



Relatório de Fluxo de Potência

Barra	Tipo	V (pu)	Ângulo	P (MW)	Q (MVar)
1	BusType.PV	0.841	18021379.49	-3666.92	3865.89
2	BusType.PV	159355.157	10166207.46	29683012560410.46	133768148731640.02
3	BusType.PV	1.341	16207086.32	421823782.37	-82993043.51
4	BusType.PV	1.918	18101069.65	17779.58	12638.62
5	BusType.PV	0.717	18438627.15	1723.93	3550.14
6	BusType.PV	189532.650	-19002793.76	-64812703158.64	155744276142493.56
7	BusType.PV	1.176	23294497.40	91731799.40	589207784.37
8	BusType.PV	72079.806	-20214733.19	18858864549129.41	78351200970407.80
9	BusType.PV	0.077	10952092.33	126.59	76.47
10	BusType.PV	1187.058	-15898323.18	173804.05	750872350820.16
11	BusType.PV	0.824	-15272641.35	-55591.76	-121406824.53
12	BusType.PV	1.244	15330796.21	-953749.50	2717412.31
13	BusType.PV	0.117	-493982.42	26167.16	-842.09
14	BusType.PV	2.325	9543097.13	-208285490.65	319301652.28
15	BusType.PV	2.333	13999976.83	26269.69	14294.35
16	BusType.PV	3.154	7521393.14	17809.99	86578.27
17	BusType.PV	1.573	13999987.49	-561.00	-7047.82
19	BusType.PV	1.472	8806617.31	-164.50	5352.06
20	BusType.PV	77.876	13675879.40	18652538.65	164685823.36
21	BusType.PV	1.256	14160552.03	695901.75	312540.72
22	BusType.PV	407.299	13637158.89	317670626.05	588944551.66
23	BusType.PV	1.163	13554206.23	-13106.65	386140.02
24	BusType.PV	1.163	13688840.59	-4251.05	10357.75
25	BusType.PV	1.359	13439699.15	-2687.62	3228.48
26	BusType.PV	1.600	13259392.29	1786.02	967.09
27	BusType.PV	1.606	13123311.02	12730.43	-60614.08
33	BusType.PV	0.479	105970257.00	-714.85	4571.16
34	BusType.PV	1.555	40720091.10	-5223.21	6612.19
35	BusType.PV	0.467	-29262046.42	-161256.77	-8786084.65
36	BusType.PV	0.500	-29261148.70	2112.49	5378360.65
37	BusType.PV	0.510	161313985.15	106142140.84	820454613.78



Power Systems Simulator

Barra	Tipo	V (pu)	Ângulo	P (MW)	Q (MVar)
38	BusType.PV	0.409	72673271.04	2510.39	4002.26
39	BusType.PV	1.460	44005838.61	9911.21	-1334.99
40	BusType.PV	0.393	73984701.40	771.96	896.43
41	BusType.PV	1.316	83914131.52	9932.08	27911.21
42	BusType.PV	1.526	43948941.08	-16898.28	57410.82
43	BusType.PV	0.126	92937073.93	98.03	66.48
44	BusType.PV	0.515	33966845.59	-150058.56	69253.84
45	BusType.PV	0.511	33981719.73	150691.25	20453814.42
46	BusType.PV	0.370	37652482.50	-3745.21	1215.02
47	BusType.PV	0.505	31491187.24	368.16	930.51
48	BusType.PV	0.595	17252912.07	-456.83	869.48
49	BusType.PV	1.599	159998163.46	10189.23	36079.40
51	BusType.PV	1.719	220058138.60	3475.70	5809.06
52	BusType.PV	1.270	158031548.36	-176.66	2033.85
53	BusType.PV	0.116	124456640.62	64.24	65.78
54	BusType.PV	0.111	-71309335.49	61.64	13.91
55	BusType.PV	0.162	189108042.29	-4957020.26	-6244641.00
57	BusType.PV	89186.143	-46759620.30	6276666893149.24	41684676784227.23
58	BusType.PV	0.484	-18108628.54	1523864.38	-46746809.71
59	BusType.PV	0.473	-38164203.60	2234.70	2872.28
60	BusType.PV	0.451	9343525.45	-20.88	1438.97
61	BusType.PV	0.570	-39102499.91	-1019.44	4318.03
62	BusType.PV	0.184	-29251539.16	-116.57	509.33
63	BusType.PV	0.524	-43455681.20	-3207346.01	10310606.19
64	BusType.PV	0.023	-43455916.72	1526.07	1050.44
69	BusType.PV	0.508	-11660678.95	8572.77	1761.47
70	BusType.PV	1.202	-6405292.95	529.92	30477916.80
71	BusType.PV	26610.838	-6744250.70	563418956287.09	2805399111852.46
72	BusType.PV	0.675	-48340076.00	-152886.51	-13218998.34
73	BusType.PV	0.682	-29382132.04	-4709520.98	-13288617.73
74	BusType.PV	0.130	33572185.72	5098.58	3440.68
76	BusType.PV	2884.318	-27535148.58	32571007960.92	80033050508.13
77	BusType.PV	0.704	-25136627.25	-72200.39	4432699.00



Power Systems Simulator

Barra	Tipo	V (pu)	Ângulo	P (MW)	Q (MVar)
78	BusType.PV	0.741	-23968772.68	4226.99	999.00
79	BusType.PV	0.688	-20791836.66	-1916.63	2293.31
80	BusType.PV	0.733	-21859513.75	629.54	804.14
81	BusType.PV	0.121	13131323.36	-147.24	375.02
84	BusType.PV	0.860	-23968761.68	338.00	316.83
85	BusType.PV	1.231	7501230.64	219646.10	128532320.41
86	BusType.PV	1.298	-3666719.90	-471795.94	-301091189.02
87	BusType.PV	0.496	-1174350.76	-34877.60	2387551.87
88	BusType.PV	0.002	-45306076.79	-5.77	-0.12
89	BusType.PV	1.475	19050569.31	2446236.29	-3335976.96
90	BusType.PV	0.770	67171551.07	5779398.38	-14959615.67
91	BusType.PV	3588.977	15135871.56	9857885302.68	29177777889.64
92	BusType.PV	36855.670	25140439.52	450998242548.00	1944734362836.14
94	BusType.PV	0.508	-1327250.75	222248.27	-636582.36
97	BusType.PV	1.145	16355800.86	56099037.07	-250982678.02
98	BusType.PV	85387.805	16715415.77	3204709106854.68	-123147554659.67
99	BusType.PV	50131.135	15019650.73	1604958190438.93	11777832486961.58
100	BusType.PV	67167.828	16753929.66	1620224625791.31	-1619029607733.43
102	BusType.PV	111312.131	14526600.19	14427626247569.88	66016214750417.84
103	BusType.PV	1.157	18457408.95	248015.21	-82060877.35
104	BusType.PV	1.141	3723963.65	-80198933.51	107186568.30
105	BusType.PV	29546.817	22033272.70	425023013864.06	2253107417595.73
107	BusType.PV	0.706	34286738.24	-1787219.76	34311331.06
108	BusType.PV	47665.903	14951611.63	1232748605366.35	371339611279.19
109	BusType.PV	4092.416	12593068.53	16123508129.64	78559154878.04
110	BusType.PV	0.889	-7041266.93	-11171563.02	18633531.51
112	BusType.PV	1.630	-11791453.98	916.30	11550.03
113	BusType.PV	0.755	10964137.45	798017.15	-695560.43
114	BusType.PV	1.683	-11459389.88	-738412.81	1525128.31
115	BusType.PV	0.650	-24696791.15	-2858019.86	2589363.84
116	BusType.PV	0.515	-22618401.82	3552770.76	-3012166.86
117	BusType.PV	0.124	124306392.25	-4894.75	4023.05
118	BusType.PV	0.439	-43401756.51	-4147.10	7240.35



Power Systems Simulator

Barra	Tipo	V (pu)	Ângulo	P (MW)	Q (MVar)
119	BusType.PV	3.819	-32229817.37	5620645.59	127393392.22
120	BusType.PV	7.879	-32225611.70	-125477.53	226870.88
121	BusType.PV	0.509	-23600730.87	-18420.19	390187.77
122	BusType.PV	1198.099	-23899629.62	1240047321.58	15218921261.81
123	BusType.PV	2.565	-23040262.23	-1150575.81	-3142647.88
124	BusType.PV	60.008	-22621296.35	24414530.90	102115335.54
125	BusType.PV	1581.776	-23989197.81	1512864776.15	14644042133.21
126	BusType.PV	3.486	-23583651.24	-2342737.71	28002233.65
127	BusType.PV	4.177	-309152948.13	-27717.42	111177.96
128	BusType.PV	2.608	-359676647.89	22811.20	51529.55
129	BusType.PV	2.971	311814347.55	-6796.02	52981.56
130	BusType.PV	0.507	814480463.56	-10178.46	1197657.07
131	BusType.PV	0.484	724528931.56	-14443.15	28729.74
132	BusType.PV	0.507	571342496.55	-44207101.99	-3156129.78
133	BusType.PV	1.366	219825777.70	33560.98	27218.57
134	BusType.PV	2.876	-215555403.19	42450.33	22885.43
135	BusType.PV	3.151	-31828330.86	-65896091.14	455563349.07
136	BusType.PV	91957.527	-35981487.40	3093737626902.07	10436286929359.33
137	BusType.PV	0.391	-23276998.15	39574891.00	-6105910.07
138	BusType.PV	0.159	-23233362.31	-72.06	361.01
139	BusType.PV	0.485	-17641882.28	36082.52	14038.53
140	BusType.PV	0.576	-18034797.55	-100919.80	13414927.74
141	BusType.PV	21213.870	-6958506.50	130309799890.94	1510912359110.88
142	BusType.PV	0.825	-28702471.02	-33650.74	175225.78
143	BusType.PV	121.133	-38537868.51	7829893.91	14911687246.81
144	BusType.PV	0.180	-38042425.41	741361.90	-89527.60
145	BusType.PV	1.150	-35822132.17	-834680.86	-1062146.46
146	BusType.PV	1599.136	-29600540.34	1530820646.71	11118475877.09
147	BusType.PV	4711.595	-29862247.07	8418316997.27	33957653084.59
148	BusType.PV	1.146	-39233693.91	65874.01	-26316883.06
149	BusType.PV	3255.808	-41598776.40	2704503386.23	18534285521.69
150	BusType.PV	0.487	727973233.23	34104.51	-21633.10
151	BusType.PV	0.513	570965398.39	45677539.22	5249326.86



Power Systems Simulator

Barra	Tipo	V (pu)	Ângulo	P (MW)	Q (MVar)
152	BusType.PV	140445.182	-56678249.96	4236612331648.77	36914430736509.59
153	BusType.PV	3834.306	-35956441.57	955410528.22	4896464821406.55
154	BusType.PV	0.015	80662764.44	-31.80	-5.08
155	BusType.PV	0.520	88007534.07	-8242.23	113855.33
156	BusType.PV	7.620	88002855.92	15228.36	-69163.46
157	BusType.PV	0.145	-25976382.02	886365.17	-57924.29
158	BusType.PV	0.023	-23512191.11	-28340.55	4442.62
159	BusType.PV	0.478	116239657.36	4267.21	568691.62
160	BusType.PV	576.597	-22773740.95	112605496.40	1691122627.28
161	BusType.PV	1.149	-70831970.66	-24239.34	15036106.11
162	BusType.PV	0.658	406978.57	274.82	1918.06
163	BusType.PV	1.180	-113819100.65	2577.19	6299.33
164	BusType.PV	0.627	425331.81	-215.60	2350.91
165	BusType.PV	0.054	407151.39	-65.73	357.63
166	BusType.PV	0.471	407302.82	-422.50	1425.20
167	BusType.PV	2.688	-216015178.10	-32582.11	49431.36
168	BusType.PV	2.607	-169625994.09	-8886.98	59857.25
169	BusType.PV	2.563	-69429931.28	42885.88	53286.69
170	BusType.PV	1757.243	571175900.71	390412266.94	15550468050.60
171	BusType.PV	1.759	219825775.53	-763.58	6882.37
172	BusType.PV	1.474	-14103972.12	7255.63	7895811.43
173	BusType.PV	26185.081	-12966199.93	538066964831.16	856331719365.06
174	BusType.PV	1.211	-10245824.34	-18303332.62	49633637.70
175	BusType.PV	0.794	-23199290.27	5257168.17	-13728938.38
176	BusType.PV	90500.288	-26023181.54	10428562689070.29	21588278776172.91
177	BusType.PV	104905.906	-35502140.16	7689587054007.39	39252783963737.30
178	BusType.PV	36704.798	-38800272.29	2300033838978.20	11755386317642.92
179	BusType.PV	1.101	-54376917.26	1311.64	21040829.39
180	BusType.PV	1.103	-36219240.70	701566.78	136572441.39
181	BusType.PV	0.640	-23240530.45	-25098.92	8829.30
182	BusType.PV	0.522	-17671152.30	-14495.26	845887.53
183	BusType.PV	0.078	-35935379.15	-50.80	6428034.77
184	BusType.PV	0.465	-39628538.81	-168300.96	85637.14



Power Systems Simulator

Barra	Tipo	V (pu)	Ângulo	P (MW)	Q (MVar)
185	BusType.PV	98.062	-36134267.79	4142297.18	38814862.75
186	BusType.PV	15.281	-23210404.69	407470.57	4162688.50
187	BusType.PV	4.697	-23217060.32	28442.53	513864.56
188	BusType.PV	0.722	-23226323.14	-92770.77	16995.92
189	BusType.PV	0.490	-11625063.85	-744.13	106342.62
190	BusType.PV	106.474	-2484312.51	60018707.14	288658856.79
191	BusType.PQ	1.001	-2836381.68	1484.00	1000.00
192	BusType.PV	0.818	-2836410.10	-800.00	23.63
193	BusType.PV	0.555	-11328741.79	-26928.27	167523.01
194	BusType.PV	0.174	-639230.53	-362.08	327.21
195	BusType.PV	0.246	-2990791.50	24.97	946.53
196	BusType.PV	4.484	-11289011.20	-46188.77	142225.08
197	BusType.PV	2.101	-11294690.74	611002.76	-361946.83
198	BusType.PV	200.642	-11293677.29	56498501.42	258957764.83
199	BusType.PV	0.257	-7513036.89	-1.80	-20.32
200	BusType.PV	0.624	-675925.64	-187.69	599.63
201	BusType.PV	0.486	-11636296.63	-8234.64	268718.36
202	BusType.PV	0.495	-11197627.25	-27512.25	1908601.67
203	BusType.PV	0.751	-11289409.31	-286659.15	-143610.32
204	BusType.PV	0.359	-11305299.66	-6021.23	37386.91
205	BusType.PV	0.637	-10995343.13	221.99	46.67
206	BusType.PV	2.624	-11165961.44	-2546.78	1635.58
207	BusType.PV	3.943	-11256661.45	8839.87	9406.56
208	BusType.PV	0.591	-13311939.31	356.27	71.65
209	BusType.PV	0.508	-11302129.14	-14593.42	1730538.88
210	BusType.PV	0.080	-11394911.96	-21043.61	105.11
211	BusType.PV	0.416	-11167682.23	-14911.88	-70822.74
212	BusType.PV	0.385	-16538026.96	976.62	2119.40
213	BusType.PQ	0.911	-248207.84	272.00	150.00
214	BusType.PV	0.849	-248215.24	14797.66	17213.47
215	BusType.PV	0.573	-1055837.65	-961.64	4884.04
216	BusType.PV	0.232	10713645.13	157813.69	1772449.09
217	BusType.PV	3823.520	-1359854.38	9962390572.45	174397921371.69



Power Systems Simulator

Barra	Tipo	V (pu)	Ângulo	P (MW)	Q (MVar)
218	BusType.PV	1.292	-3113597.84	418.40	12424060.90
219	BusType.PV	0.635	-2704097.96	-1260388.36	-13613868.16
220	BusType.PV	648.237	-3013724.46	-578730441.23	6822497006.64
221	BusType.PV	271.889	-2958474.36	1366923685.18	6207564733.16
222	BusType.PV	1251.026	-2360641.74	80892464.86	3017292178.00
223	BusType.PV	1.120	-2936141.42	2936.11	-22714483.43
224	BusType.PV	0.676	-2738299.22	4609.95	23877.34
225	BusType.PV	0.809	-2836410.08	-206.78	1612.62
226	BusType.PV	1.457	-2654230.76	24783.29	-284911.65
227	BusType.PV	132.595	-2485385.31	2778335.13	23663633.45
228	BusType.PV	0.287	-1724754.71	-9495.34	-11712.59
229	BusType.PV	0.530	-2121116.89	350.04	2049937.05
230	BusType.PV	0.041	-2121109.05	345.00	-3215.18
231	BusType.PV	48.303	-2503395.17	21926283.37	407718002.10
232	BusType.PV	167.741	-2481262.90	32992009.92	579267764.98
233	BusType.PV	0.007	-2482158.53	-104.00	2518.30
234	BusType.PV	0.538	-472774.32	10271.54	360997.18
235	BusType.PV	1.339	-2946378.70	26973.27	-257981.82
236	BusType.PV	0.173	-472768.44	600.00	-8106.86
237	BusType.PV	0.839	-2520739.24	-4331567.36	-1336723.97
238	BusType.PV	2.528	-2937390.61	6462.36	65638110.53
239	BusType.PV	1.584	-2937388.82	550.00	-1235411.32
240	BusType.PV	102.412	-2482152.27	80223.13	451272.17
241	BusType.PQ	0.936	-2520732.98	575.43	600.00
242	BusType.PV	1.673	-295495.72	-4404.87	47271.29
243	BusType.PV	15.630	-370749.09	223347.22	829475.94
244	BusType.PV	1.634	-369514.52	56871.51	63994.63
245	BusType.PV	2.810	-372768.93	31824.03	53253.42
246	BusType.PV	2.584	-306310.47	7088.35	41406.91
247	BusType.PV	2.717	20096.48	928.22	29579.70
248	BusType.PV	1.312	930858.52	-1519.78	560.11
249	BusType.PV	1.313	930858.28	-29.00	-10.94
250	BusType.PV	1.343	930859.37	23.00	14.67



Power Systems Simulator

Barra	Tipo	V (pu)	Ângulo	P (MW)	Q (MVar)
281	BusType.PV	102.204	-2483232.25	79930.84	-503678.35
319	BusType.PV	1.260	13620960.62	1172.00	4228.09
320	BusType.PV	1.639	13245745.63	1112.67	11.16
322	BusType.PV	1.173	3699477.82	-86.23	65.15
323	BusType.PV	1.314	-3659821.65	3187.71	1319.20
324	BusType.PV	45989.940	15798885.97	411825569598.29	1888667247724.01
526	BusType.PV	377.542	-43340669.59	12505352.38	80872598.87
528	BusType.PV	1.252	-6393765.23	169.41	31.34
531	BusType.PV	0.663	-48340079.40	-14.00	-1.94
552	BusType.PV	0.843	-25018871.07	143.84	37.51
562	BusType.PV	92.664	46312091.63	590425.81	4023127.22
609	BusType.PV	0.771	-25071266.36	87.59	485.22
664	BusType.PV	0.156	-630211.55	24.59	-5.96
1190	BusType.PV	0.023	-32229815.22	-100.31	-16899.73
1200	BusType.PV	8.540	-32225611.69	100.00	1994.78
1201	BusType.PV	27.335	-31795173.90	49205.95	-109963.84
2040	BusType.PV	4.287	-11326399.82	86891.18	50937.32
7001	BusType.PV	0.882	18021386.56	467.00	212.66
7002	BusType.PV	151818.007	11629607.65	49804.66	-7836630455893.85
7003	BusType.PV	1.407	16207090.20	1210.00	911.08
7011	BusType.PV	0.870	-15272637.75	234.00	215.55
7012	BusType.PV	1.201	15330800.67	372.00	-151.88
7017	BusType.PV	1.781	13999988.54	330.00	3633.93
7023	BusType.PV	1.176	13554208.01	185.00	68.07
7024	BusType.PV	1.105	13688845.88	410.00	-204.11
7039	BusType.PV	1.504	44005842.59	500.00	500.97
7044	BusType.PV	0.708	33966855.62	37.00	101.07
7049	BusType.SLACK	1.051	0.00	-11306.03	16373.74
7055	BusType.PV	0.556	189108109.64	45.00	159.13
7057	BusType.PV	79451.882	-45968160.30	-544.87	27031095774913.76
7061	BusType.PV	0.724	-39102486.57	400.00	513.78
7062	BusType.PV	0.560	-29251438.32	331.26	1143.38
7071	BusType.PV	0.000	-6621675.41	116.00	1408.12



Power Systems Simulator

Barra	Tipo	V (pu)	Ângulo	P (MW)	Q (MVar)
7130	BusType.PV	0.722	814480506.45	1292.02	1313.03
7139	BusType.PV	0.707	-17641862.35	700.00	1064.87
7166	BusType.PV	0.685	407318.12	553.00	1025.52
9001	BusType.PV	0.506	161313992.49	-1.24	-6727812.04
9002	BusType.PV	0.587	161313882.21	-4.20	81.75
9003	BusType.PV	0.463	161313909.21	-2.71	55.80
9004	BusType.PV	0.453	161313907.97	-0.86	1.58
9005	BusType.PV	0.517	161313964.42	-0.00	185448.47
9006	BusType.PV	0.490	161313932.51	-0.00	77.81
9007	BusType.PV	0.474	161313920.30	0.00	3.65
9012	BusType.PV	0.633	161313900.57	1.21	163.52
9021	BusType.PV	0.579	161313881.45	-4.75	-0.47
9022	BusType.PV	0.544	161313873.73	-1.53	-0.32
9023	BusType.PV	0.559	161313880.06	0.00	0.19
9024	BusType.PV	0.552	161313874.64	-1.35	-0.29
9025	BusType.PV	0.545	161313876.81	-0.45	-0.11
9026	BusType.PV	0.546	161313877.08	-0.45	-0.11
9031	BusType.PV	0.378	161313879.26	-1.84	0.10
9032	BusType.PV	0.400	161313887.61	-1.39	-0.04
9033	BusType.PV	0.372	161313876.70	-1.89	0.15
9034	BusType.PV	0.459	161313903.30	-1.55	-0.28
9035	BusType.PV	0.411	161313891.68	-1.66	-0.11
9036	BusType.PV	0.425	161313894.45	-3.03	-0.30
9037	BusType.PV	0.422	161313895.11	-1.86	-0.18
9038	BusType.PV	0.391	161313883.97	-2.58	0.01
9041	BusType.PV	0.433	161313900.80	-1.01	-0.15
9042	BusType.PV	0.411	161313894.36	-0.81	-0.06
9043	BusType.PV	0.434	161313900.14	-1.60	-0.24
9044	BusType.PV	0.457	161313908.38	0.00	-0.14
9051	BusType.PV	0.093	161313959.84	-35.81	-290.52
9052	BusType.PV	0.385	161313932.77	-30.00	-7.27
9053	BusType.PV	0.095	161313961.47	-26.48	-292.68
9054	BusType.PV	0.095	161313968.28	50.00	-734.49



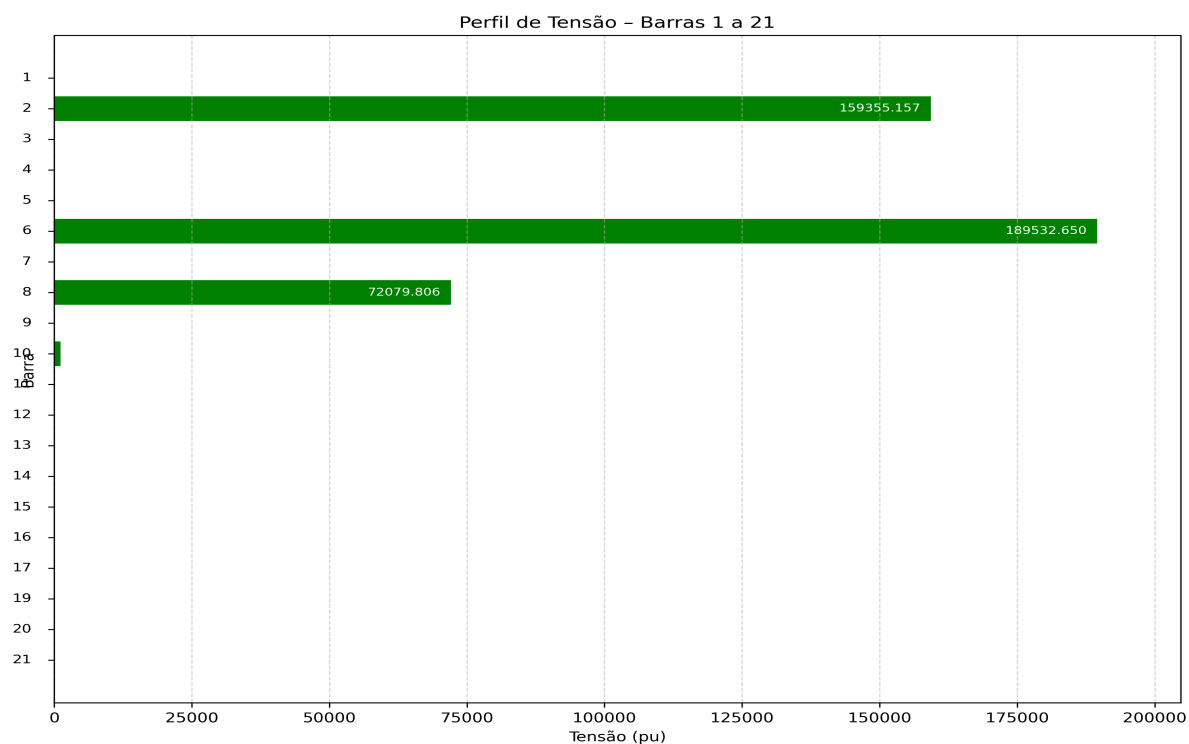
Power Systems Simulator

Barra	Tipo	V (pu)	Ângulo	P (MW)	Q (MVar)
9055	BusType.PV	0.096	161313967.64	8.00	-141.27
9071	BusType.PV	0.449	161313912.22	-1.02	-0.15
9072	BusType.PV	0.457	161313914.82	-1.02	-0.17
9121	BusType.PV	0.602	161313895.21	-3.80	-0.84
9533	BusType.PV	0.106	161313903.14	-1.19	0.75



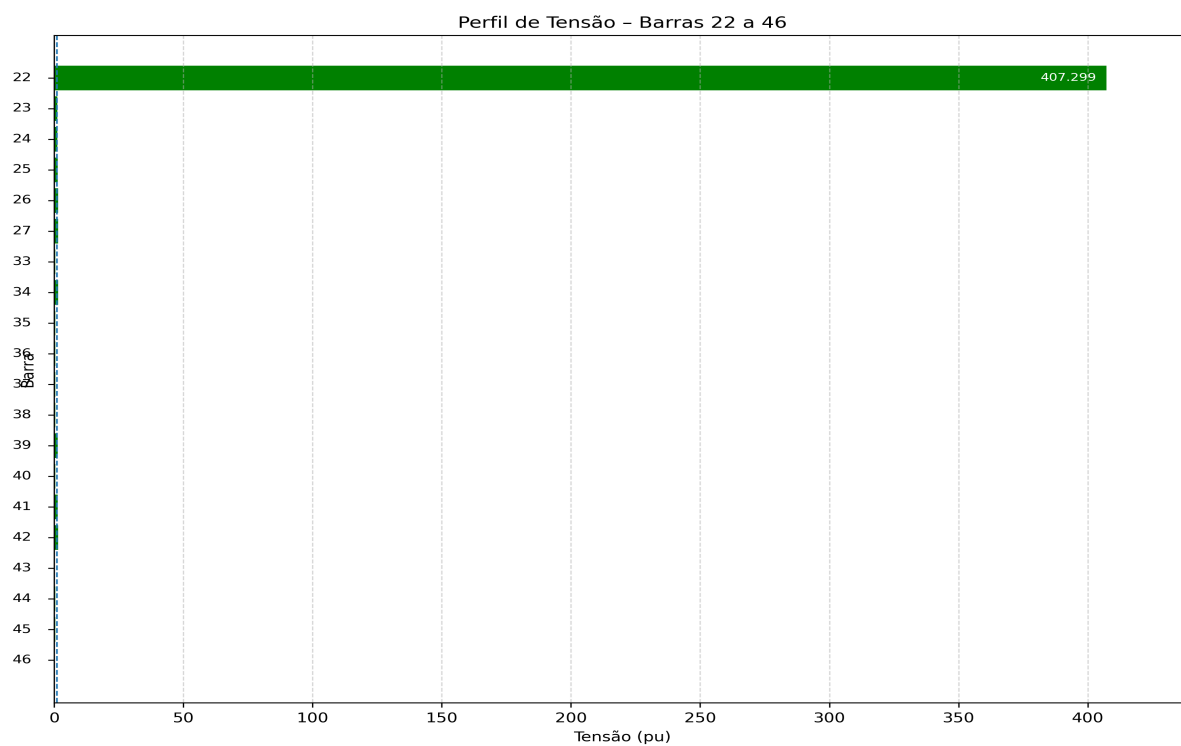
Power Systems Simulator

Perfil de Tensão



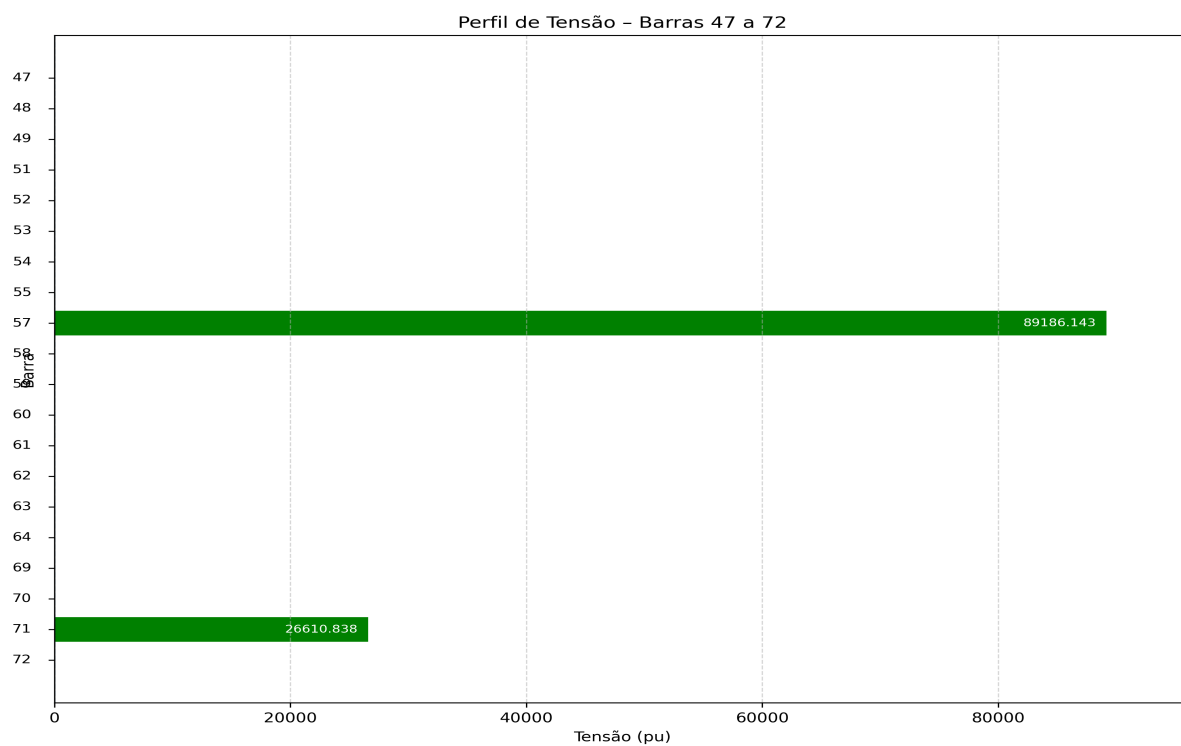


Power Systems Simulator



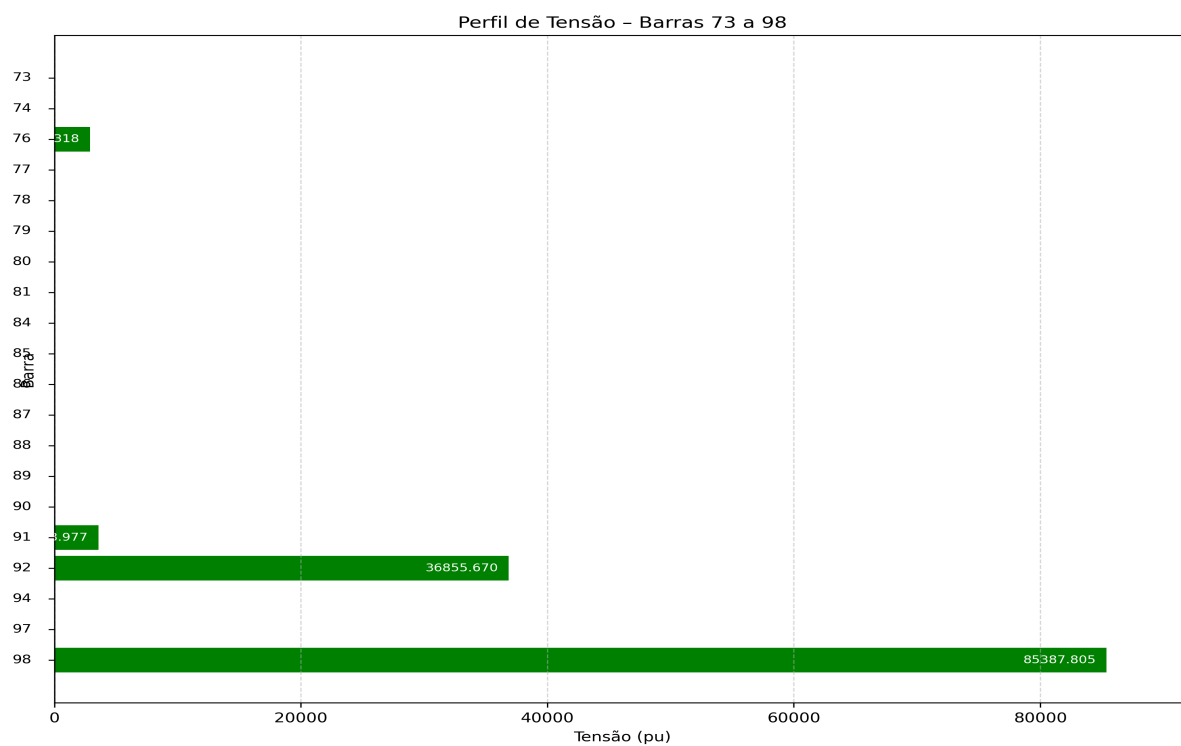


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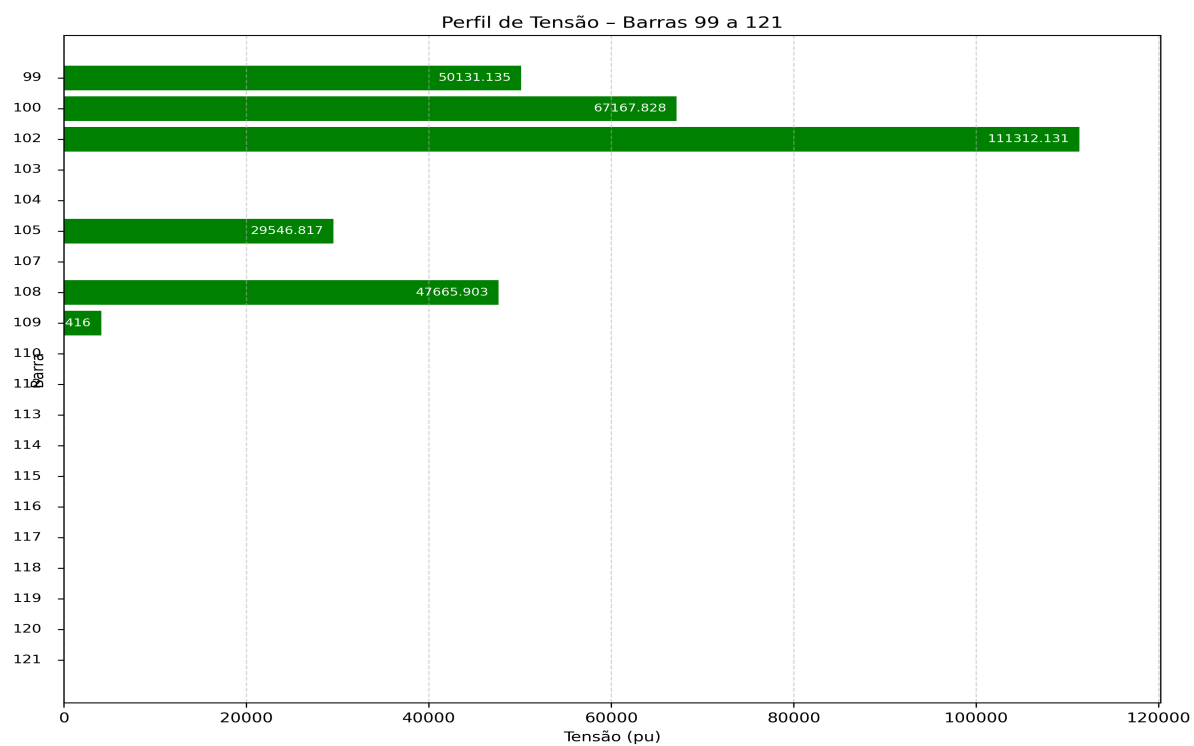


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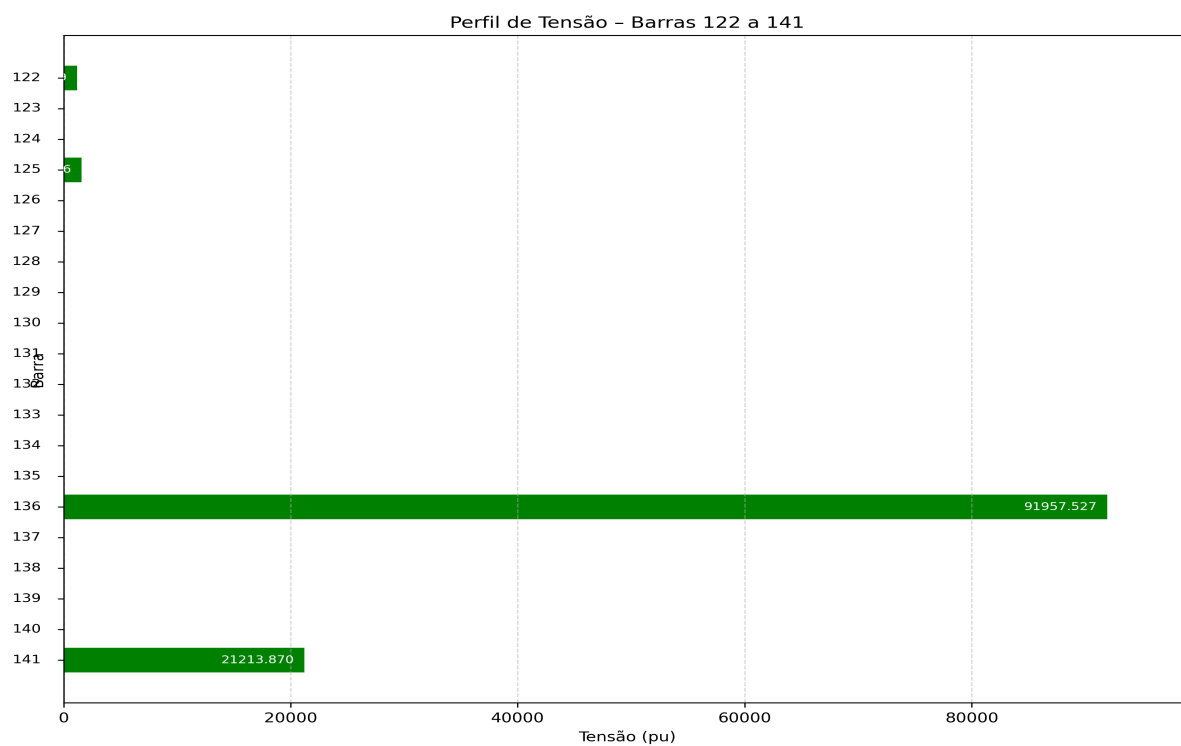


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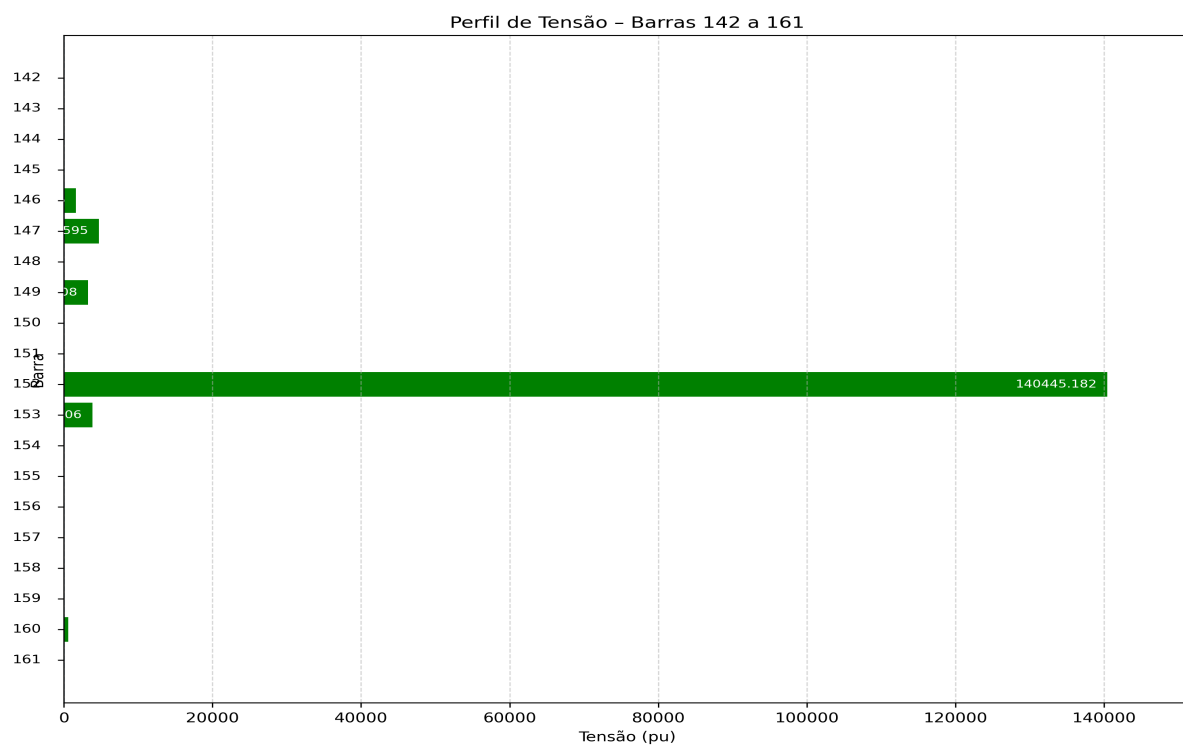




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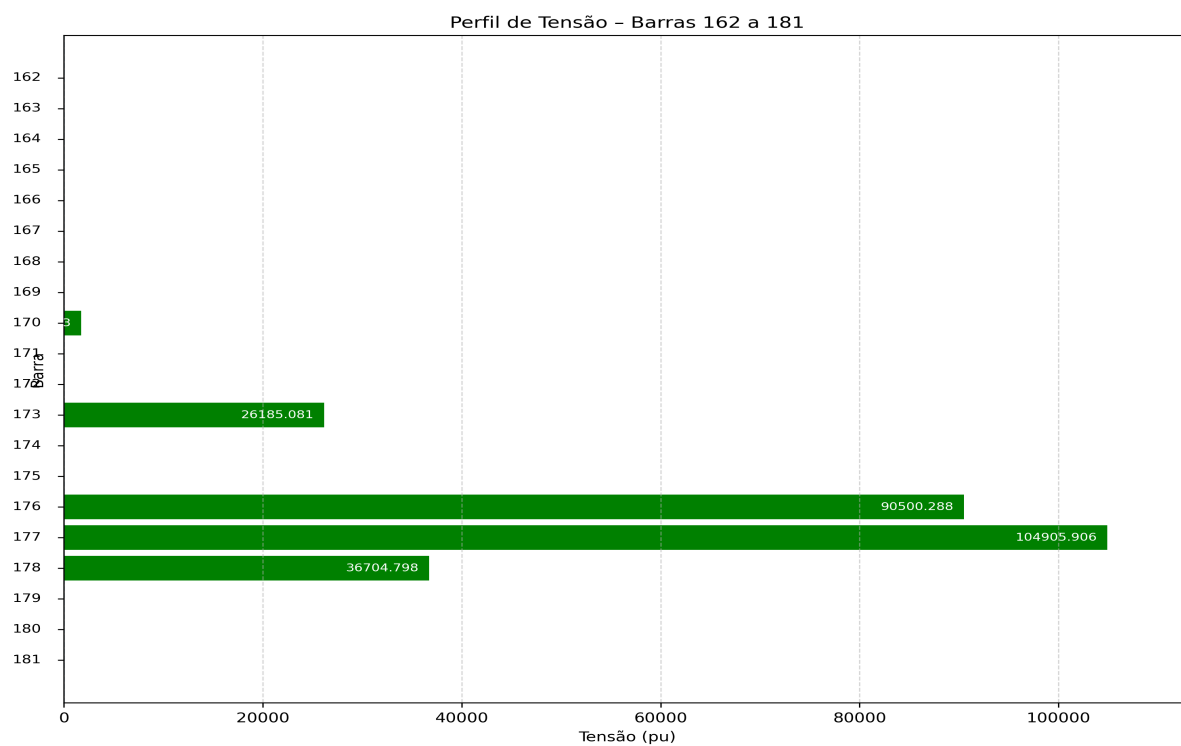


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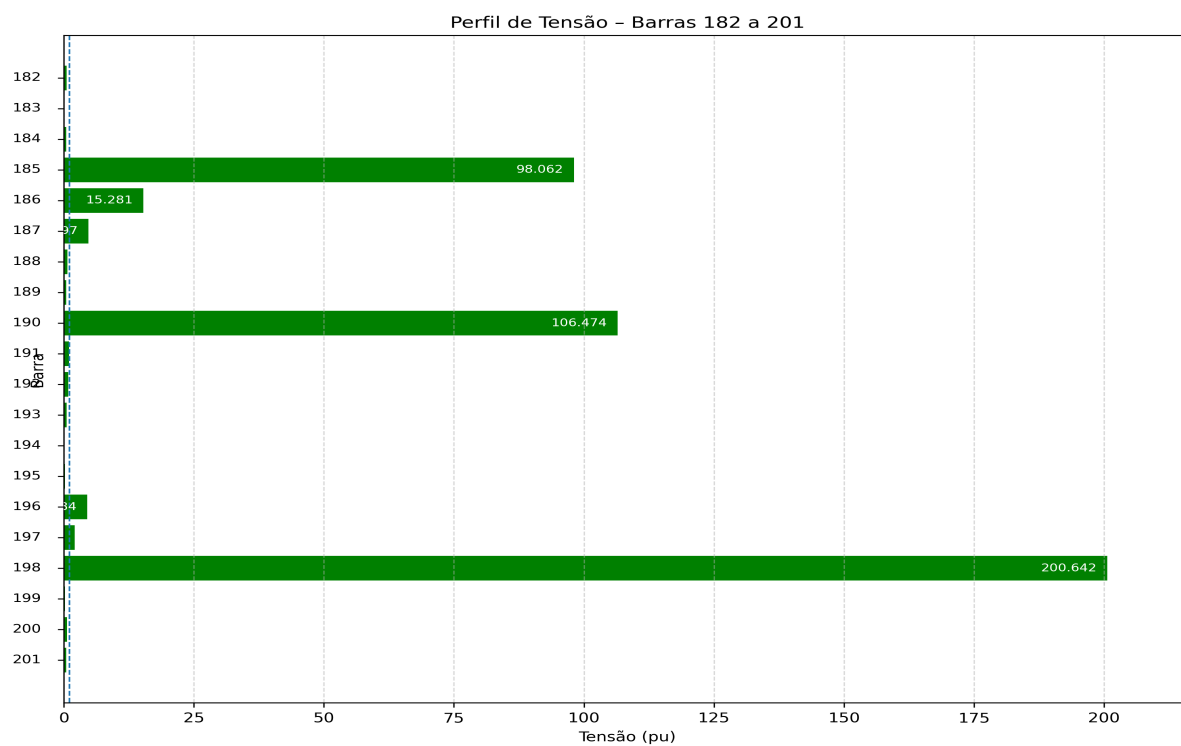


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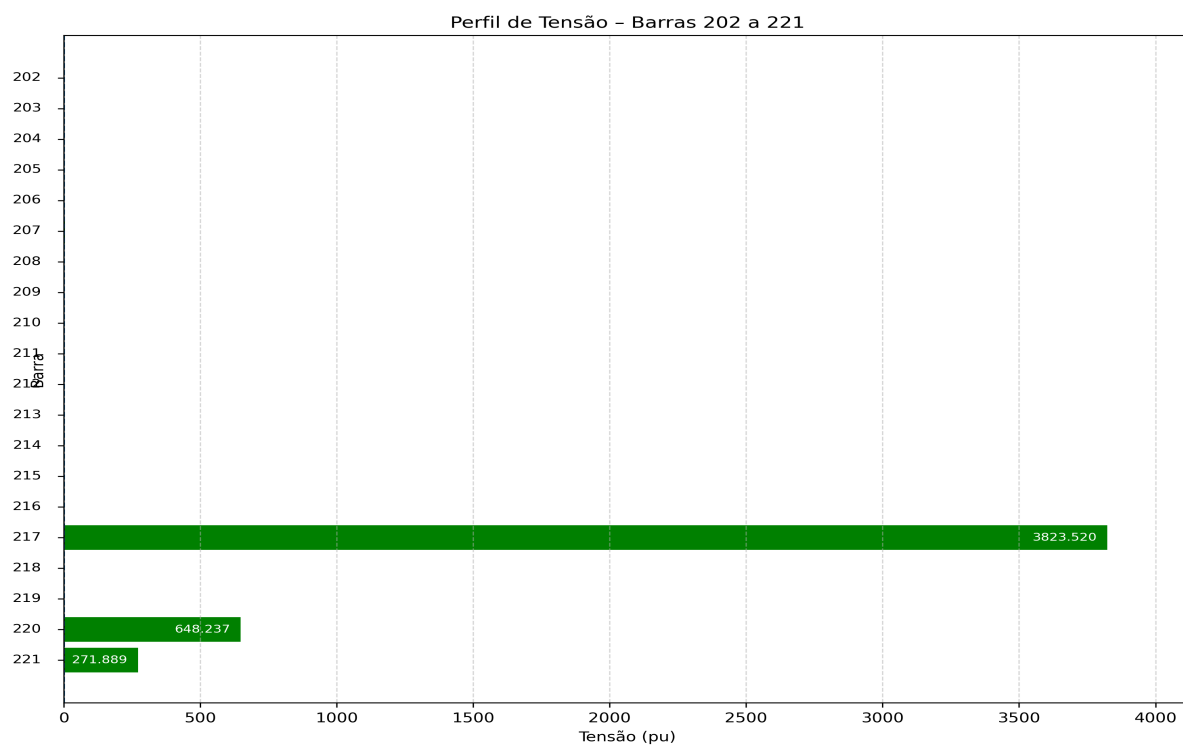


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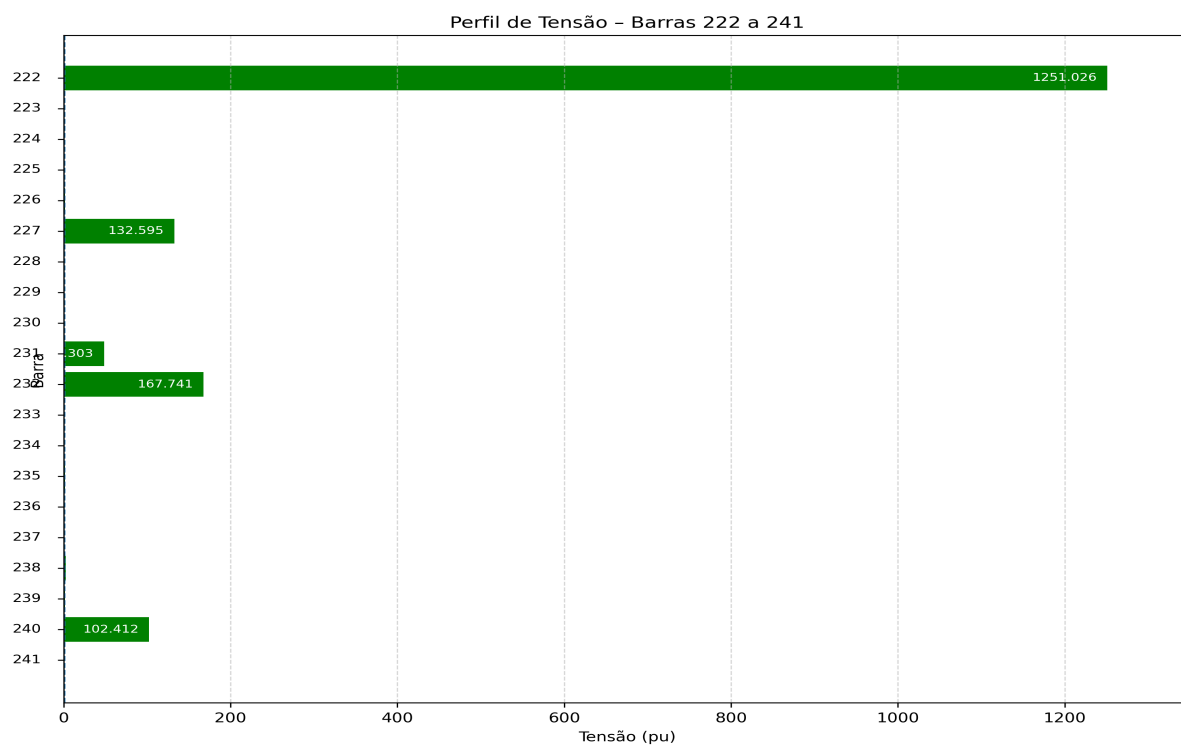


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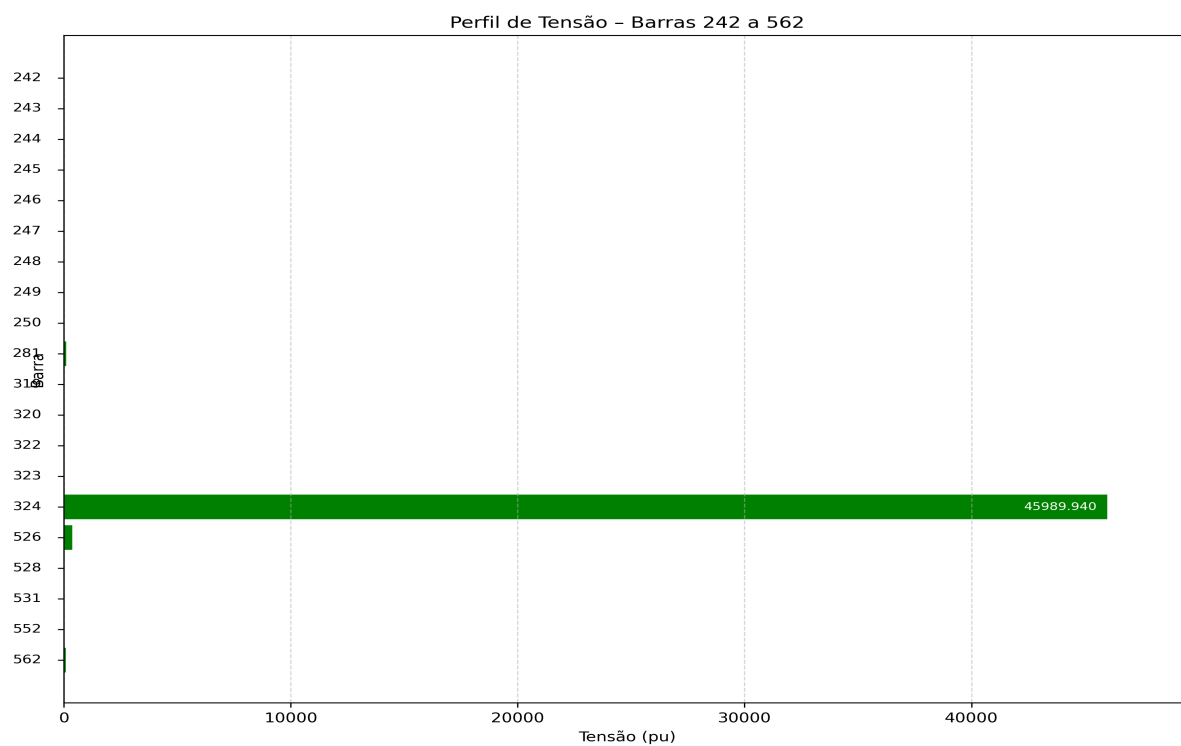


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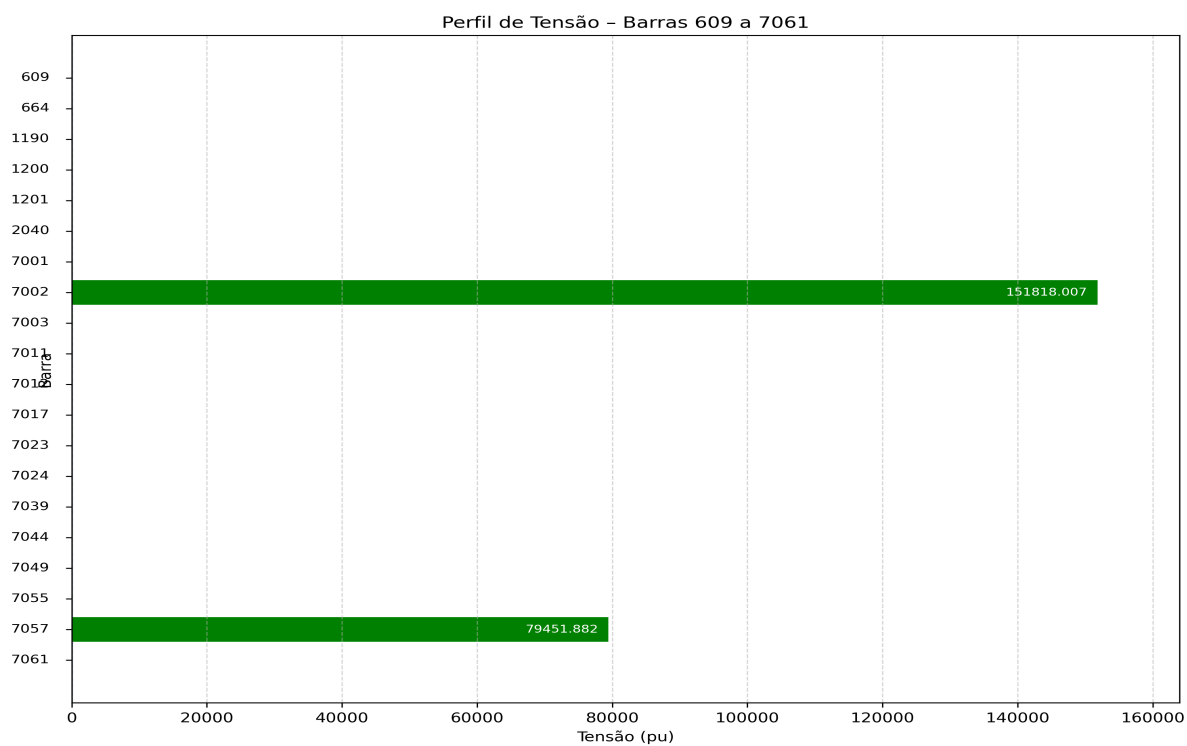




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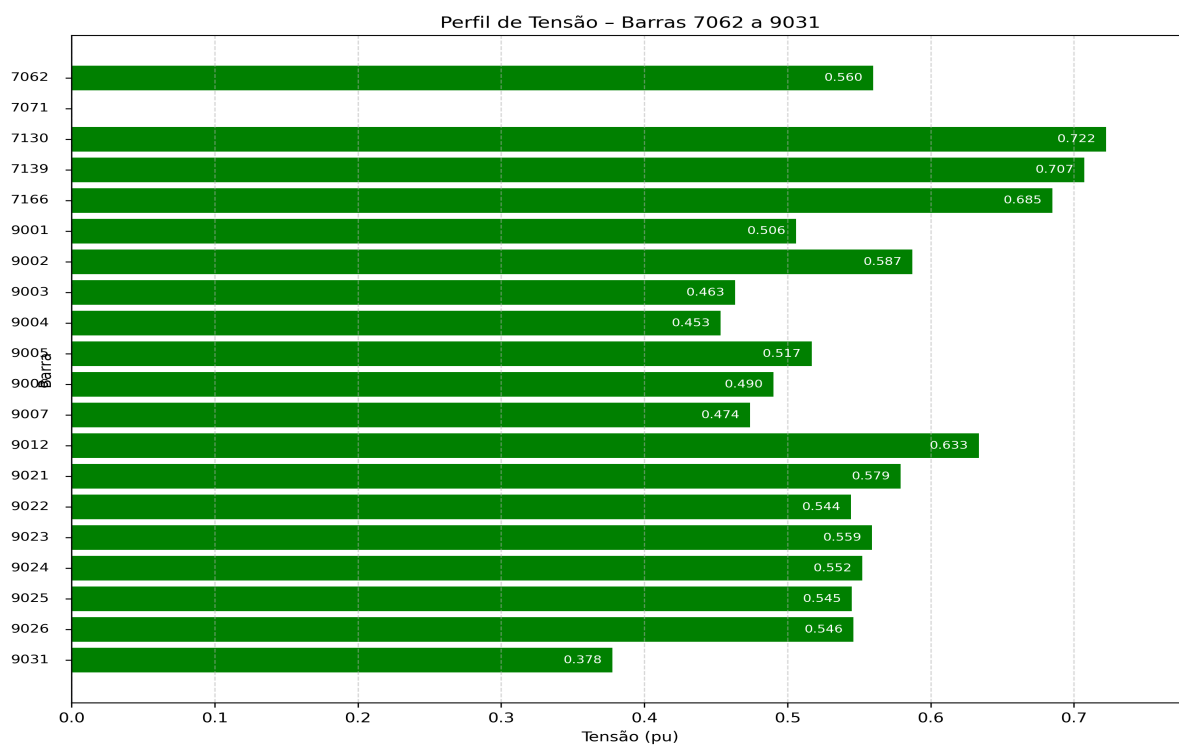


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