

2026-2027 ISO Preliminary Reliability Assessment - Study Results

Study Area: Entire PG&E System

High Voltages Under P0 Conditions



Bus/Substation	Area	Division	Voltage PU (Base Scenarios)				Voltage PU (Sensitivity Scenarios)	Project & Potential Mitigation Solutions
			2028 Spring Off-Peak	2031 Spring Off-Peak	2036 Summer Off-Peak	2036 Winter Off-Peak		
BELDEN 230 kV	North Valley	North Valley	1.0216	1.038	1.0303	1.0642	1.0225	System adjustments or voltage support if needed
BCKS CRK 230 kV	North Valley	North Valley	1.0154	1.0373	1.0282	1.0679	1.0167	System adjustments or voltage support if needed
ROCKCK 1 230 kV	North Valley	North Valley	1.0206	1.0378	1.0306	1.0641	1.0216	System adjustments or voltage support if needed
ROCKCK 2 230 kV	North Valley	North Valley	1.0154	1.0373	1.0283	1.068	1.0167	System adjustments or voltage support if needed
CRESTA 230 kV	North Valley	North Valley	1.0136	1.0373	1.0279	1.0682	1.0151	System adjustments or voltage support if needed
POE 230 kV	North Valley	North Valley	1.0176	1.0365	1.0314	1.0627	1.0191	System adjustments or voltage support if needed
RIO OSO 230 kV	Central Valley	Sierra	1.0014	1.0259	1.0367	1.0596	1.0051	System adjustments or voltage support if needed
MIDWAY-R12 230 kV	Kern	Kern	1.027	1.0507	1.0468	1.0424	1.0393	System adjustments or voltage support if needed
FULTON 115 kV	North Coast North Bay	North Coast	1.0232	1.0587	1.0448	1.0411	1.0205	System adjustments or voltage support if needed
RINCON 115 kV	North Coast North Bay	North Coast	1.0217	1.0558	1.0451	1.0384	1.0192	System adjustments or voltage support if needed
SLYCREEKPH 115 kV	North Valley	North Valley	1.0542	1.0569	1.0496	1.0547	1.0516	System adjustments or voltage support if needed
WOODLEAFPH 115 kV	North Valley	North Valley	1.0521	1.0558	1.0478	1.0534	1.0498	System adjustments or voltage support if needed
KANAKA 115 kV	North Valley	North Valley	1.0503	1.0559	1.0453	1.0534	1.0481	System adjustments or voltage support if needed
FORBESTOWN 115 kV	North Valley	North Valley	1.0503	1.0559	1.0457	1.0535	1.0482	System adjustments or voltage support if needed
WYANDTTE 115 kV	North Valley	North Valley	1.0536	1.0564	1.0501	1.0541	1.0495	System adjustments or voltage support if needed
DEADWDCKRAK 115 kV	North Valley	North Valley	1.054	1.0568	1.0494	1.0545	1.0514	System adjustments or voltage support if needed
PALERMO 115 kV	North Valley	North Valley	1.057	1.0584	1.0505	1.0554	1.0529	System adjustments or voltage support if needed
HONCUT 115 kV	North Valley	North Valley	1.0465	1.0505	1.0477	1.0495	1.0441	System adjustments or voltage support if needed
GRIZZLYT4-2 115 kV	North Valley	North Valley	1.0144	1.0292	1.0231	1.0503	1.0153	System adjustments or voltage support if needed
GPH-BC 115 kV	North Valley	North Valley	1.0143	1.0292	1.0231	1.0503	1.0152	System adjustments or voltage support if needed
GRIZZLY1 115 kV	North Valley	North Valley	1.0177	1.0319	1.026	1.0521	1.0186	System adjustments or voltage support if needed
OLSENHYDRO 60 kV	North Valley	North Valley	1.0418	1.0615	1.0488	1.0393	1.042	System adjustments or voltage support if needed
WHITMORE 60 kV	North Valley	North Valley	1.0386	1.0585	1.0463	1.0363	1.0387	System adjustments or voltage support if needed
CDR CRK 60 kV	North Valley	North Valley	1.0397	1.0598	1.0409	1.0348	1.0399	System adjustments or voltage support if needed
KILARC 60 kV	North Valley	North Valley	1.0411	1.061	1.0466	1.0379	1.0413	System adjustments or voltage support if needed
CLOVERCREEK 60 kV	North Valley	North Valley	1.0422	1.0621	1.0462	1.0382	1.0424	System adjustments or voltage support if needed
DOBBSIN 60 kV	Central Valley	Sierra	1.0115	1.05	1.0647	1.063	1.0125	System adjustments or voltage support if needed
CHALLENGE 60 kV	North Valley	North Valley	1.0076	1.0473	1.0607	1.0587	1.0085	System adjustments or voltage support if needed
ELKCREEK 60 kV	North Valley	North Valley	1.0339	1.0507	1.0354	1.0343	1.0342	System adjustments or voltage support if needed
HAMILTON 60 kV	North Valley	North Valley	1.0364	1.0521	1.0532	1.0426	1.0379	System adjustments or voltage support if needed
ANITA 60 kV	North Valley	North Valley	1.0078	1.0545	1.0611	1.0177	1.0093	System adjustments or voltage support if needed
JACINTO 60 kV	North Valley	North Valley	1.0309	1.051	1.0549	1.041	1.0324	System adjustments or voltage support if needed
BRIGHTN 115 kV	Central Valley	Sacramento	1.0389	1.0509	1.0363	1.0495	1.0397	System adjustments or voltage support if needed
RICE 60 kV	Central Valley	Sacramento	1.0128	1.0248	1.0608	0.99	1.0119	System adjustments or voltage support if needed
VACA-DXN 60 kV	Central Valley	Sacramento	1.0379	1.051	1.0562	1.0455	1.04	System adjustments or voltage support if needed
WINTERS 60 kV	Central Valley	Sacramento	1.0276	1.0478	1.0736	1.0412	1.0299	System adjustments or voltage support if needed
PLAINFIELD 60 kV	Central Valley	Sacramento	1.0055	1.061	1.1147	1.0099	1.0079	System adjustments or voltage support if needed
PLAINFIELD 60 kV	Central Valley	Sacramento	1.0055	1.061	1.1147	1.0099	1.0079	System adjustments or voltage support if needed
MAINE-PR 60 kV	Central Valley	Sacramento	1.0304	1.0445	1.0504	1.0395	1.0326	System adjustments or voltage support if needed
DRUMPH2 115 kV	Central Valley	Sierra	1.046	1.0525	1.0491	1.0508	1.047	System adjustments or voltage support if needed
E.MRYSVE 115 kV	Central Valley	Sierra	1.0392	1.0562	1.0571	1.053	1.0394	System adjustments or voltage support if needed
DRUMPH1 115 kV	Central Valley	Sierra	1.0459	1.0525	1.0491	1.0507	1.047	System adjustments or voltage support if needed
DTCH FL2 115 kV	Central Valley	Sierra	1.045	1.0526	1.0489	1.0497	1.0462	System adjustments or voltage support if needed
BRNSWALT 115 kV	Central Valley	Sierra	1.0391	1.052	1.047	1.0464	1.041	System adjustments or voltage support if needed
BRNSWCKP 115 kV	Central Valley	Sierra	1.0376	1.0516	1.0471	1.0459	1.0396	System adjustments or voltage support if needed
COLGATE 60 kV	Central Valley	Sierra	-1000	1.0502	1.065	1.0634	-1000	System adjustments or voltage support if needed
CLMBA HL 60 kV	Central Valley	Sierra	1.0043	1.0472	1.0515	1.057	1.0052	System adjustments or voltage support if needed
GRSS VLY 60 kV	Central Valley	Sierra	0.9569	1.0423	1.0569	1.055	0.9578	System adjustments or voltage support if needed
RBROCKLIN 115 kV	Central Valley	Sierra	1.0152	1.0365	1.0481	1.0564	1.0183	System adjustments or voltage support if needed
PLSNT GR 115 kV	Central Valley	Sierra	1.0132	1.0355	1.0485	1.0575	1.0163	System adjustments or voltage support if needed
ATLANTIC 115 kV	Central Valley	Sierra	1.0143	1.0368	1.0506	1.063	1.0175	System adjustments or voltage support if needed
SILVERDO 115 kV	North Coast North Bay	North Bay	1.016	1.053	1.0425	1.0373	1.0138	System adjustments or voltage support if needed
MONTCLLO 115 kV	North Coast North Bay	North Bay	1.0192	1.0557	1.0455	1.0399	1.017	System adjustments or voltage support if needed
MNTCLOPH 115 kV	North Coast North Bay	North Bay	1.021	1.0568	1.0466	1.041	1.0188	System adjustments or voltage support if needed
IGNACIO 115 kV	North Coast North Bay	North Bay	1.0214	1.0565	1.0634	1.062	1.0172	System adjustments or voltage support if needed
LS GLINS 115 kV	North Coast North Bay	North Bay	1.0158	1.054	1.0634	1.0611	1.0116	System adjustments or voltage support if needed
SAN RAFL 115 kV	North Coast North Bay	North Bay	1.0129	1.0524	1.0628	1.0601	1.0087	System adjustments or voltage support if needed
SKAGGS 115 kV	North Coast North Bay	North Bay	1.0182	1.0538	1.051	1.0584	1.0139	System adjustments or voltage support if needed
JMSCNPMP 115 kV	North Coast North Bay	North Bay	1.0151	1.0513	1.0415	1.0556	1.0108	System adjustments or voltage support if needed
MREIS JC 115 kV	North Coast North Bay	North Bay	1.0126	1.0492	1.0353	1.0535	1.0084	System adjustments or voltage support if needed
CARQUINZ 115 kV	North Coast North Bay	North Bay	1.0121	1.0488	1.0339	1.0529	1.0078	System adjustments or voltage support if needed
BIXLER 60 kV	Greater Bay area	Diablo	1.0328	1.0562	1.0338	1.0414	1.0294	System adjustments or voltage support if needed
LCKFRDJB 115 kV	Central Valley	Stockton	1.0412	1.0501	1.0384	1.0344	1.0366	System adjustments or voltage support if needed
BELLOTA 115 kV	Central Valley	Stockton	1.046	1.053	1.042	1.0415	1.0415	System adjustments or voltage support if needed
LOCKFORD 115 kV	Central Valley	Stockton	1.0408	1.052	1.0409	1.0341	1.0362	System adjustments or voltage support if needed
CAMANACHEPH 115 kV	Central Valley	Stockton	1.0448	1.0547	1.0444	1.0385	1.0403	System adjustments or voltage support if needed
WPVS-021-098 60 kV	Central Valley	Stockton	1.0415	1.0555	1.0414	1.045	1.0423	System adjustments or voltage support if needed
VLLY SP5 60 kV	Central Valley	Stockton	1.0416	1.0557	1.0414	1.0452	1.0425	System adjustments or voltage support if needed
VSC000-002 60 kV	Central Valley	Stockton	1.0415	1.0557	1.0414	1.045	1.0424	System adjustments or voltage support if needed
CAL CMNT 60 kV	Central Valley	Stockton	1.0337	1.0522	1.0407	1.0357	1.0346	System adjustments or voltage support if needed
MARTELL 60 kV	Central Valley	Stockton	1.0333	1.054	1.0389	1.035	1.0342	System adjustments or voltage support if needed
AMFOR SW 60 kV	Central Valley	Stockton	1.0336	1.054	1.039	1.0353	1.0345	System adjustments or voltage support if needed
AM FORST 60 kV	Central Valley	Stockton	1.0336	1.054	1.039	1.0353	1.0345	System adjustments or voltage support if needed
PARDEE A 60 kV	Central Valley	Stockton	1.048	1.0607	1.0478	1.0515	1.0489	System adjustments or voltage support if needed
VSLDSW87 60 kV	Central Valley	Stockton	1.0461	1.0595	1.0459	1.0496	1.047	System adjustments or voltage support if needed
VSIA000-001D 60 kV	Central Valley	Stockton	1.0415	1.0557	1.0414	1.045	1.0424	System adjustments or voltage support if needed
N.HOGAN 60 kV	Central Valley	Stockton	1.0297	1.0568	1.043	1.0304	1.0306	System adjustments or voltage support if needed
CORRAL 60 kV	Central Valley	Stockton	1.0117	1.0594	1.0426	1.0092	1.0126	System adjustments or voltage support if needed
CORRAL2 60 kV	Central Valley	Stockton	1.0117	1.0594	1.0426	1.0092	1.0126	System adjustments or voltage support if needed
HERDLYN 60 kV	Central Valley	Stockton	1.0448	1.0661	1.046	1.0545	1.0415	System adjustments or voltage support if needed
ALTA-CGE 60 kV	Central Valley	Stockton	1.0451	1.0664	1.0466	1.0552	1.0426	System adjustments or voltage support if needed
TOSCO-PP 60 kV	Central Valley	Stockton	1.0457	1.0653	1.0476	1.0554	1.044	System adjustments or voltage support if needed
SOUTH BY 60 kV	Central Valley	Stockton	1.0458	1.0651	1.0477	1.0555	1.0442	System adjustments or voltage support if needed
WEST SDE 60 kV	Central Valley	Stockton	1.0425	1.0639	1.0437	1.0522	1.0392	System adjustments or voltage support if needed
STNSLSRP 60 kV	Central Valley	Stanislaus	1.0431	1.0441	1.0459	1.0506	1.0389	System adjustments or voltage support if needed
SALADO 60 kV	Central Valley	Stanislaus	1.0451	1.0502	1.0476	1.0551	1.041	System adjustments or voltage support if needed
PATTERSN 60 kV	Central Valley	Stanislaus	1.0426	1.0487	1.0473	1.0514	1.0385	System adjustments or voltage support if needed
ATWATER 115 kV	Fresno	Yosemite	0.9761	1.0314	1.0514	0.9914	0.9852	System adjustments or voltage support if needed
EXCHEQUUR 115 kV	Fresno	Yosemite	1.0335	1.0421	1.0517	1.0386	1.0363	System adjustments or voltage support if needed
LE GRNDJ 115 kV	Fresno	Yosemite	0.9928	1.0341	1.05	0.9998	1.0012	System adjustments or voltage support if needed
WILSONPGAE 115 kV	Fresno	Yosemite	0.9882	1.0348	1.0511	1.0077	0.9971	System adjustments or voltage support if needed
EL CAPTN 115 kV	Fresno	Yosemite	0.9785	1.0316	1.0519	0.9946	0.9875	System adjustments or voltage support if needed
CRESSEY 115 kV	Fresno	Yosemite	0.972	1.0305	1.0504	0.9865	0.9812	System adjustments or voltage support if needed
MERCED 115 kV	Fresno	Yosemite	0.9833	1.0346	1.0501	0.9996	0.9922	System adjustments or voltage support if needed
CHENYT 115 kV	Fresno	Yosemite	1.049	1.0563	1.0602	1.0498	1.0495	System adjustments or voltage support if needed
PANOCH1 115 kV	Fresno	Yosemite	1.0492	1.0568	1.0609	1.0502	1.0496	System adjustments or voltage support if needed
PANOCH2 115 kV	Fresno	Yosemite	1.0492	1.0568	1.0609	1.0502	1.0497	System adjustments or voltage support if needed
HAMMONDS 115 kV	Fresno	Yosemite	1.0366	1.0489	1.057	1.0332	1.0398	System adjustments or voltage support if needed
ORO LOMA 115 kV	Fresno	Yosemite	1.0203	1.0305	1.0517	1.0051	1.0264	System adjustments or voltage support if needed

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High Voltages Under P0 Conditions

Area/Configuration	Area	Division	Voltage PU (Base Scenarios)				Voltage PU (Sensitivity Scenarios)		Remedial & Potential Mitigation Solutions
LUIS #3 115 kV	Fresno	Yosemite	1.0395	1.0517	1.0564	1.0387	1.0416		System adjustments or voltage support if needed
DFS 115 kV	Fresno	Yosemite	1.0263	1.0378	1.0537	1.016	1.0314		System adjustments or voltage support if needed
LUIS #5 115 kV	Fresno	Yosemite	1.0396	1.0519	1.0565	1.0389	1.0417		System adjustments or voltage support if needed
OXFORD 115 kV	Fresno	Yosemite	1.04	1.0523	1.0569	1.0393	1.0422		System adjustments or voltage support if needed
CALPEAKPNCH 115 kV	Fresno	Yosemite	1.0492	1.0567	1.0609	1.0501	1.0496		System adjustments or voltage support if needed
WSTLD1RA 115 kV	Fresno	Yosemite	1.0401	1.0524	1.057	1.0394	1.0422		System adjustments or voltage support if needed
WILSONSTCOM 115 kV	Fresno	Yosemite	0.9882	1.0347	1.051	1.0077	0.9971		System adjustments or voltage support if needed
STARWDPNCH 115 kV	Fresno	Yosemite	1.0491	1.0567	1.0609	1.0501	1.0496		System adjustments or voltage support if needed
CANANDGA 70 kV	Fresno	Yosemite	1.0115	1.0609	1.0373	1.0379	1.0267		System adjustments or voltage support if needed
BONITA 70 kV	Fresno	Yosemite	0.9997	1.0619	1.0252	1.0157	1.0151		System adjustments or voltage support if needed
GLASS 70 kV	Fresno	Yosemite	1.0118	1.0612	1.0375	1.0382	1.0271		System adjustments or voltage support if needed
MADERA 70 kV	Fresno	Yosemite	1.0136	1.0627	1.0395	1.0399	1.0282		System adjustments or voltage support if needed
TRIGO 70 kV	Fresno	Yosemite	1.0118	1.0612	1.0378	1.0381	1.027		System adjustments or voltage support if needed
BORDEN 70 kV	Fresno	Yosemite	1.0188	1.065	1.0389	1.0475	1.0325		System adjustments or voltage support if needed
CASSIDY 70 kV	Fresno	Yosemite	1.0038	1.0503	1.033	1.0371	1.0153		System adjustments or voltage support if needed
EL PECO 70 kV	Fresno	Yosemite	1.0083	1.0595	1.0377	1.0334	1.0234		System adjustments or voltage support if needed
LOTUSSF 70 kV	Fresno	Yosemite	1.0211	1.0612	1.039	1.0476	1.0373		System adjustments or voltage support if needed
SHEPHERD 115 kV	Fresno	Fresno	0.9899	1.0397	1.0537	1.0109	0.9974		System adjustments or voltage support if needed
CANTUA 115 kV	Fresno	Fresno	1.0386	1.0483	1.0521	1.0363	1.0391		System adjustments or voltage support if needed
KAMM 115 kV	Fresno	Fresno	1.0437	1.0521	1.0559	1.043	1.0442		System adjustments or voltage support if needed
CHLDHOSP 115 kV	Fresno	Fresno	0.9758	1.0295	1.0539	1.0003	0.985		System adjustments or voltage support if needed
KERCKHF1 115 kV	Fresno	Fresno	0.997	1.0334	1.0521	1.0136	1.0006		System adjustments or voltage support if needed
KERCKHOFP2 115 kV	Fresno	Fresno	0.997	1.0334	1.0521	1.0136	1.0006		System adjustments or voltage support if needed
AIRWAYS1 115 kV	Fresno	Fresno	0.9774	1.0214	1.0532	1.0048	0.9852		System adjustments or voltage support if needed
CLOVIS-1 115 kV	Fresno	Fresno	0.9938	1.0312	1.0504	1.0161	0.9994		System adjustments or voltage support if needed
CLOVIS-2 115 kV	Fresno	Fresno	0.9924	1.0251	1.0511	1.0138	0.9971		System adjustments or voltage support if needed
SESWTF 115 kV	Fresno	Fresno	0.9781	1.0217	1.0528	1.0057	0.9859		System adjustments or voltage support if needed
BARTON 115 kV	Fresno	Fresno	0.9727	1.0191	1.0553	1.0016	0.9814		System adjustments or voltage support if needed
HERNDON 115 kV	Fresno	Fresno	0.9698	1.026	1.0541	0.9979	0.9804		System adjustments or voltage support if needed
PNEDLE 115 kV	Fresno	Fresno	0.9581	1.0198	1.0566	0.984	0.9688		System adjustments or voltage support if needed
WOODWARD 115 kV	Fresno	Fresno	0.9805	1.0335	1.0544	1.0023	0.9888		System adjustments or voltage support if needed
PNEDLE2 115 kV	Fresno	Fresno	0.9597	1.0206	1.056	0.9858	0.9704		System adjustments or voltage support if needed
BULLARD 115 kV	Fresno	Fresno	0.9578	1.0198	1.0567	0.9838	0.9686		System adjustments or voltage support if needed
HARDWOOD 70 kV	Fresno	Fresno	1.0534	1.0712	1.0774	1.0624	1.0572		System adjustments or voltage support if needed
GUERNSEY 70 kV	Fresno	Fresno	1.0111	1.0395	1.0617	0.9944	1.0175		System adjustments or voltage support if needed
COPPRMNE 70 kV	Fresno	Fresno	1.0047	1.0471	1.0336	1.0513	1.0131		System adjustments or voltage support if needed
BOWLES 70 kV	Fresno	Fresno	1.0232	1.0504	1.0407	1.0321	1.0315		System adjustments or voltage support if needed
KEARNEY 70 kV	Fresno	Fresno	1.0328	1.0507	1.0417	1.0447	1.0411		System adjustments or voltage support if needed
HNFRD SW 70 kV	Fresno	Fresno	1.0553	1.0712	1.0786	1.066	1.0591		System adjustments or voltage support if needed
ARMSTRNG 70 kV	Fresno	Fresno	1.0109	1.039	1.061	0.9941	1.0174		System adjustments or voltage support if needed
RESERVE 70 kV	Fresno	Fresno	1.0108	1.0389	1.0608	0.9939	1.0173		System adjustments or voltage support if needed
AMSTG SW 70 kV	Fresno	Fresno	1.0109	1.039	1.061	0.9941	1.0174		System adjustments or voltage support if needed
STROUD 70 kV	Fresno	Fresno	1.0285	1.0339	1.0523	1.0258	1.0299		System adjustments or voltage support if needed
KNGLOBUS 70 kV	Fresno	Fresno	1.0597	1.0704	1.0811	1.0755	1.0635		System adjustments or voltage support if needed
ALPAUGHSTH 115 kV	Fresno	Fresno	1.0526	1.0348	1.0348	1.0444	1.0497		System adjustments or voltage support if needed
ALPAUGHNTN 115 kV	Fresno	Fresno	1.0526	1.0348	1.0348	1.0443	1.0497		System adjustments or voltage support if needed
STOCKDLE 115 kV	Kern	Kern	1.0096	1.0297	1.0512	1.0204	1.0334		System adjustments or voltage support if needed
OLIVE_S5 115 kV	Fresno	Fresno	1.052	1.0348	1.0347	1.0436	1.0499		System adjustments or voltage support if needed
TUPMAN 115 kV	Kern	Kern	1.0269	1.0511	1.0532	1.0368	1.0378		System adjustments or voltage support if needed
TEVIS 115 kV	Kern	Kern	1.0088	1.0295	1.0524	1.0174	1.0326		System adjustments or voltage support if needed
RIO BRVO 115 kV	Kern	Kern	1.0259	1.051	1.0513	1.0371	1.0367		System adjustments or voltage support if needed
RENFRD 115 kV	Kern	Kern	1.0255	1.0535	1.0562	1.0343	1.0364		System adjustments or voltage support if needed
RENFRD2 115 kV	Kern	Kern	1.0246	1.0531	1.0553	1.0338	1.0355		System adjustments or voltage support if needed
MIDWAY D 115 kV	Kern	Kern	1.0389	1.0553	1.0552	1.0519	1.0496		System adjustments or voltage support if needed
NORCO_TA 115 kV	Kern	Kern	1.0267	1.0509	1.0531	1.0366	1.0376		System adjustments or voltage support if needed
NORCO 115 kV	Kern	Kern	1.0267	1.0509	1.0531	1.0365	1.0376		System adjustments or voltage support if needed
INERGV 115 kV	Kern	Kern	1.0255	1.0498	1.052	1.0354	1.0364		System adjustments or voltage support if needed
ROSEAL 115 kV	Kern	Kern	1.0176	1.0324	1.0523	1.0256	1.0411		System adjustments or voltage support if needed
TX ROSLD 115 kV	Kern	Kern	1.0175	1.0324	1.0523	1.0256	1.0411		System adjustments or voltage support if needed
RIORBTM 115 kV	Kern	Kern	1.0355	1.0538	1.0541	1.0478	1.0462		System adjustments or voltage support if needed
FRITO LY 115 kV	Kern	Kern	1.03	1.0519	1.0531	1.0411	1.0408		System adjustments or voltage support if needed
KERN PP 115 kV	Kern	Kern	1.0171	1.0317	1.0514	1.0252	1.0406		System adjustments or voltage support if needed
GRANT 115 kV	Greater Bay area	Mission	1.0455	1.0601	1.0506	1.0415	1.0324		System adjustments or voltage support if needed
EASTSHRE 115 kV	Greater Bay area	Mission	1.0473	1.0618	1.0567	1.0456	1.0363		System adjustments or voltage support if needed
MT EDEN 115 kV	Greater Bay area	Mission	1.0461	1.0613	1.0568	1.0446	1.035		System adjustments or voltage support if needed
DUMBARTN 115 kV	Greater Bay area	Mission	1.0465	1.0366	1.0528	1.0387	1.0357		System adjustments or voltage support if needed
A100US 115 kV	Greater Bay area	Mission	1.0469	1.0613	1.0564	1.0453	1.0358		System adjustments or voltage support if needed
DYERWND 60 kV	Greater Bay area	Mission	1.0461	1.0664	1.0495	1.0575	1.0486		System adjustments or voltage support if needed
MNTA VSA 60 kV	Greater Bay area	De Anza	1.0467	1.0574	1.0519	1.0523	1.0532		System adjustments or voltage support if needed
PERMNNTE 60 kV	Greater Bay area	De Anza	1.0465	1.0571	1.0517	1.052	1.0529		System adjustments or voltage support if needed
METCALFRCTR1 115 kV	Greater Bay area	San Jose	1.0439	1.0562	1.0401	1.0403	1.0456		System adjustments or voltage support if needed
METCALFRCTR2 115 kV	Greater Bay area	San Jose	1.0436	1.0564	1.0334	1.0335	1.0451		System adjustments or voltage support if needed
METCALFRCTR3 115 kV	Greater Bay area	San Jose	1.0438	1.0562	1.0337	1.0338	1.0453		System adjustments or voltage support if needed
METCALFRCTR4 115 kV	Greater Bay area	San Jose	1.0443	1.0568	1.0412	1.0409	1.0459		System adjustments or voltage support if needed
GREENVALLEY 60 kV	Central Coast	Central Coast	1.0387	1.0538	1.0517	1.0351	1.0376		System adjustments or voltage support if needed
RSVTN RD 60 kV	Central Coast	Central Coast	0.995	1.0142	1.0735	1.002	0.9939		System adjustments or voltage support if needed
LAURELES 60 kV	Central Coast	Central Coast	0.9861	1.0119	1.1715	0.99	0.985		System adjustments or voltage support if needed
OTTER 60 kV	Central Coast	Central Coast	0.9819	1.0087	1.1966	0.9875	0.9808		System adjustments or voltage support if needed
SAN ARDO 60 kV	Central Coast	Central Coast	0.9957	0.9169	1.0205	1.0093	0.9926		System adjustments or voltage support if needed
OILFDS 60 kV	Central Coast	Central Coast	0.9917	0.8788	1.0056	1.0012	0.9862		System adjustments or voltage support if needed
CHVSANARDO 60 kV	Central Coast	Central Coast	0.9898	0.8683	1.0022	0.9983	0.9849		System adjustments or voltage support if needed
SARG CYN 60 kV	Central Coast	Central Coast	0.9917	0.8788	1.0055	1.0012	0.9862		System adjustments or voltage support if needed
SALINASRIVER 60 kV	Central Coast	Central Coast	0.9911	0.8705	1.0035	0.9996	0.9862		System adjustments or voltage support if needed
AERA_ENG 60 kV	Central Coast	Central Coast	0.9912	0.8778	1.0044	1.0007	0.985		System adjustments or voltage support if needed
AERA_MTR 60 kV	Central Coast	Central Coast	0.9916	0.8787	1.0054	1.0011	0.986		System adjustments or voltage support if needed
EDENLANDING 115 kV	Greater Bay area	Mission	1.0469	1.0613	1.0558	1.0448	1.0357		System adjustments or voltage support if needed
STACKHAYWARD 115 kV	Greater Bay area	Mission	1.0469	1.0613	1.0557	1.0447	1.0356		System adjustments or voltage support if needed
CORPORATEDC 115 kV	Greater Bay area	Mission	1.0466	1.0617	1.0567	1.0455	1.0355		System adjustments or voltage support if needed
ARDENRDC 115 kV	Greater Bay area	Mission	1.0472	1.0617	1.0567	1.0456	1.0362		System adjustments or voltage support if needed
26462CORPDC 115 kV	Greater Bay area	Mission	1.0464	1.0618	1.0568	1.0457	1.0354		System adjustments or voltage support if needed
Q1109 115 kV	Central Valley	Stockton	1.0456	1.0526	1.0417	1.0413	1.0411		System adjustments or voltage support if needed
Q1143 115 kV	Fresno	Fresno	1.0523	1.0348	1.0348	1.0436	1.0496		System adjustments or voltage support if needed
Q1493 70 kV	Kern	Kern	1.0469	1.04	1.04	1.04	1.0533		System adjustments or voltage support if needed
Q1443 115 kV	Fresno	Fresno	1.0521	1.0348	1.0348	1.0436	1.0499		System adjustments or voltage support if needed
COLLINSVILLE 500.0 kV	Bulk	Bulk	1.0567	1.0731	1.0628	1.0777	1.0535		System adjustments or voltage support if needed
DIABLOCNYS 500.0 kV	Bulk	Bulk	1.0598	1.085	1.0802	1.0756	1.061		System adjustments or voltage support if needed
FERNROADSS 500.0 kV	Bulk	Bulk	1.0603	1.062	1.072	1.073	1.0581		System adjustments or voltage support if needed
GATES 500.0 kV	Bulk	Bulk	1.0621	1.062	1.0699	1.069	1.062		System adjustments or voltage support if needed
HARLANSWSTA 500.0 kV	Bulk	Bulk	1.064	1.0704	1.0637	1.0666	1.0628		System adjustments or voltage support if needed
LOSANOS 500.0 kV	Bulk	Bulk	1.0631	1.0668	1.0606	1.0657	1.0585		System adjustments or voltage support if needed
MANNING 500.0 kV	Bulk	Bulk	1.0638	1.0678	1.0611	1.0668	1.0616		System adjustments or voltage support if needed
METCALF 500.0 kV	Bulk	Bulk	1.0522	1.0774	1.0313	1.0578	1.0504		System adjustments or voltage support if needed

2026-2027 ISO Preliminary Reliability Assessment - Study Results

Study Area: Entire PG&E System

High Voltages Under P0 Conditions



Area/Generation	Area	Division	Voltage PU (Base Scenarios)				Voltage PU (Sensitivity Scenarios)	Remedial & Potential Mitigation Solutions
MIDWAY 500.0 kV	Bulk	Bulk	1.0552	1.0737	1.0626	1.0612	1.0597	System adjustments or voltage support if needed
MOSSLAND 500.0 kV	Bulk	Bulk	1.0507	1.064	1.0441	1.047	1.0425	System adjustments or voltage support if needed
ROUND MT 500.0 kV	Bulk	Bulk	1.0621	1.0622	1.0729	1.0736	1.06	System adjustments or voltage support if needed
TABLE MTN 500.0 kV	Bulk	Bulk	1.0604	1.0692	1.071	1.0752	1.0579	System adjustments or voltage support if needed
TESLA 500.0 kV	Bulk	Bulk	1.0583	1.0693	1.0575	1.0709	1.0559	System adjustments or voltage support if needed
VACA-DIX 500.0 kV	Bulk	Bulk	1.0584	1.0744	1.0657	1.0794	1.0551	System adjustments or voltage support if needed