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COMISION FEDERAL DE ELECTRICIDAD

Generation and Transmission Expansion Plan Baja California System

2003-2007

Florencio Aboytes PhD

March 2003

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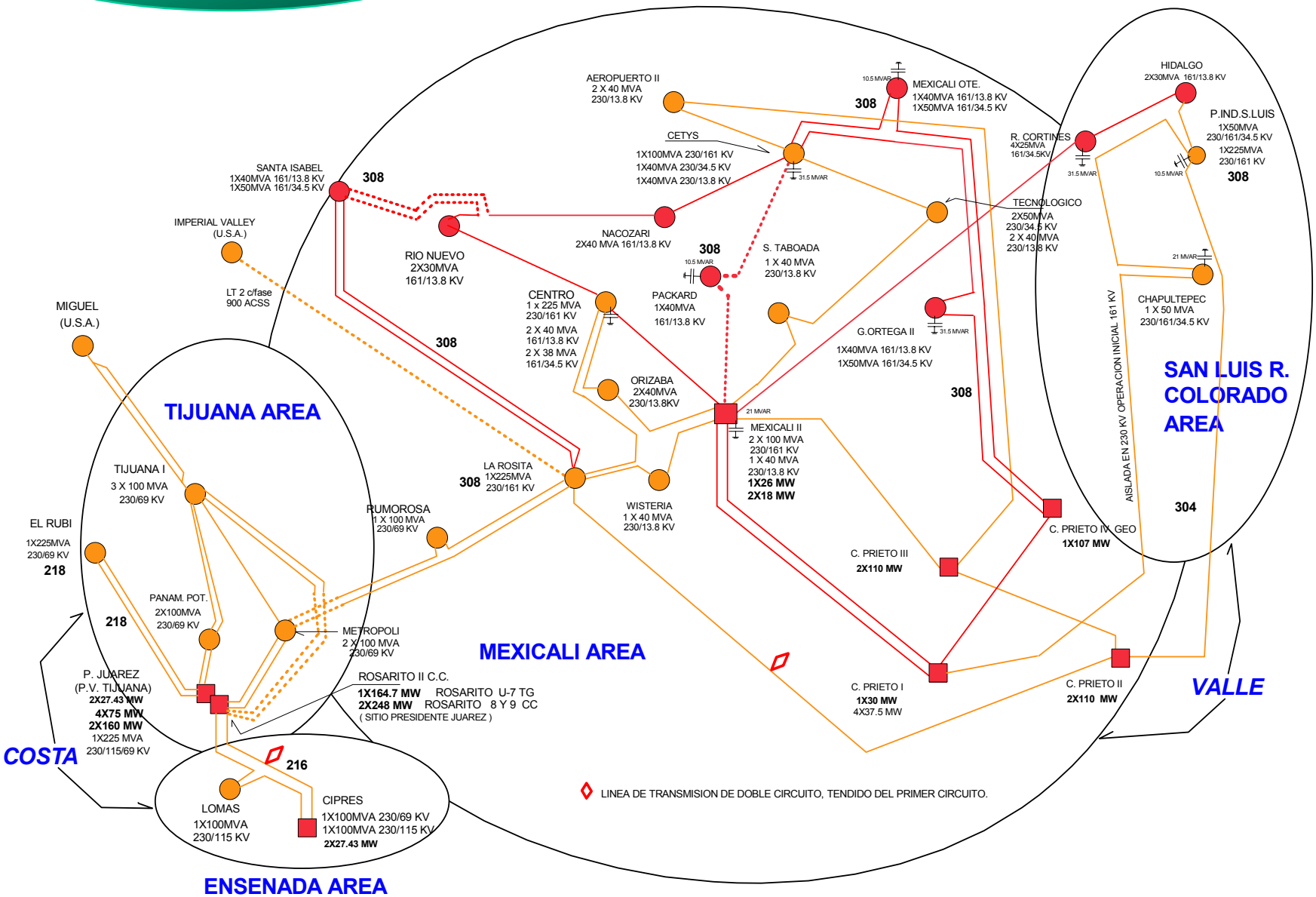
Baja California Bulk Electric System



Load Forecast 2002-2007

Areas	Load Growth 1997-2002	Peak Load MW		Expected Load Growth 2002-2007
		2002	2007	
Tijuana	8.52%	530	793	8.3%
Ensenada	5.71%	141	189	6.11%
Mexicali	6.77%	843	1,190	7.14%
San Luis R.C.	4.10%	155	211	6.36%
Tecate	6.68%	30	43	7.38%
Total	**6.94%**	**1,699**	**2,426**	**7.38%**

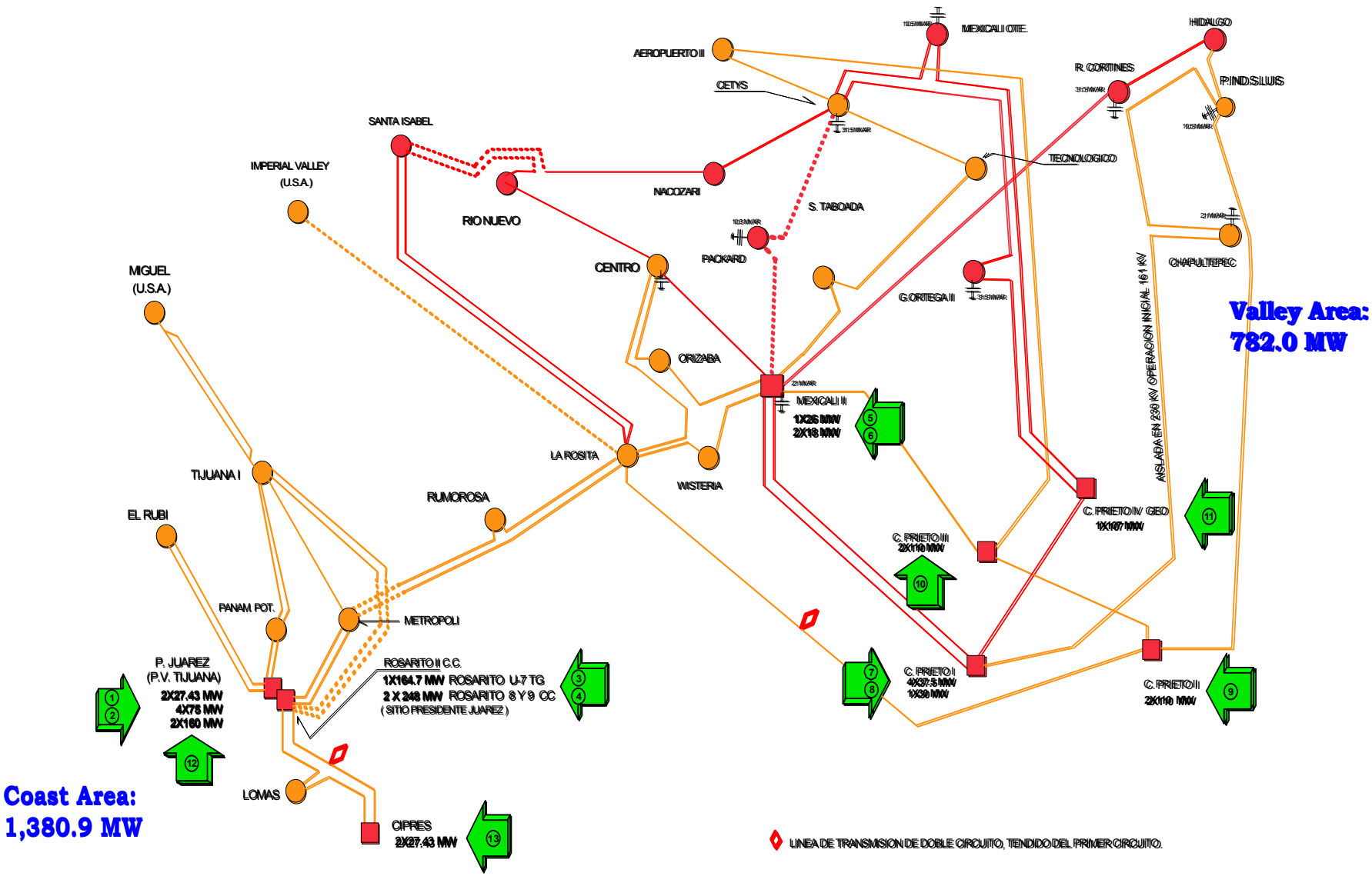
Total Installed Capacity

Baja California System

2002

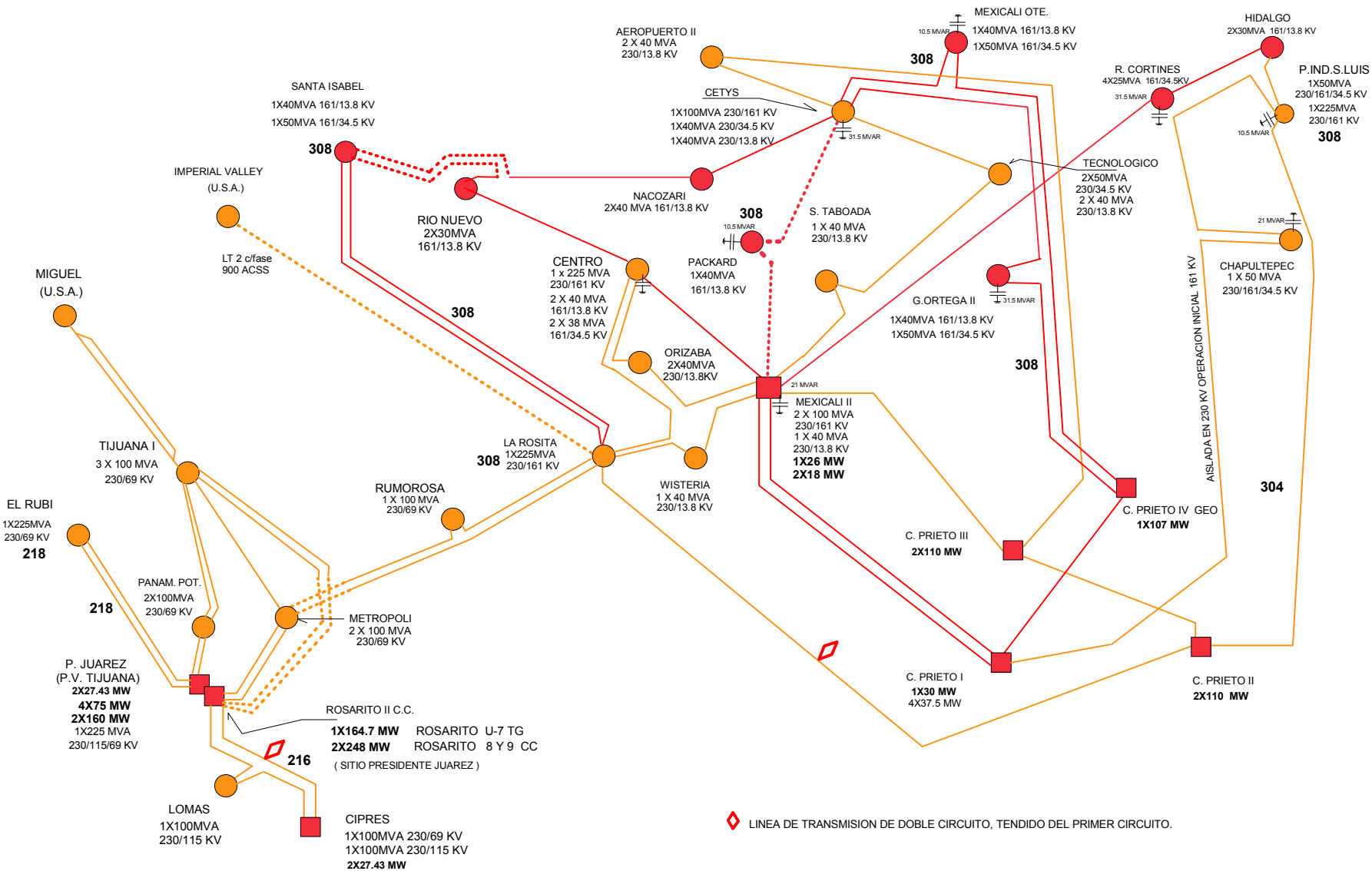
POWER STATION	UNITS	TOTAL CAPACITY (MW)
1.- PRESIDENTE JUAREZ	4 X 75	300
2.- PRESIDENTE JUAREZ	2 X 160	320
3.- PRESIDENTE JUAREZ	1 X 150	150
4.- PRESIDENTE JUAREZ	2 X 248	496
5.- MEXICALI II	1X 26	26
6.- MEXICALI II	2 X 18	36
7.- CERRO PRIETO I	4 X 37.5	150
8.- CERRO PRIETO I	1 X 30	30
9.- CERRO PRIETO II	2 X 110	220
10.- CERRO PRIETO III	2 X 110	220
11.- CERRO PRIETO IV	4 X 25	100
12.- TIJUANA	2 X 30	60
13.- CIPRES	2 X 27.4	55
		2,163

Generation Sites



Existing Transmission Grid

(2002)



Import/Export Transactions

IMPORTS

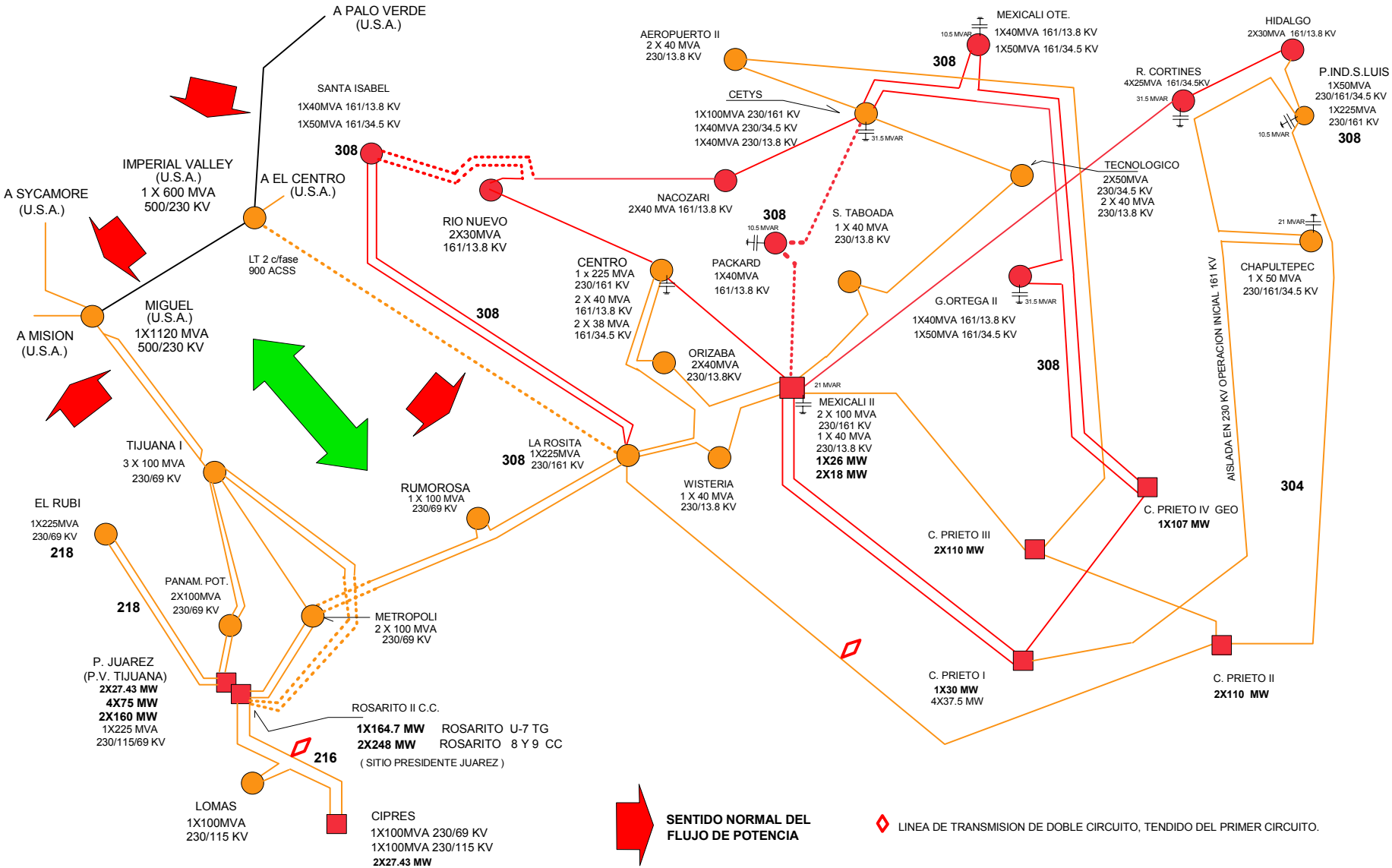
YEAR	SELLER	CAPACITY (MW)	ENERGY (GWh)
1995	SDG&E,SCE,IID	180	229
1996	SDG&E,SCE	270	355
1997	SDG&E,IID,POWEREX,APS	290	406
1998	SDG&E,ENRON,APS,ENOVA,POWEREX	320	480
1999	IID,ENRON,WILLIAMS,CALPX,ISO	408	647
2000	IID,ENRON,PNM,CALPX	390	930
2001	CDWR,CORAL,APS,IID,ISO	120	97
2002	POWEREX ,CDWR,CORAL,ISO	400	316

EXPORTS

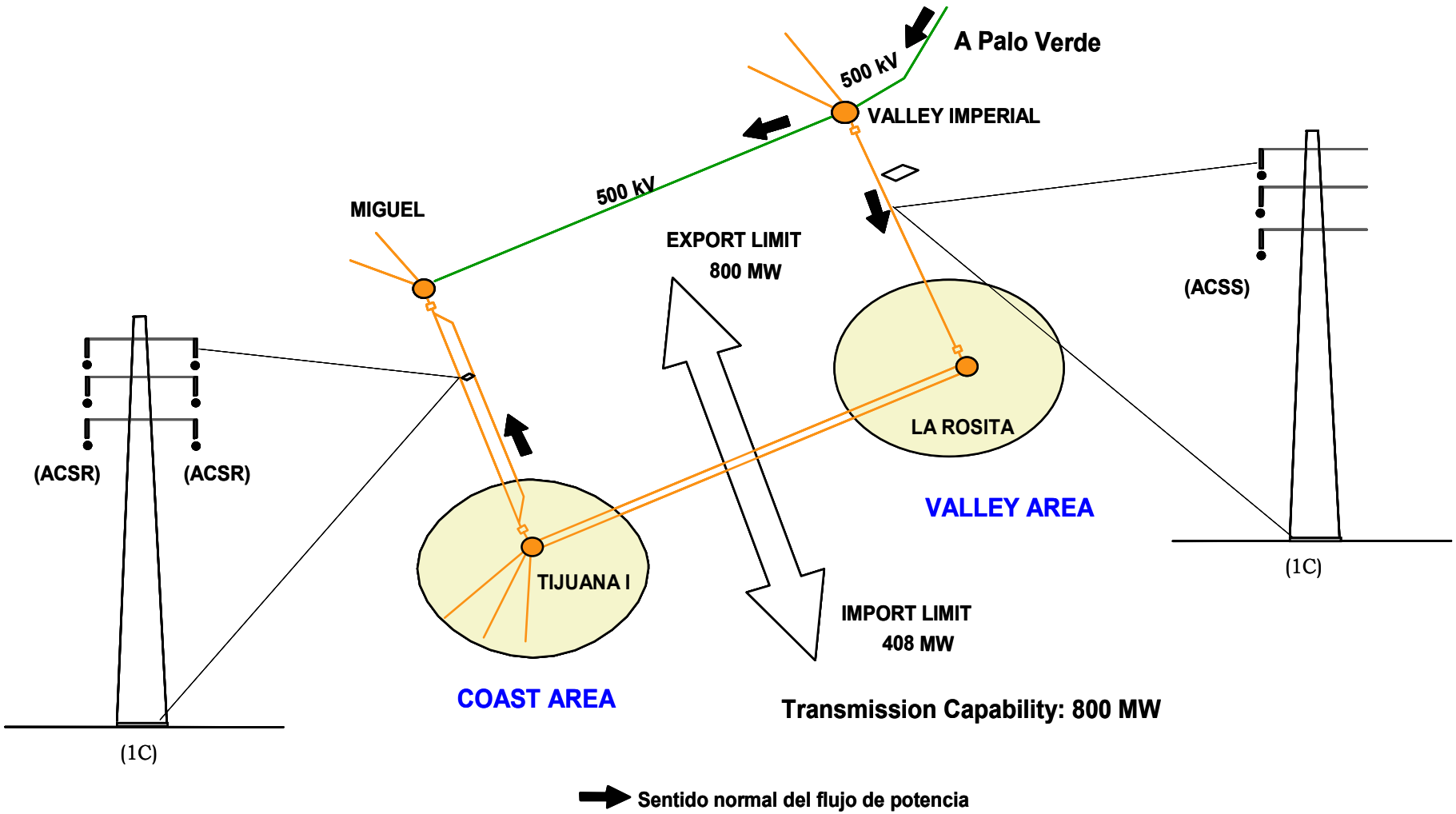
YEAR	BUYER	CAPACITY (MW)	ENERGY (GWh)
1995	SDG&E, SCE	290	1,919
1996	SDG&E, SCE	110	1,258
1997	SDG&E	272	17
1998	ENRON	180	45
1999	ENRON,CALPX	170	31
2000	CALPX	320	75
2001	ISO,CDWR,CORAL	408	127
2002	ISO, CORAL	305	165

Import/Export Transactions

1995–2002

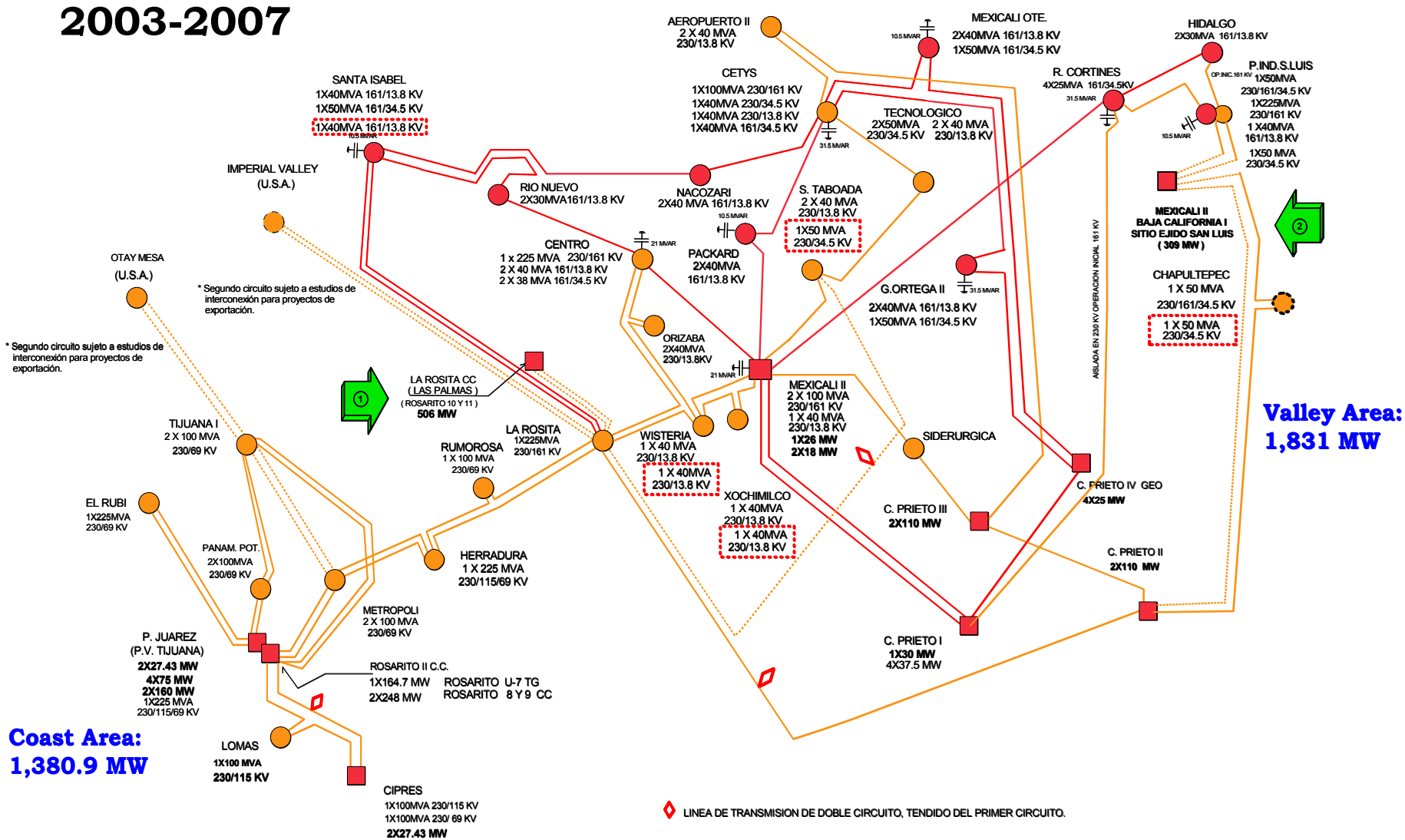


WECC Path 45 Capability



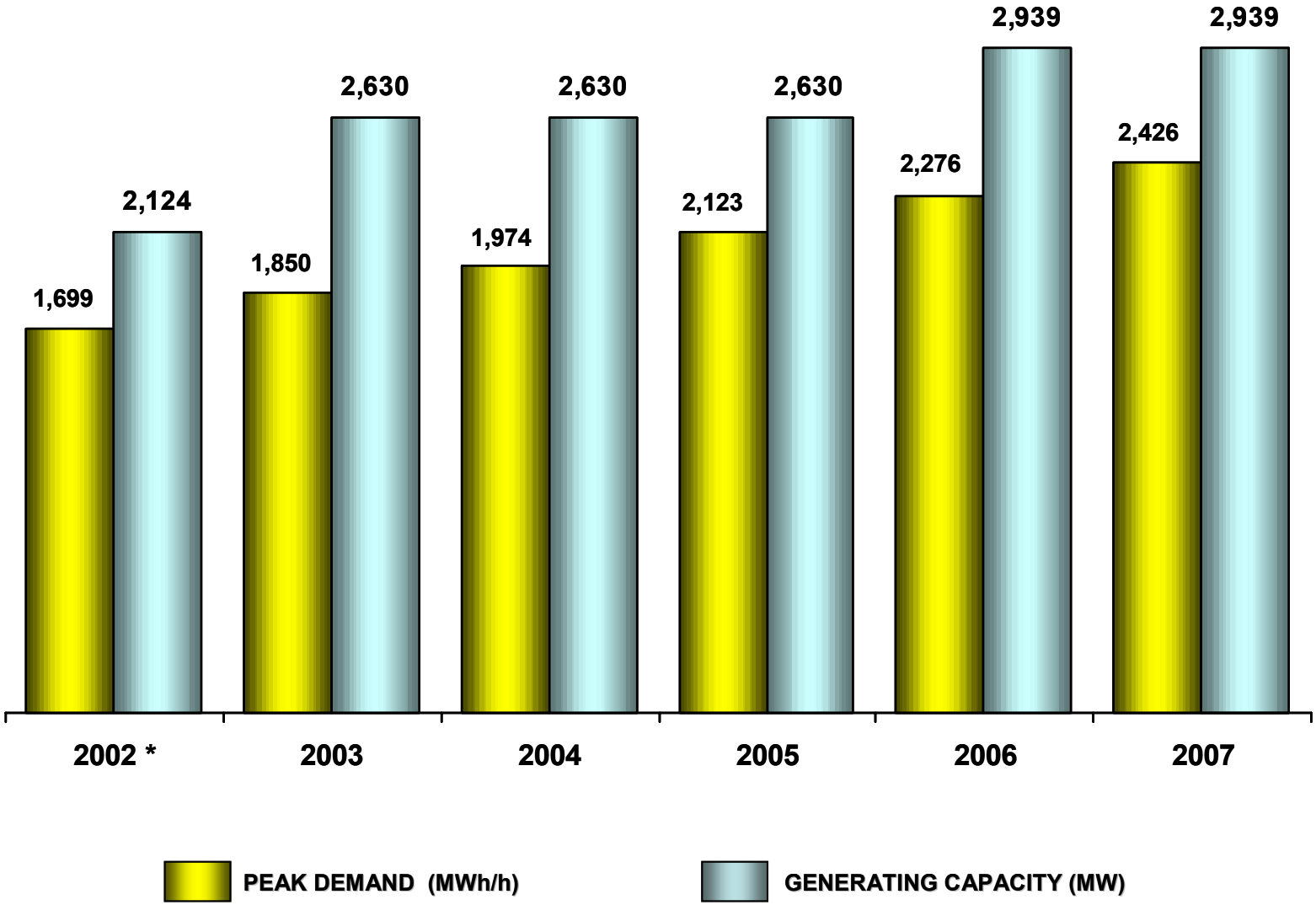
Generation and Transmission Expansion

2003-2007



Generating Capacity and Peak Demand

Baja California System

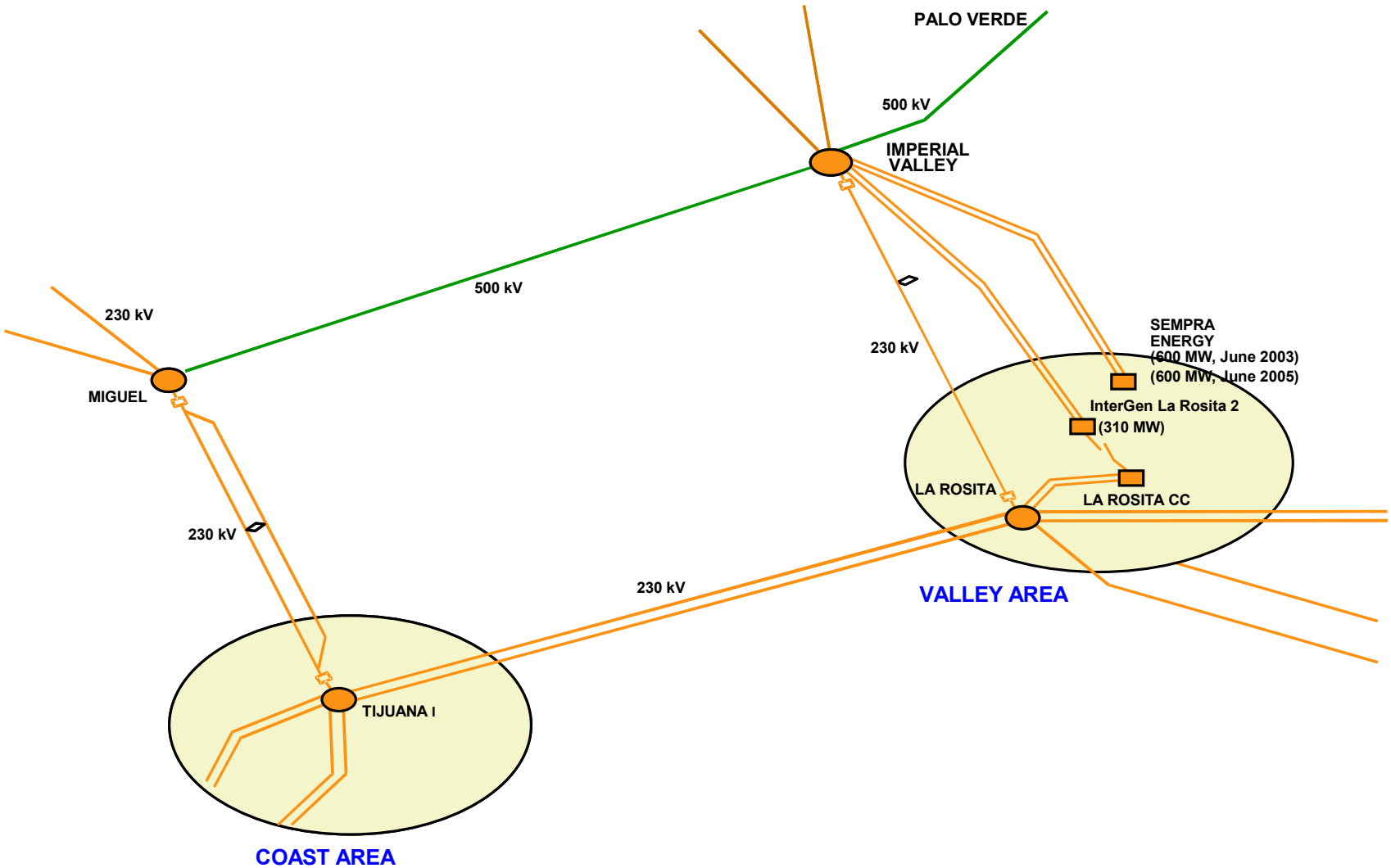


Generating Capacity Additions 2003-2007

Year	Power Station	Capacity (MW)	Site
2003	Rosarito 10 y 11	506	Las Palmas
2004			
2005			
2006	Mexicali II	309	Ejido San Luis

US/Mexico Border Joint System Impact Study

2003-2007



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