



**Fresno Area
Effectiveness Factors**

**Distribution Restriction:
None**

When operating constraints allow Increasing and Decreasing should be done in **pairs**. It is recommended to try and match the best Increase option (grey) with the best Decrease option (blue) for maximum effectiveness. If this is done, then their Effectiveness Factors can be added together resulting in a more accurate number.

Table 1a. Generation Effectiveness Factors on Calculated Loading

Loading Equation	MW increase in the LOADING across the transmission facilities that make up the LOADING EQUATION for 100MW increase in generation.																																
	Balch #1	Balch #2	CalPeak Power Panoche	CAPCO Madera	Chevron USE (Coalinga)	Chowchilla	Coalinga Cogeneration Company	Dinuba	Dynamis CoGen	Exchequer	Fresno CoGen (Agrico)	Friant Dam	Gates Peaker	GWF Henrietta Peaker Plant	Haas	Hanford LP	Helms	HEP Peaker Plant	JR Wood	Kerckhoff #1 & #2	Kings River	KRCD	McSwain	Mendota Bio Mass	Merced Falls	Starwood Power – Midway LLC	Panoche Energy Center	Panoche Peaker	PE-KES Kingsburg	Pine Flat	Rio Bravo Fresno (Ultrapower)	San Joaquin 2	Wishon
Panoche-Kearney 230kV Line & Dairyland-LeGrand 115kV Line	-1.3	-0.6	5.8	20.1	1.3	-8.1	1.1	-1.1	-1.1	-7.6	1.7	-2.3	0.9	-0.5	-0.6	-0.5	-2.2	-0.7	-4.1	-2.9	-1.2	-1.1	-7.1	6.7	-7.1	5.7	1.1	1.2	-0.9	-0.6	-1.1	-2.4	-2.4
Gates-Gregg 230kV Line & Panoche-Kearney 230kV Line	-14.3	-7.9	3.0	-4.9	2.3	-13.1	2.2	-12.1	-12.1	-11.9	0.3	-30.3	2.0	0.9	-7.8	0.7	-31.5	-5.3	-16.1	-17.0	-12.6	-12.4	-12.7	0.1	-12.7	3.0	6.7	5.2	-9.7	-8.0	-12.4	-31.3	-31.2
Gates-McCall 230kV Line & Helm-McCall 230kV Line or Panoche-Helm 230kV Line	-34.9	-44.4	2.8	-1.9	0.7	-11.6	0.6	-39.2	-39.9	-6.5	23.8	-11.3	0.3	-5.7	-44.2	-5.2	-11.7	-24.8	-7.0	-26.9	-36.3	-37.5	-6.7	7.1	-6.7	2.8	4.3	3.6	-38.5	-44.8	-37.6	-11.8	-11.7
Panoche-Helm 230kV Line & Gates-McCall 230kV Line	-33.3	-42.2	-3.3	-7.5	1.4	-13.2	1.5	-37.2	-37.8	-8.5	-35.2	-11.4	2.0	-2.6	-41.9	-2.3	-11.8	-22.2	-8.2	-26.2	-34.5	-35.6	-8.5	-12.9	-8.6	-3.3	-1.0	-1.3	-36.2	-42.5	-35.6	-11.9	-11.9
Hemdon-Kearney 230kV Line & Dairyland-LeGrand 115kV Line	-1.4	-0.7	5.8	20.1	1.3	-8.2	1.2	-1.2	-1.2	-7.7	1.7	-2.4	0.9	-0.6	-0.7	-0.5	-2.4	-0.8	-4.2	-3.0	-1.2	-1.2	-7.2	6.7	-7.2	5.7	1.1	1.2	-1.0	-0.7	-1.2	-2.5	-2.5
Gregg-Wilsom 230kV Line & Gregg-Borden 230kV Line	13.1	10.1	1.6	-5.4	3.9	-7.2	3.9	12.3	12.4	-13.5	5.9	-70.5	4.2	9.8	10.1	9.3	22.0	10.7	-21.7	10.7	12.3	12.3	-14.9	0.6	-15.0	1.6	4.5	3.1	11.3	10.2	12.3	-73.0	-72.9
Exchequer – Le Grand 115kV Line	-0.3	-0.2	-0.7	-2.3	-0.2	-3.2	-0.2	-0.2	-0.2	75.7	-0.3	0.1	-0.1	-0.1	-0.2	0.0	0.1	-0.1	1.3	-0.8	-0.2	-0.2	63.8	-0.8	63.9	-0.7	-0.1	-0.1	-0.2	-0.2	-0.2	0.1	0.1
Warnerville-Wilson 230kV Line	-15.9	-12.7	-10.3	-18.4	-7.3	-24.3	-7.0	-15.2	-15.2	-25.7	-10.7	-23.7	-6.9	-10.8	-12.6	-10.0	-22.0	-12.7	-33.5	-19.0	-15.0	-15.1	-27.2	-11.8	-27.2	-10.2	-7.3	-8.5	-14.0	-12.9	-15.1	-24.6	-24.6
Dairyland-LeGrand 115kV Line	-0.8	-0.3	5.6	20.2	1.2	-7.6	1.1	-0.6	-0.6	-7.2	1.7	-1.2	0.9	-0.2	-0.3	-0.1	-1.0	-0.4	-3.6	-2.3	-0.7	-0.7	-6.7	6.6	-6.7	5.5	0.7	0.9	-0.5	-0.3	-0.7	-1.2	-1.2
Le Grand-Chowchilla 115kV Line	-5.6	-3.7	2.2	9.3	0.0	-66.7	-0.1	-5.1	-5.1	12.4	-0.9	-0.8	-0.2	-1.1	-3.7	-0.9	-1.2	-3.0	5.3	-17.6	-5.1	-5.1	11.4	2.6	11.4	2.1	-0.3	0.1	-4.3	-3.8	-5.1	-0.9	-0.9
Gates-McCall 230kV Line	-24.5	-31.0	-3.7	-5.9	1.6	-10.0	1.8	-27.3	-27.8	-6.5	-14.0	-8.6	2.4	-0.6	-30.8	-0.5	-8.9	-15.7	-6.4	-19.3	-25.4	-26.1	-6.6	-6.8	-6.6	-3.7	-3.1	-3.0	-26.5	-31.2	-26.2	-8.9	-8.9
Panoche-Kearney 230kV Line	-11.1	-6.3	3.9	-2.6	1.3	-9.4	1.1	-9.5	-9.5	-8.5	1.4	-22.5	0.7	-6.7	-6.3	-6.2	-23.4	-7.6	-11.6	-12.9	-9.9	-9.8	-9.1	1.3	-9.1	3.9	7.2	5.8	-8.2	-6.4	-9.7	-23.2	-23.2

Note 1: Dropping a Helms Pump has the same effect as Increasing Helms Generation. The ID for each pump is: HELMPG_7_#100LD, HELMPG_7_#200LD, HELMPG_7_#300LD



Procedure No.	T-129Z
Version No.	6.1
Effective Date	8/19/09

**Fresno Area
Effectiveness Factors**

**Distribution Restriction:
None**

Resource Name	Resource ID
Balch #1	BALCHS_7_UNIT 1
Balch #2	BALCHS_7_UNIT 2
	BALCHS_7_UNIT 3
CalPeak Power Panoche	PNOCHE_1_UNITA1
CAPCO Madera	CAPMAD_1_UNIT 1
Chevron USE (Coalinga)	CHEVCO_6_UNIT 1
Chowchilla	CHWCHL_1_UNIT
Coalinga Cogeneration Company	COLGA1_6_SHELLW
Dinuba	DINUBA_6_UNIT
Dynamis CoGen	SGREGY_6_SANGER
Exchequer	EXCHEC_7_UNIT 1
Fresno CoGen (Agrico)	AGRICO_7_UNIT
Friant Dam	FRIANT_6_UNITS
Gates Peaker	GATES_6_PL1X2
GWF Henrietta Peaker Plant	HENRTA_6_UNITA1
	HENRTA_6_UNITA2
Haas	HAASPH_7_PL1X2
Hanford Energy Peakers	GWFPWR_6_UNIT
Helms	HELMPG_7_UNIT 1
	HELMPG_7_UNIT 2
	HELMPG_7_UNIT 3
HEP Peaker Plant	GWFPWR_1_UNITS
JR Wood (San Joaquin Power Co)	JRWOOD_1_UNIT 1
Kerckhoff #1	KERKH1_7_UNIT 1
	KERKH1_7_UNIT 2
	KERKH1_7_UNIT 3

Resource Name	Resource ID
Kerckhoff #2	KERKH2_7_UNIT 1
Kings River	KINGRV_7_UNIT 1
KRCD	MALAGA_1_PL1X2
McSwain	MCSWAN_6_UNITS
Mendota Bio Mass	MENBIO_6_UNIT
Merced Falls	MERCFL_6_UNIT
Starwood Power - Midway	PNCHPP_1_PL1x2
Panoche Peaker	PNOCHE_1_PL1X2
PE- KES Kingsburg	KINGCO_1_KINGBR
Pine Flat	PINFLT_7_UNITS
Rio Bravo Fresno (Ultrapower)	ULTPFR_1_UNIT 1
San Joaquin 2	CRNEVL_6_SJQN 2
Wishon	WISHON_6_UNITS