

**TABLE C-1  
KEY FACTS, AXIOMS AND COMMONLY ACCEPTED PRINCIPLES**

	<b>Citation/Source</b>
<b>Institutional/Restructuring Policy</b>	
The PX and ISO began operation on April 1, 1998.	Historic fact, AB 1890, Sec. 330
IOU generation plants will be market valued by December 31, 2001.	AB 1890, Sec. 377
The IOUs will receive transitional costs to compensate for the stranded generation assets by March 31, 2002. The CTC account shall track accrual and recovery of costs through the period.	AB 1890, Sec. 367
Whether owned by the IOUs or independents, any “going forward” or operational costs must be recovered from the PX, through ISO contracts, or direct access sales.	AB 1890, Sec. 367
The IOUs must sell into the PX until generation plants are market valued.	PPD, col. 18.
Owners of divested plants and other non-IOU plants may sell into the direct access market beginning April 1, 1998.	AB 1890
Sales of IOU plants must be reviewed for effects on system reliability.	AB 1890, Sec. 362.
<b>System Engineering and Characteristics</b>	
Traditional form of hourly dispatch is “merit order” by short-run fuel costs plus some portion of “variable” O&M.	Utilities’ ECACs
Traditional form of daily and weekly commitment is based on expectations and variance of peak demand during those periods.	Utilities’ ECAC
Large variations in daily loads plus inability to store electricity prevents simultaneous maximum output by all generators. Increased generation at one unit generally must cause a decrease at another.	CEC demand forecast; laws of physics
Maximum output from any thermal-source generator is limited by: temporary or intermittent derating, forced outages, scheduled maintenance, permit limitations, and transmission constraints.	CEC Electricity Supply Planning Assessment Report (ESPAR), PEA

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<b>System Engineering and Characteristics (continued)</b>	
Gas-fired steam plants must burn fuel without generating electricity to attain critical steam level before selling into the electricity market.	CEC ESPAR
Repeatedly starting up and ramping up and down plants places mechanical stresses on steam-fired generation units.	Utilities' testimony in CPUC ECAC and CEC Electricity Report, SDG&E Data Response 12
Most natural-gas-fired units in California were built for baseload operation.	CA Foundation on the Environment and the Economy, "Coal Use in California," 1982
The incremental heat rate of a generation unit changes with its output level.	CEC ESPAR reports
The incremental heat rates of California's natural gas plants when operating at full load fall into a narrow range.	Lovick, Workshop June 27; Joskow, FERC Filing, Fig. 1
Gas-fired plants are the marginal resource in California at least 70 percent of the year.	Joskow, FERC Filing, May 29, 1996, p. 9
Edison and SDG&E gas-fired generation units currently operate at levels well below maximum technical and permitted output levels.	PEAs
ThermoECOTek is repowering the San Bernardino and Highgrove power plants.	ThermoECOTek filing, A. 96-11-046, May 29, 1998.
Western U.S. grid bulk power market prices are below incremental natural-gas fuel costs during the spring run-off periods during off-peak hours.	<i>California Energy Markets</i> , PX Price History, May 1998
<b>Portfolio Effects</b>	
IOUs possess vertical and horizontal market power in generation.	PPD, FoF 29, CoL 34, 35
Owners of large generation pools in the United Kingdom (England and Wales), and Australia have exerted market power in the deregulated electricity market.	Lovick, Responses to Questions; Green, 1997; Wolfram, 1997
Owners of large generation portfolios in England and Wales manipulated the availability of their plants to increase total net revenues by placing their most expensive plants on the margin more often.	Wolfram, POWER Conference, March 14, 1997

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<b>Portfolio Effects (continued)</b>	
“Portfolios are better able to manage the risks of trading in the PX than are non-portfolio bidders.... It is not immediately apparent whether it is possible to develop PX rules which entirely remove this portfolio advantage; we suspect that it may not be.”	London Economics, PX Filing, Attachment A, March 3, 1997
In England and Wales, single-station owners operate their plants even if they have to accept some losses on days when market prices are low.	London Economics, PX Filing, Attachment A, March 3, 1997
Participating in a market has transaction costs to both buyers and sellers in addition to the direct purchase price of the commodity.	McCann, <i>Contemporary Economic Policy</i> , July 1996
<b>Direct Access Market Characteristics</b>	
Direct access contracts disconnect the contract price from those in the spot market in the England and Wales market.	Green, POWER Conference, March 14, 1997
Large industrial and water district customers have higher load factors than the system average load factor.	CEC, demand forecasting documents
Large industrial customers represented by CA Manufacturing Association (CMA) led negotiations on the Memorandum of Understanding (MOU) for restructuring, which reintroduced direct access into the Proposed Policy Decision.	MOU, signed September 1995
Association of California Water Agencies (ACWA) was one of the first groups to initiate contracting for direct access service.	ACWA Newsletters, 1996
<b>Natural Gas Fuel Procurement</b>	
Several natural “gas” spot markets exist throughout the U.S.	New York Mercantile Exchange (NYMEX)
Mandalay and Coolwater generation plants had special contracts that reduced costs of gas supply.	Edison, ECAC filings; SCG, BCAP filings

**TABLE C-1 (continued)**  
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**Natural Gas Fuel Procurement (continued)**

Independent power plant (QF) operators currently use different gas contracting terms than those used by the IOUs.	<i>Public Utility Fortnightly</i> , Review of confidential contracts
Gas contracts and published tariffs typically have a transportation rate that is fixed over a monthly or annual period, and a commodity rate that varies with the amount of gas consumed.	Wholesale gas contracts
“Net back” gas contracts exist where the consumer pays the producer a price equal to cost of an alternative fuel or energy source.	<i>Public Utility Fortnightly</i> , Review of confidential contracts

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Acronyms Used in Table:

AB = Assembly Bill  
BCAP = Biennial Cost Adjustment Proceeding  
CEC = California Energy Commission  
CoL = Conclusion of Law  
CTC = Competition Transition Charge  
ECAC = Energy Cost Adjustment Clause  
FERC = Federal Regulatory Commission  
FoF = Findings of Fact  
IOU = Investor Owned Utility  
ISO = Independent System Operator  
PEA = Proponent’s Environmental Assessment  
PPD = Preferred Policy Decision  
PX = Power Exchange  
SCG = Southern California Gas Company