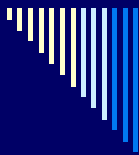


California's Energy Crisis – Lessons Learned

Bill Julian

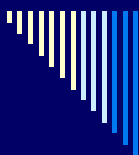
**Former Legislative Director (2001-02),
California Public Utilities Commission**



California's Energy Crisis Lessons Learned

- California's Energy Crisis was a perfect storm of seller-side market manipulations and abuses that caused the breakdown of the basic commercial relationships that under gird the electric industry.

“MARKET FUNDAMENTALS” WERE INVOKED AS EXPLANATORY FACTORS, BUT WERE NEVER A REAL ISSUE. RATHER, SOPHISTICATED SCHEMES FOR ECONOMIC AND PHYSICAL WITHHOLDING, FRAUDULENT CONGESTION, BID RIGGING, AND MANIPULATION OF SUPPLIES AND PRICES OF INPUTS SUCH AS FUEL AND EMISSIONS CREDITS CREATED A THE APPEARANCE OF SHORTAGES JUSTIFYING HIGH PRICES.



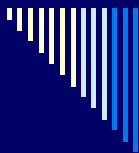
California's Energy Crisis
Lessons Learned

- Actions Taken:

Litigation in all forums available; legislation to effectuate direct state control to the extent constitutionally permissible.

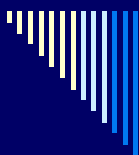
- Lesson:

Scrutinize all levels of the supply chain for market power—both vertical and horizontal – and manipulative, collusive behaviors. Demand transparency from all sellers as a matter of state law and from the FERC and CFTC where subject to federal control.



California's Energy Crisis
Lessons Learned

UTILITIES WERE STRIPPED OF CASH AND CREDIT VERY QUICKLY – IN A MATTER OF WEEKS. SPECIAL ARRANGEMENTS AND EMERGENCY RATE INCREASES TO MAINTAIN UTILITY SOLVENCY WERE REQUIRED, BECAUSE WHOLESALE SUPPLIERS WOULD WITHHOLD ON THE BASIS OF LACK OF CREDIT.



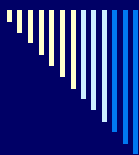
California's Energy Crisis Lessons Learned

- Actions Taken:

After the loss of utility credit, California became the buyer of last resort. Ended divestiture of generating and other supply assets by statute; statutory assurance of recovery of reasonable supply costs incurred pursuant to a long-range procurement plan approved by regulators.

- Lesson:

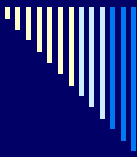
Reduce exposure to wholesale markets through re-integration of utility subject to state control and obligation to serve, including disclosure obligations to consumer interests. Do not place the state's credit at risk in the volatile energy commodity markets.



California's Energy Crisis Lessons Learned

- The presence of unlawful activity by sellers was recognized by California policymakers almost immediately, in July 2000.

IN ACTION BY FERC FOR NEARLY A YEAR ON PRICE CAPS AND DIRECT REMEDIES AGAINST WITHHOLDING CAUSED SIGNIFICANT ECONOMIC DAMAGE TO BOTH UTILITIES AND CONSUMERS. APPROPRIATE FERC ACTION ON JUNE 19, 2001 – ESTABLISHING A PRICE CAP AND A MUST-OFFER REQUIREMENT -- IMMEDIATELY QUELLED THE CRISIS.



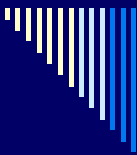
California's Energy Crisis Lessons Learned

- Actions Taken:

Complaints and investigations initiated at FERC; FERC authority over Cal ISO challenged by statute; political intervention by Congressional delegation sought but defeated by Bush/Cheney for almost six months.

- Lesson:

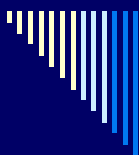
Limit exposure to FERC-jurisdictional supply arrangements and institutions through vertical integration of load and supply subject to state regulation, and assure that FERC exposure is accompanied by speedy and effective remedies through bi-lateral arrangements (not "organized markets.")



California's Energy Crisis Lessons Learned

- The abrogation of the obligation to serve end use consumers, including the obligation to plan and invest, in the name of "the market," created the context for seller-side excesses and severe economic damage.

MUNICIPAL UTILITIES (COUS) THAT REMAINED COMMITTED TO THEIR CUSTOMER/OWNERS' WELL-BEING DID NOT EXPERIENCE THE ENERGY CRISIS TO THE SAME DEGREE AS INVESTOR-OWNED ENTITIES. INVESTOR-OWNED ENTITIES DEMANDED AND RECEIVED FINANCIAL ASSURANCES THAT CAUSED THE CONTINUATION OF ELEVATED RATE LEVELS AND INCREASED THE COU RATE ADVANTAGE



California's Energy Crisis Lessons Learned

- Actions Taken:

Re-established by statute for investor-owned utilities the obligation to serve, including a public planning process and procurement process that includes both demand and supply-side options. A commitment to utility financial stability was the quid-pro-quo.

- Lesson:

Electric end-users are the financial backstop for all electric system costs; cost minimization from their standpoint requires active consideration of consumer ownership scenarios