



CALIFORNIA ISO

California Independent
System Operator

2003 FIRM TRANSMISSION RIGHTS AUCTION

Presentation to the Board of Governors

**Scott Jercich
FTR Project Manager
Market Operations**

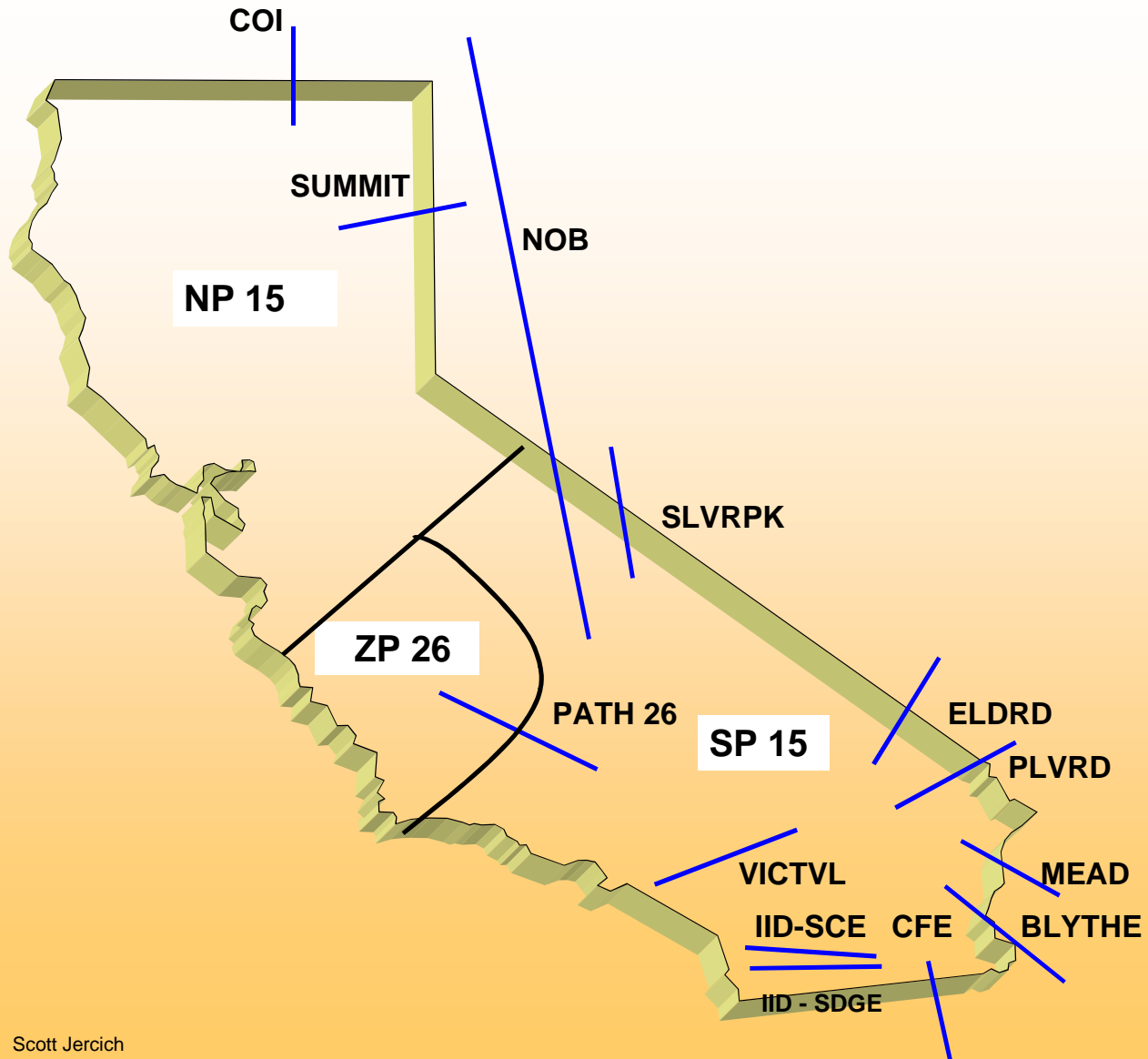
November 21, 2002



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TRANSMISSION PATHS WITH FTRs





METHODOLOGY FOR DETERMINING FTR RELEASE QUANTITIES

1. For each branch group, determine Operating Transmission Capability (OTC) for each hour of the Day Ahead market during the study period of November 1, 2001 through October 31, 2002.
2. Determine the Existing Transmission Contract (ETC) values for each corresponding OTC value for each hour over the study period.
3. Subtract from each hourly OTC value the corresponding ETC value to arrive at the Available Transfer Capability (ATC) for each hour of the study period.



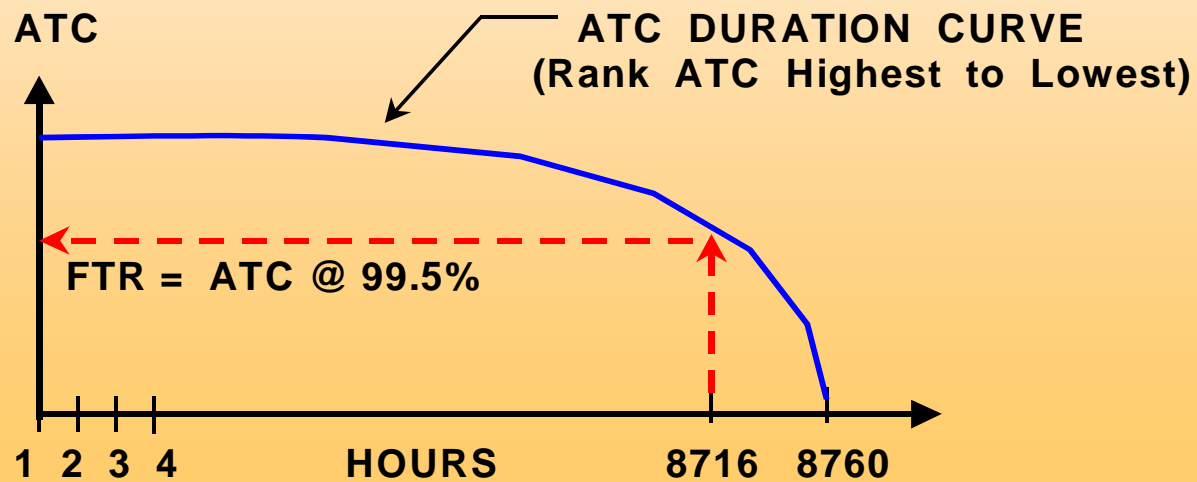
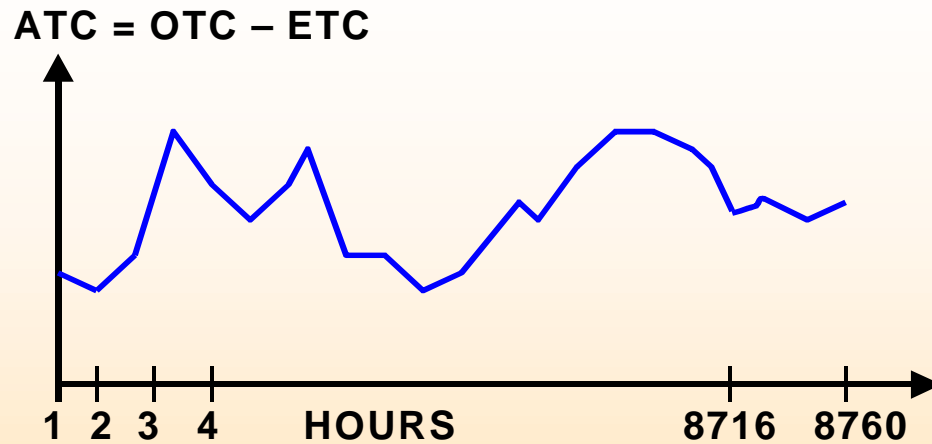
METHODOLOGY FOR DETERMINING FTR RELEASE QUANTITIES

4. Rank the resulting ATC values from highest to lowest value and determine the ATC value at the 99.5% confidence level after considering line outages due to maintenance and unique circumstances.
5. The FTR release quantity is computed by subtracting the converted FTR quantities*, if any, from the ATC values at the 99.5 % confidence level.

* Azusa, Banning, Riverside & Vernon



FTR RELEASE QUANTITY METHODOLOGY





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FTR SEED PRICE -- EXAMPLE

<u>Entry</u>	<u>Hour</u>	<u>Usage Charge (\$/MWh)</u>	<u>Flow (MWh)</u>	<u>Amount (\$)</u>
1	4	10.18	120	\$1,221.60
2	20	2.48	70	\$173.60
3	50	0	20	\$0.00
4	300	0	140	\$0.00
5	555	50.40	45	\$2,268.00
6	1565	150.00	120	\$18,000.00
7	2370	20.11	200	\$4,022.00
8	4250	249.44	95	\$23,696.80
9	5550	15.50	60	\$930.00
*	*	*	*	*
*	*	*	*	*
*	*	*	*	*
91	7115	110.07	220	\$24,215.40
92	8760	8.32	10	\$83.20
			11,000	\$746,100.00
FTR Projected Value (\$ / MW-Yr) = (\$746,100 / 11,000 MWh) X 92 MWh/MW-Yr				
= \$6,240 / MW-Yr				
FTR Seed Price = \$6,240 X .20 = \$1,248				



2003 FTR AUCTION INFORMATION

FTR Quantities for Sale, Estimated Projected Values, and Estimated Seed Price

Path Number	Branch Group	From	To	FTRs for Sale (MW)	Estimated Projected Value (\$/MW)	Estimated Auction Seed Price (\$/MW)
1	BLYTHE	SP15	LC2	72	\$0	\$100
2	BLYTHE	LC2	SP15	167	\$0	\$100
3	CFE	SP15	MX	100	\$0	\$100
4	CFE	MX	SP15	100	\$0	\$100
5	COI	NP15	NW1	422	\$0	\$100
6	COI	NW1	NP15	739	\$9,361	\$1,872
7	ELDRD	SP15	AZ2	536	\$0	\$100
8	ELDRD	AZ2	SP15	519	\$1,255	\$251
9	IID-SCE	II1	SP15	600	\$0	\$100
10	IID-SDGE	SP15	II2	62	\$832	\$166
11	IID-SDGE	II2	SP15	62	\$0	\$100
12	MEAD	SP15	LC1	430	\$311	\$100
13	MEAD	LC1	SP15	446	\$554	\$111
14	NOB	SP15	NW3	509	\$0	\$100
15	NOB	NW3	SP15	526	\$587	\$117
16	PLVRD	SP15	AZ3	845	\$0	\$100
17	PLVRD	AZ3	SP15	625	\$12,731	\$2,546
18	PATH26	ZP26	SP15	1,405	\$2,574	\$515
19	PATH26	SP15	ZP26	285	\$615	\$123
20	SLVRPK	SP15	SR3	10	\$0	\$100
21	SLVRPK	SR3	SP15	10	\$0	\$100
22	SUMMIT	SR2	NP15	98	\$7	\$100
23	VICTVL	LA4	SP15	991	\$0	\$100
				9,559		