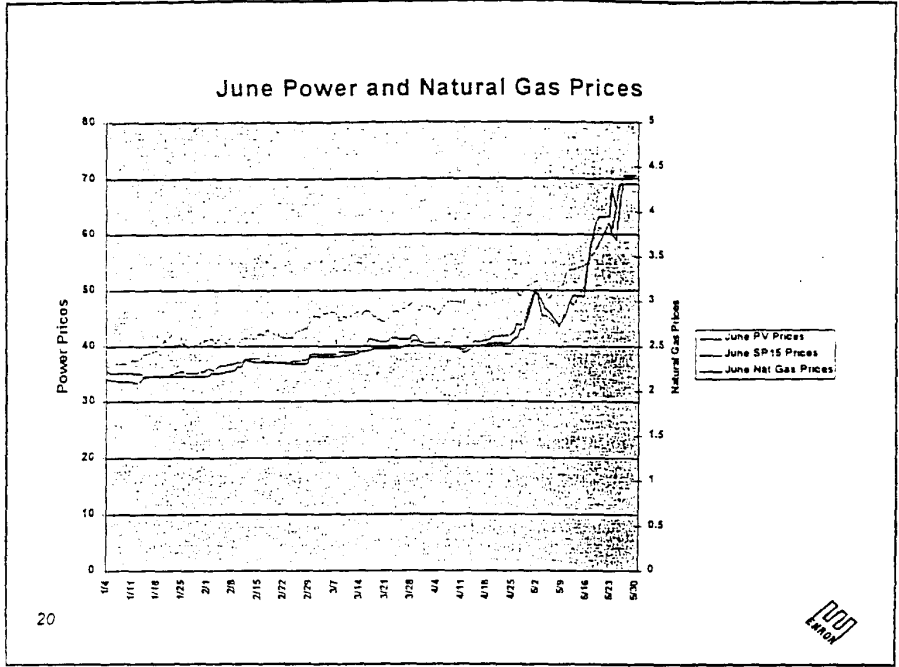


## Recommendations

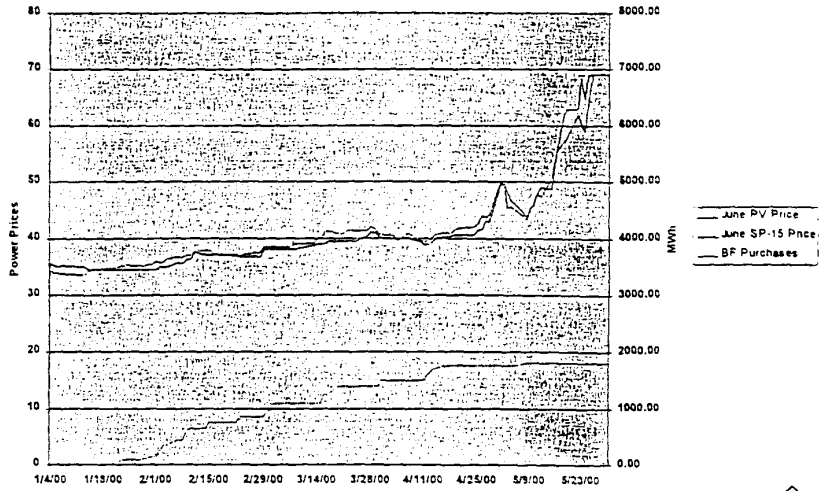
- Do not reduce price caps from \$750/MWh to \$250/MWh.
- Determine the root causes of the problem.
  - Market power abuse: supply and/or demand?
  - Market structure?
  - Load growth?
  - Resource scarcity?
  - Remove price caps? Parity with PX caps?
- Develop alternative solutions: market and other.
  - Structural market changes
  - Facilitate new resources/ease congestion: generation, transmission
  - Demand side: bidding, real time prices

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### June SP15 Block Forward Purchases vs. Power Prices



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