



Niveles de cortocircuito de la Red Nacional de Transmisión 2022

Dirección de Operación y Planeación
del Sistema
Subdirección de Planeación

Junio de 2020

*Capacidad de cortocircuito en las subestaciones eléctricas del Sistema Eléctrico Nacional
calculados con base en el Estándar IEC 60909.*

Contenido

1. Objetivo
2. Fundamento legal
3. Consideraciones de cálculo
4. Niveles de cortocircuito reportados por nivel de tensión y por Gerencia de Control Regional
5. Referencias
6. Niveles de cortocircuito de la Red Nacional de Transmisión
 - 6.1 Gerencia de Control Regional Central
 - 6.2 Gerencia de Control Regional Oriental
 - 6.3 Gerencia de Control Regional Occidental
 - 6.4 Gerencia de Control Regional Noroeste
 - 6.5 Gerencia de Control Regional Norte
 - 6.6 Gerencia de Control Regional Noreste
 - 6.7 Gerencia de Control Regional Baja California
 - 6.7.1 Sistema Baja California
 - 6.7.2 Sistema Baja California Sur
 - 6.7.3 Sistema Mulegé
 - 6.8 Gerencia de Control Regional Peninsular

1. Objetivo

Determinar los niveles de cortocircuito máximos y mínimos en las subestaciones eléctricas de la Red Nacional de Transmisión.

2. Fundamento legal

De conformidad con los Criterios INTG 11, así como CONE 5, de las Disposiciones Administrativas de carácter general que contienen los criterios de eficiencia, calidad, confiabilidad, continuidad, seguridad y sustentabilidad del Sistema Eléctrico Nacional: Código de Red, publicadas en el Diario Oficial de la federación el 8 de abril de 2016, corresponde al Centro Nacional de Control de Energía (CENACE) calcular y publicar anualmente los niveles de cortocircuito máximos y mínimos en los puntos de interconexión de Centrales Eléctricas y conexión de Centros de Carga.

3. Consideraciones de cálculo

Los niveles de cortocircuito se calcularon con base en lo siguiente:

- a) A fin de calcular los valores máximos y mínimos en los puntos de interconexión de Centrales Eléctricas y conexión de Centros de Carga, se analizaron los escenarios esperados para 2022.
- b) Para el escenario de mínima capacidad, se considera red completa (sin contingencia) y las condiciones esperadas para invierno de 2022.
- c) Para el escenario de máxima capacidad, se consideran cerrados todos los interruptores y elementos de transmisión que pueden estar en servicio en la Red Nacional de Transmisión, con las Centrales Eléctricas para 2022.
- d) Los modelos eléctricos del Sistema Eléctrico Nacional (SEN) contemplan las obras indicadas en el Programa de Ampliación y Modernización de la Red Nacional de Transmisión y Redes Generales de Distribución del Mercado Eléctrico Mayorista (PRODESEN) 2019-2033, que se prevé estén en servicio para el año de estudio.
- e) Los modelos eléctricos del SEN se desarrollaron con base en la información proporcionada por los Transportistas y Distribuidores.

- f) Los modelos de las Centrales Eléctricas y de los Centros de Cargas programados en los escenarios de estudio son con base en la información proporcionada en las solicitudes de Interconexión y de Conexión, respectivamente.
- g) El método de cálculo es el establecido en el Estándar IEC 60909.
- h) Para efectos de cálculo se utiliza la herramienta de software PSS®E V34.6.1, con los siguientes parámetros:
 - Taps de los transformadores unitarios.
 - Reactores de Líneas de Transmisión (LT) y barra en servicio y sin cambio.
 - Susceptancia de las LT sin cambio.
 - Reactancia subtransitoria de las unidades de Centrales Eléctricas.
 - Cargas del sistema eléctrico sin cambio.
 - Para el escenario de máxima capacidad se considera el factor $C = 1.1$.
 - Para el escenario de mínima capacidad se considera el factor $C=1.0$.
- i) Se reporta la magnitud de la corriente simétrica inicial I_k'' (r.m.s.)

Los niveles de cortocircuito calculados pueden variar dependiendo de las impedancias de las unidades de las Centrales Eléctricas, transformadores, autotransformadores, transformadores defasadores, reactores, etc., así como de las características de los Centros de Carga, que tienen fecha de entrada en operación entre 2020 y 2022.

4. Niveles de cortocircuito reportados por nivel de tensión y por Gerencia de Control Regional

En la figura 1 se muestran los niveles de cortocircuito reportados por nivel de tensión. Se observa que el nivel de tensión con el mayor número de subestaciones eléctricas es 115 kV, con aproximadamente el 68% de los valores reportados.

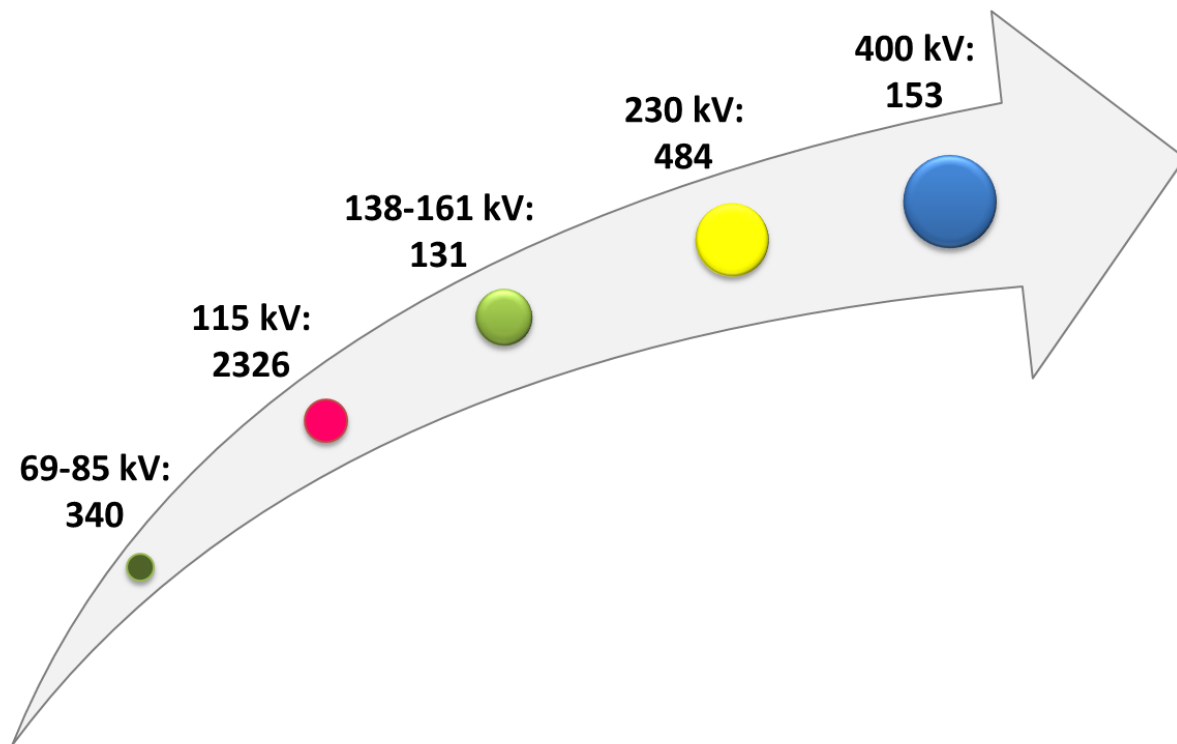
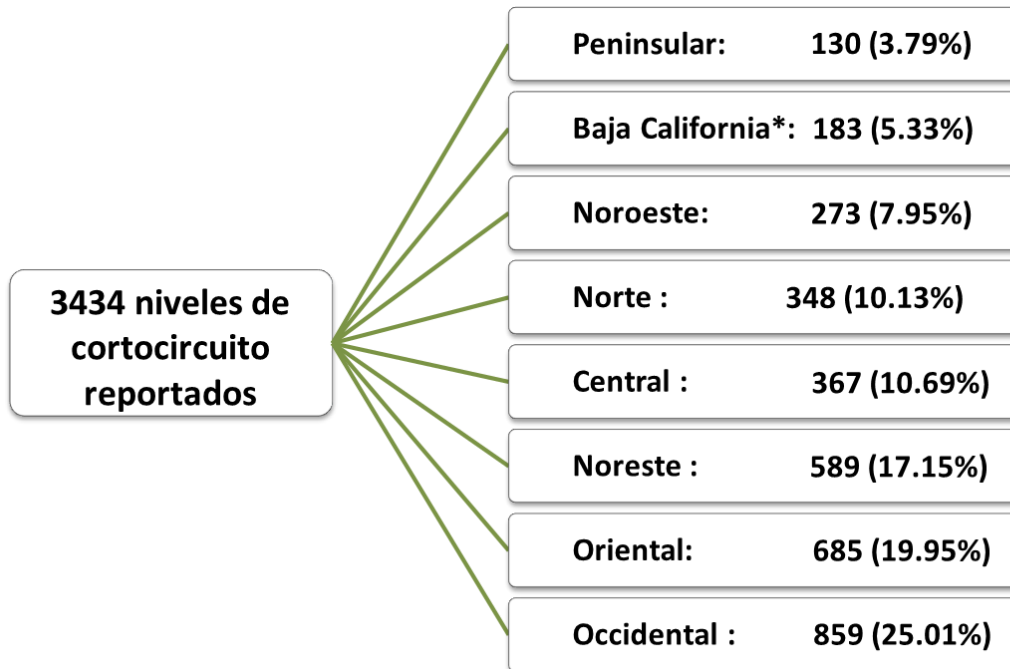


Figura 1: Niveles de cortocircuito por nivel de tensión

Considerando las diferentes Gerencias de Control Regional, en la figura 2 se indica el número de subestaciones eléctricas reportadas por Gerencia de Control, por ejemplo, el 25% de los niveles de cortocircuito reportados corresponde a la Gerencia de Control Regional Occidental.



* Incluye los sistemas Baja California, Baja California Sur y Mulegé

Figura 2: Niveles de cortocircuito por Gerencia de Control Regional

5. Referencias

- [1] Ley de la Industria Eléctrica. DOF: 11/08/2014.
- [2] Reglamento de la Ley de la Industria eléctrica. DOF: 31/10/14.
- [3] Disposiciones Administrativas de carácter general que contienen los criterios de eficiencia, calidad, confiabilidad, continuidad, seguridad y sustentabilidad del Sistema Eléctrico Nacional: Código de Red. DOF: 08/04/2016.
- [4] Programa de Ampliación y Modernización de la Red Nacional de Transmisión y Redes Generales de Distribución del Mercado Eléctrico Mayorista 2019-2033.
- [5] Estándar IEC 60909 Short-circuit currents in three-phase a.c. systems.
- [6] IEEE Standard 551-2006. Recommended Practice for Calculating Short-Circuit Currents in Industrial and Commercial Power Systems.
- [7] IEEE Std 141-1993, IEEE Recommended Practice for Electric Power Distribution for Industrial Plants (IEEE Red Book).

Niveles de cortocircuito de la Red Nacional de Transmisión por Gerencia de Control Regional



Gerencia de Control Regional Central



[Regresar a mapa del SEN](#)



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
ACEROS CAMESA	ACM-85	85	17.79	6.62	0.487+j2.715	2.313+j16.633	20.34	8.22	0.417+j2.621	2.584+j14.206
ACEROS CORSA	ACC-85	85	14.06	6.49	0.646+j3.431	2.717+j15.535	15.82	8.13	0.592+j3.361	2.924+j12.832
ACEROS CORSA	ACS-230	230	13.33	9.74	1.663+j9.821	3.709+j20.765	15.13	10.78	1.458+j9.546	3.767+j21.080
ACEROS NACIONALES	ACN-85	85	17.99	7.27	0.555+j2.671	2.389+j14.658	20.32	9.19	0.502+j2.609	2.639+j12.064
ACOLMAN	ACO-230	230	25.22	19.43	0.933+j5.183	2.068+j9.851	29.19	21.71	0.731+j4.950	2.102+j10.024
ACTOPAN	AAN-85	85	5.78	2.94	2.463+j8.129	7.047+j32.614	6.32	3.20	2.458+j8.187	7.062+j32.903
ACULCO	AUO-115	115	2.43	1.42	5.500+j26.782	16.838+j83.604	2.70	1.57	5.282+j26.519	16.903+j83.887
AEROPUERTO	ATO-85	85	7.52	4.53	1.513+j6.347	2.606+j19.399	8.20	4.91	1.509+j6.406	2.651+j19.764
AGUAVIVA	AGV-85	85	5.73	1.41	1.861+j8.354	8.545+j87.134	6.22	1.55	1.862+j8.472	8.545+j87.134
ÁGUILAS	AGU-230	230	26.72	28.52	1.334+j4.787	0.675+j4.122	31.99	32.73	0.999+j4.456	0.696+j4.282
AGUSTÍN MILLÁN	ANM-115	115	18.07	13.21	0.577+j3.628	1.234+j7.635	21.32	15.06	0.489+j3.390	1.267+j7.585
ALMOLOYA	AML-400	400	12.32	10.76	3.077+j18.490	1.993+j27.064	15.42	12.59	2.036+j16.347	2.157+j27.542
ALPURA	ALR-85	85	18.21	6.43	0.489+j2.651	2.461+j17.402	21.19	7.99	0.403+j2.516	2.732+j14.969
ALTAMIRANO (115 KV)	ATM-115	115	2.75	1.62	6.539+j23.213	20.145+j71.968	3.24	2.11	5.804+j21.786	15.051+j56.872
AMOMOLULCO	AMO-85	85	9.27	4.52	1.180+j5.159	2.528+j21.965	10.13	5.00	1.142+j5.205	2.625+j21.683
APAPLASTIC	AAP-85	85	9.64	4.61	1.100+j4.971	2.744+j21.664	10.53	5.10	1.062+j5.016	2.840+j21.382
APASCO	APA-85	85	20.17	5.59	0.353+j2.408	2.239+j21.382	21.44	6.08	0.344+j2.494	2.222+j21.537
APASCO	APA-230	230	21.12	19.07	1.008+j6.205	0.953+j8.349	24.64	21.32	0.787+j5.875	1.026+j8.682
APM TERMINALS	ATS-115	115	10.71	9.82	1.099+j6.099	1.438+j7.662	13.60	11.85	0.850+j5.301	1.447+j7.591
ARAGÓN	ARA-85	85	10.21	2.87	0.546+j4.773	0.311+j41.847	11.26	3.16	0.516+j4.765	0.311+j41.847
ARAGÓN	ARA-230	230	18.69	18.57	1.183+j7.005	1.200+j7.285	21.59	20.72	0.933+j6.701	1.263+j7.607
ARCELIA NUEVA	ANU-69	69	2.32	2.89	3.917+j16.747	0.530+j7.072	2.49	3.06	3.818+j17.179	0.594+j7.750
ARCELIA NUEVA	ANU-115	115	2.39	1.45	9.178+j26.282	26.875+j77.500	2.71	1.71	8.729+j25.454	24.462+j70.435
ARMEX	ARX-230	230	25.12	20.05	0.887+j5.211	1.887+j9.185	29.87	22.92	0.658+j4.845	1.908+j9.183
ARTEAGA	ATG-69	69	2.18	2.32	3.635+j17.895	1.819+j14.840	2.35	2.47	3.772+j18.233	1.980+j15.844
ARTEAGA	ATG-115	115	2.61	2.12	5.669+j24.754	6.340+j42.902	2.97	2.32	5.389+j24.007	6.756+j44.572
ATENCO	ATE-85	85	16.02	7.00	0.621+j3.000	1.042+j14.943	17.41	7.77	0.582+j3.045	1.139+j14.663
ATENCO	ATE-230	230	16.84	18.26	1.944+j7.643	0.626+j6.209	20.06	20.88	1.482+j7.130	0.665+j6.492
ATIZAPÁN	ATI-230	230	21.22	18.24	1.286+j6.125	1.639+j9.314	25.00	20.60	0.978+j5.759	1.686+j9.510
ATLACOMULCO	ATU-115	115	8.14	5.82	1.625+j7.993	3.236+j17.610	8.98	6.36	1.558+j7.980	3.272+j17.855
ATLACOMULCO INDUSTRIAL	AIN-115	115	6.34	4.32	2.337+j10.208	5.283+j24.607	6.99	4.73	2.271+j10.195	5.319+j24.855
ATLACOMULCO POTENCIA	AMP-115	115	15.97	15.35	0.589+j4.116	0.314+j4.659	17.59	16.51	0.525+j4.119	0.347+j4.949
ATLACOMULCO POTENCIA	AMP-400	400	9.88	8.90	3.592+j23.109	2.368+j31.188	12.03	10.24	2.532+j20.973	2.579+j32.117
ATOTONILCO	ANL-85	85	2.95	1.60	4.245+j16.063	12.071+j57.373	3.24	1.76	4.244+j16.123	12.106+j57.738
AURORA	AUR-85	85	22.17	2.71	0.337+j2.188	0.118+j50.081	23.66	2.97	0.316+j2.259	0.118+j50.081
AURORA	AUR-230	230	32.92	34.11	0.904+j3.931	0.585+j3.706	39.27	38.98	0.649+j3.662	0.609+j3.840
AUTOMETALES	AUM-85	85	13.93	6.56	0.668+j3.459	2.722+j15.233	15.76	8.31	0.609+j3.370	2.893+j12.353
AVANDARO	AVA-115	115	7.19	4.78	2.587+j8.863	6.714+j22.261	8.17	5.36	2.475+j8.586	6.701+j22.023
AVANTE TEXTIL	AVT-85	85	13.75	6.46	0.740+j3.490	1.243+j15.708	15.04	7.17	0.697+j3.520	1.340+j15.398
AYOTLA	AYO-85	85	18.43	2.20	0.410+j2.631	3.198+j61.593	19.59	2.41	0.395+j2.728	3.198+j61.593
AYOTLA	AYO-230	230	21.48	21.35	1.182+j6.069	0.756+j6.414	24.63	23.63	0.933+j5.857	0.804+j6.744
AZCAPOTZALCO	AZC-230	230	32.36	31.96	1.029+j3.972	2.299+j3.851	39.72	37.26	0.707+j3.609	2.348+j3.983



Subestación eléctrica	Acónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$	3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$
AZTECA	ATK-230	230	27.46	26.84	0.899+j4.752	0.728+j5.242	32.29	30.43	0.662+j4.475	0.742+j5.380
BANCOMER	BBV-230	230	21.93	11.93	1.277+j5.920	2.056+j21.359	25.91	13.35	0.964+j5.553	2.099+j21.542
BÁRBARA (SANTA)	BBR-115	115	7.87	5.09	1.721+j8.260	4.541+j21.832	9.68	7.96	1.394+j7.419	1.613+j12.271
BARRIENTOS	BAR-85	85	20.90	8.12	0.482+j2.298	1.972+j13.334	23.71	10.46	0.428+j2.237	2.222+j10.740
BECTON DICKINSON	BDK-85	85	17.80	6.34	0.502+j2.711	2.495+j17.590	20.73	7.87	0.415+j2.571	2.765+j15.157
BOSQUES	BOS-230	230	23.76	21.61	1.435+j5.403	1.595+j7.203	28.23	24.59	1.106+j5.054	1.629+j7.362
CAMPO MORADO	CMO-115	115	1.80	1.09	11.032+j35.157	32.351+j105.091	2.03	1.26	10.580+j34.333	29.912+j97.979
CAMPOS HERMANOS	CHE-85	85	19.24	7.64	0.521+j2.497	2.195+j14.041	21.77	9.74	0.467+j2.436	2.444+j11.447
CANCHESDA NUEVA	CSN-115	115	3.07	1.92	5.719+j20.857	15.373+j58.538	3.38	2.11	5.652+j20.846	15.414+j58.794
CARACOL	CRO-230	230	23.46	19.42	1.040+j5.565	1.848+j9.115	27.24	21.77	0.818+j5.300	1.888+j9.279
CARBONER	CSR-115	115	7.26	5.84	1.829+j8.958	3.485+j15.357	8.79	6.77	1.579+j8.161	3.508+j15.324
CAREAGA	CAR-85	85	20.30	7.71	0.479+j2.370	2.096+j14.155	22.57	9.84	0.437+j2.351	2.251+j11.502
CARTAGENA	CTG-230	230	29.83	26.98	0.910+j4.358	0.667+j5.937	35.80	30.82	0.647+j4.028	0.685+j6.075
CARTÓN Y PAPEL DE MÉXICO	CPM-230	230	28.12	25.50	0.904+j4.635	1.138+j6.202	33.20	28.89	0.664+j4.349	1.160+j6.345
CAYACAL	CAY-115	115	8.19	7.44	1.658+j7.938	1.937+j10.292	10.02	8.69	1.401+j7.157	2.005+j10.421
CEILÁN	CEI-230	230	24.94	23.35	1.023+j5.225	1.080+j6.442	29.87	26.50	0.720+j4.837	1.118+j6.729
CEMENTOS ANÁHUAC	CAH-85	85	17.92	7.30	0.559+j2.681	2.201+j14.573	20.31	9.27	0.501+j2.610	2.454+j11.948
CEMENTOS APASCO	CEA-85	85	10.68	3.48	0.839+j4.518	5.770+j32.650	11.57	3.80	0.827+j4.593	5.753+j32.806
CEMENTOS FORTALEZA	CFZ-85	85	2.54	1.27	4.880+j18.727	15.442+j75.463	2.78	1.40	4.876+j18.783	15.456+j75.752
CEMENTOS TOLTECA	TLT-85	85	10.01	3.07	0.888+j4.822	7.224+j37.455	10.83	3.36	0.877+j4.907	7.207+j37.611
CERRO DEL CAMPO	CCM-115	115	3.43	2.33	5.824+j18.456	14.760+j44.389	3.87	2.65	5.599+j18.004	14.277+j42.583
CERRO GORDO	CRG-85	85	25.69	9.96	0.341+j1.880	1.257+j10.935	31.74	17.62	0.255+j1.682	0.968+j5.745
CERRO GORDO	CRG-230	230	36.41	39.23	0.783+j3.562	0.413+j2.959	43.96	45.31	0.547+j3.277	0.429+j3.074
CERVECERÍA MODELO	CVM-85	85	14.13	5.31	0.675+j3.406	7.160+j19.613	15.69	6.44	0.632+j3.383	7.296+j16.911
CHALCO	CHA-85	85	13.16	1.91	0.693+j3.663	4.924+j69.759	14.04	2.09	0.690+j3.784	4.924+j69.759
CHALCO	CHA-85B	85	13.16	1.91	0.693+j3.663	4.924+j69.759	14.04	2.09	0.690+j3.784	4.924+j69.759
CHALCO	CHA-230	230	16.95	17.24	2.319+j7.483	2.071+j7.305	19.31	19.09	2.072+j7.275	2.135+j7.641
CHAPINGO	CPG-230	230	39.77	36.91	0.688+j3.267	0.791+j4.143	47.88	42.29	0.476+j3.014	0.810+j4.244
CHICOLOAPAN	CHC-230	230	36.16	31.10	0.709+j3.603	1.070+j5.460	43.16	35.38	0.497+j3.347	1.093+j5.574
CHIMALPA	MLP-230	230	30.13	32.15	1.173+j4.248	0.841+j3.596	36.67	37.31	0.849+j3.892	0.863+j3.742
CHIMALPA DOS	MLD-230	230	31.54	33.92	1.101+j4.063	0.547+j3.409	38.53	39.40	0.779+j3.711	0.574+j3.557
CHIMALPA DOS	MLD-400	400	23.38	22.96	2.292+j9.610	1.710+j10.561	29.99	27.35	1.378+j8.359	1.782+j10.891
CHRYSLER DE MÉXICO	KDM-85	85	13.02	6.63	0.775+j3.688	1.044+j14.708	14.37	7.41	0.724+j3.687	1.146+j14.325
CIUDAD BICENTENARIO	CDB-115	115	6.91	5.99	1.122+j9.543	1.451+j14.004	7.27	6.27	1.142+j9.983	1.512+j14.808
COAPA	COA-230	230	18.29	16.51	1.442+j7.116	1.664+j9.651	21.32	18.53	1.115+j6.760	1.719+j9.916
COFRADÍA UNO	CFI-230	230	28.83	26.43	0.976+j4.501	0.747+j5.937	34.79	30.30	0.688+j4.142	0.768+j6.076
COMALCO	COM-115	115	3.72	2.42	4.287+j17.310	10.665+j45.187	4.10	2.66	4.222+j17.311	10.698+j45.468
CONDESA	CDS-85	85	8.74	3.78	1.265+j5.471	10.402+j25.850	9.66	4.45	1.223+j5.453	10.545+j23.168
CONDESA	CDS-230	230	18.73	3.68	1.663+j6.893	3.136+j94.343	21.80	3.90	1.323+j6.569	3.339+j99.050
CONTADERO	CTD-230	230	22.91	21.30	1.459+j5.611	1.387+j7.110	27.12	24.15	1.128+j5.267	1.433+j7.308
CONTRERAS	CRS-230	230	15.82	13.91	1.652+j8.228	1.175+j11.980	18.19	15.45	1.330+j7.919	1.225+j12.348
COVADONGA	CVD-85	85	12.58	1.92	0.715+j3.834	4.686+j68.741	13.47	2.11	0.708+j3.944	4.686+j68.741



Subestación eléctrica	Acónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
COYOACÁN	COY-230	230	22.40	23.45	1.536+j5.725	1.608+j5.021	26.39	26.55	1.197+j5.403	1.684+j5.273
COYOTEPEC	CYO-85	85	7.61	3.49	1.996+j6.132	6.936+j28.766	9.87	4.25	1.397+j5.286	7.200+j26.307
CRUZ AZUL	CCZ-230	230	26.17	22.41	0.759+j5.016	1.477+j7.556	31.16	25.71	0.543+j4.656	1.493+j7.557
CUAJIMALPA	CJM-230	230	23.14	22.53	1.355+j5.577	0.799+j6.304	27.28	25.50	1.022+j5.257	0.829+j6.501
CUAUHTÉMOC	CMC-230	230	21.94	22.20	1.147+j5.941	0.916+j5.938	25.64	24.85	0.879+j5.629	0.977+j6.277
CUAUTITLÁN	CTT-85	85	17.35	6.22	0.542+j2.776	2.732+j17.907	21.00	7.77	0.413+j2.537	3.001+j15.463
CULHUACÁN	LUN-230	230	19.19	9.09	1.407+j6.774	1.542+j30.229	22.34	9.91	1.095+j6.446	1.635+j31.271
DEACERO	DCO-85	85	20.90	7.92	0.470+j2.301	2.075+j13.804	24.16	10.40	0.400+j2.199	2.303+j10.909
DEPORTIVA	DVA-230	230	17.02	18.46	1.465+j7.661	0.408+j6.153	19.67	20.61	1.105+j7.343	0.442+j6.505
DEPORTIVA	DVA-400	400	15.09	13.69	2.745+j15.058	1.241+j20.278	18.89	15.99	1.708+j13.337	1.348+j20.842
DIANA	DAA-230	230	18.90	19.94	2.020+j6.727	2.328+j5.625	22.05	22.48	1.680+j6.407	2.418+j5.883
DISTRIBUCIÓN BMX	BMX-85	85	16.88	6.05	0.544+j2.856	2.739+j18.380	19.72	7.48	0.450+j2.700	3.010+j15.945
DISTRIBUCIÓN DRT	DRT-115	115	6.32	4.30	2.346+j10.247	5.312+j24.753	6.97	4.71	2.279+j10.234	5.349+j25.000
DONATO GUERRA	DOG-115	115	28.55	25.69	0.269+j2.310	0.218+j3.105	34.87	29.89	0.188+j2.086	0.258+j3.126
DONATO GUERRA	DOG-115B	115	29.58	26.58	0.277+j2.227	0.229+j3.005	36.37	31.15	0.193+j1.999	0.267+j3.001
DONATO GUERRA	DOG-400	400	16.14	15.43	2.473+j14.091	1.243+j16.392	23.28	20.19	1.349+j10.829	1.638+j15.766
DOS CARLOS	DCA-85	85	5.88	3.24	1.914+j8.128	4.460+j28.432	6.42	3.53	1.913+j8.188	4.495+j28.797
ECATEPEC	ECA-230	230	22.48	19.82	1.074+j5.810	1.519+j8.285	26.37	22.40	0.822+j5.478	1.548+j8.435
EL CARMEN	CRM-85	85	5.61	3.21	2.565+j8.360	7.492+j27.363	6.71	3.94	2.366+j7.686	6.852+j23.990
EL CERRILLO	ECR-230	230	12.73	11.91	2.331+j10.171	1.642+j12.662	14.78	13.38	1.888+j9.698	1.690+j12.985
EL GALLO	ELG-115	115	2.14	1.30	6.926+j30.302	19.870+j88.540	2.96	3.27	4.408+j24.273	1.490+j17.742
EL ROSAL	RSL-230	230	15.72	13.63	1.619+j8.289	1.239+j12.462	18.03	15.13	1.306+j7.994	1.289+j12.821
EL SALTO	SAO-85	85	9.30	7.64	0.896+j5.200	1.711+j8.550	13.71	15.62	0.493+j3.905	0.256+j2.407
EL SALTO	SAO-230	230	6.14	6.61	3.703+j21.313	1.563+j17.024	7.68	7.77	2.609+j18.852	1.732+j18.185
EL VIDRIO	EVD-230	230	14.35	11.21	1.719+j9.095	2.745+j16.903	16.50	12.48	1.438+j8.736	2.839+j17.236
ENERGÍA DEL VALLE DE MÉXICO DOS MANIOBRAS	MAN-230	230	20.52	16.39	1.040+j6.386	1.555+j11.386	23.28	18.02	0.877+j6.213	1.627+j11.735
MANIOBRAS COFUJIN	MAN-230	230	9.98	6.87	2.201+j13.116	6.345+j30.837	11.36	7.61	1.948+j12.713	6.432+j31.260
MANIOBRAS SICARTSA	MAN-230	230	11.99	10.62	2.372+j10.817	2.633+j14.743	18.79	14.92	1.222+j7.675	2.568+j13.410
ENERGÍA DEL VALLE DE MÉXICO DOS MANIOBRAS	MAN-400	400	23.37	19.84	1.394+j9.785	1.955+j15.156	27.94	22.60	0.919+j9.046	2.033+j15.460
ESMERALDA	ESR-85	85	10.66	2.95	0.501+j4.576	0.000+j40.867	11.69	3.24	0.476+j4.594	0.000+j40.867
ESMERALDA	ESR-230	230	18.42	18.97	1.193+j7.108	1.059+j6.642	21.27	21.16	0.942+j6.802	1.127+j6.983
ESMERALDA	ESR-230B	230	18.42	18.97	1.193+j7.108	1.059+j6.642	21.27	21.16	0.942+j6.802	1.127+j6.983
ESTADIO	EST-230	230	15.78	16.11	1.553+j8.273	0.674+j8.071	18.18	17.96	1.193+j7.947	0.713+j8.428
ESTRELLA	ETR-230	230	23.04	21.38	1.769+j5.485	2.647+j6.755	27.08	24.27	1.480+j5.188	2.660+j6.868
ESTRELLA	ETR-230B	230	17.19	14.48	2.022+j7.457	3.157+j11.782	20.06	16.33	1.694+j7.081	3.176+j11.933
FERROCARRILES NACIONALES	FNL-230	230	34.24	34.69	0.848+j3.784	0.557+j3.799	42.01	40.30	0.566+j3.430	0.574+j3.934
FERTIMÉX	FTM-230	230	5.99	4.39	3.903+j21.804	11.395+j44.791	8.16	6.04	2.569+j17.716	9.084+j35.875
FISISA	FIS-230	230	15.89	13.30	1.571+j8.206	2.429+j13.168	18.28	14.81	1.260+j7.890	2.495+j13.467
FORD MOTOR COMPANY	FMC-85	85	23.73	7.95	0.369+j2.035	1.843+j14.340	27.60	10.14	0.295+j1.933	2.114+j11.911
FRANCISCO DE LOS REYES	FRR-115	115	1.88	1.15	9.705+j33.971	27.411+j99.442	2.07	1.26	9.638+j33.960	27.453+j99.702
FUNDIDORA MÉXICO	FUM-85	85	21.95	7.77	0.409+j2.198	1.749+j14.432	25.32	9.88	0.338+j2.105	2.020+j12.004
GENERAL MOTORS	GMC-85	85	13.44	6.75	0.747+j3.574	1.298+j14.541	14.85	7.55	0.696+j3.568	1.402+j14.147



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
GUACAMAYAS	GYM-115	115	10.02	9.77	1.245+j6.506	1.184+j6.940	12.52	11.81	0.987+j5.748	1.116+j6.781
GUADALUPE	GUA-85	85	15.45	7.56	0.628+j3.113	2.209+j13.009	17.90	10.29	0.553+j2.965	2.241+j9.514
HÉROES DE CARRANZA	HRC-230	230	10.73	8.19	2.117+j12.192	5.801+j23.294	12.89	9.45	1.689+j11.207	5.789+j23.000
HIPÓDROMO	HIP-85	85	16.30	6.09	0.551+j2.960	3.133+j17.910	18.11	7.54	0.507+j2.937	3.276+j15.212
HUASTECA	HTC-85	85	15.25	5.56	0.641+j3.154	7.062+j18.854	16.94	6.77	0.597+j3.131	7.198+j16.152
HUETAMO	HTM-69	69	1.98	2.37	3.127+j19.830	0.522+j10.436	2.21	2.57	2.618+j19.672	0.574+j11.480
HUETAMO	HTM-115	115	2.44	1.47	6.717+j26.345	19.244+j78.922	3.10	2.47	5.129+j23.005	7.735+j41.071
INDIANILLA	INN-85	85	9.97	0.17	0.679+j4.875	0.458-j876.784	12.69	0.19	0.551+j4.220	0.458-j876.784
INDUSTRIA DE LA DEFENSA NAL.	IDN-85	85	16.66	6.01	0.592+j2.885	5.238+j17.893	18.53	7.41	0.548+j2.861	5.378+j15.192
INDUSTRIA MILITAR	INM-85	85	10.00	4.40	1.028+j4.799	4.730+j23.288	11.06	5.25	0.986+j4.782	4.879+j20.611
INDUSTRIAL SAN CRISTÓBAL	ISC-85	85	15.20	6.08	0.583+j3.176	3.004+j17.546	20.04	13.30	0.408+j2.663	1.099+j6.774
INDUSTRIAS UNIDAS S. A.	INU-115	115	9.62	7.45	1.296+j6.779	2.367+j12.719	10.60	8.11	1.232+j6.782	2.400+j13.009
INFIERNILLO	IFR-69	69	0.89	1.05	20.927+j39.561	3.198+j25.929	1.00	1.15	20.418+j38.553	3.593+j27.835
INSURGENTES	INS-85	85	18.86	9.49	0.511+j2.552	1.085+j10.322	22.82	14.74	0.411+j2.329	0.987+j6.225
IROLO	IRO-230	230	13.53	10.51	1.627+j9.679	3.035+j18.137	15.31	11.55	1.434+j9.433	3.156+j18.649
IUSASOL 1	IUN-115	115	15.30	14.47	0.624+j4.295	0.392+j5.079	16.86	15.58	0.559+j4.296	0.425+j5.373
IXTAPALUCA	IXL-230	230	21.93	21.70	1.129+j5.949	0.669+j6.367	25.17	24.12	0.882+j5.735	0.698+j6.629
IXTAPAN DE LA SAL	IXS-115	115	3.74	2.54	3.906+j17.310	9.307+j42.185	4.18	2.81	3.776+j17.045	9.357+j42.099
IXTAPANTONGO	IXT-115	115	11.15	7.57	1.080+j5.855	2.658+j14.162	13.81	11.12	0.847+j5.220	1.289+j9.006
IXTLAHUACA DOS	ITD-115	115	10.30	8.03	1.136+j6.346	1.709+j11.795	11.35	8.73	1.072+j6.346	1.742+j12.076
IZTAPALAPA	IZT-230	230	21.13	19.60	1.282+j6.153	0.951+j7.862	24.95	22.26	0.954+j5.777	0.970+j8.013
JABÓN LA CORONA	JLC-230	230	23.30	21.01	1.019+j5.608	1.312+j7.578	27.18	23.60	0.776+j5.318	1.355+j7.789
JAMAICA	JAM-85	85	10.88	0.17	0.524+j4.481	0.041-j877.953	14.04	0.19	0.398+j3.824	0.041-j877.953
JAMAICA	JAM-230	230	20.10	20.93	1.356+j6.466	0.815+j5.940	23.32	23.95	1.062+j6.174	0.766+j5.829
JASSO	JAS-85	85	16.30	3.31	0.336+j2.992	7.174+j37.837	17.18	3.61	0.331+j3.124	7.157+j37.994
JASSO	JAS-230	230	27.00	23.38	0.727+j4.864	1.102+j7.184	32.30	26.82	0.512+j4.493	1.150+j7.234
JILOTEPEC	JIL-115	115	7.95	6.37	1.574+j8.199	2.669+j14.414	9.03	7.05	1.379+j7.968	2.727+j14.669
JILOTEPEC INDUSTRIAL	JID-115	115	7.25	5.64	1.723+j8.993	3.151+j16.774	8.25	6.25	1.511+j8.724	3.215+j17.056
JILOTEPEC POTENCIA	JIP-115	115	8.38	7.05	1.459+j7.792	2.226+j12.252	9.58	7.83	1.249+j7.521	2.290+j12.534
JILOTEPEC POTENCIA	JIP-230	230	4.94	4.13	5.103+j26.401	8.408+j42.029	5.92	4.72	4.116+j24.337	8.631+j42.501
JOROBAS	JRB-230	230	26.18	21.18	0.855+j5.000	1.728+j8.566	31.24	24.28	0.626+j4.634	1.749+j8.564
JUANDO	JUA-85	85	6.70	3.04	2.102+j7.021	6.693+j33.316	7.30	3.32	2.095+j7.088	6.687+j33.524
JUCHITEPEC	JCP-85	85	6.65	1.51	1.521+j7.218	7.561+j82.543	7.21	1.66	1.521+j7.336	7.561+j82.543
JUGOS DEL VALLE	JDV-85	85	7.07	3.22	2.059+j6.632	7.375+j31.137	8.86	3.88	1.521+j5.899	7.640+j28.680
JUGOSMEX	JMX-85	85	15.93	6.97	0.549+j3.031	1.949+j14.868	19.22	11.09	0.444+j2.774	1.549+j8.895
KILOMETRO 110	KMC-85	85	10.37	5.05	0.828+j4.660	4.069+j19.260	11.83	5.88	0.796+j4.495	3.962+j17.990
KILOMETRO 110	KMC-230	230	10.92	10.87	2.004+j11.995	1.686+j12.308	13.11	12.42	1.543+j11.035	1.781+j12.882
KILOMETRO 42	KCD-85	85	2.16	1.09	9.171+j20.768	43.906+j78.287	2.40	1.22	9.139+j20.601	43.455+j76.606
KILOMETRO 48	KCO-85	85	4.38	2.49	2.070+j11.004	5.881+j36.272	6.19	3.56	1.690+j8.558	4.647+j27.524
KILOMETRO CERO	KCR-230	230	22.79	23.05	1.082+j5.726	0.670+j5.761	26.68	25.83	0.814+j5.413	0.724+j6.095
LA CEIBA	LAC-115	115	2.59	1.59	5.932+j24.954	16.813+j72.327	3.47	3.28	4.064+j20.664	3.616+j24.504
LA COSTEÑA	LCT-85	85	18.28	7.30	0.486+j2.641	2.229+j14.661	23.20	14.06	0.359+j2.299	1.287+j6.793



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
LA ESTANCIA	LES-115	115	6.16	4.20	2.854+j10.388	6.885+j24.944	6.99	4.72	2.727+j10.084	6.834+j24.557
LA LOMA	LOM-85	85	14.89	6.29	0.697+j3.222	3.014+j16.607	16.64	7.77	0.648+j3.179	3.234+j14.032
LA MIRA	MIR-115	115	6.83	6.72	2.201+j9.465	1.551+j10.034	8.16	7.73	1.940+j8.741	1.604+j10.307
LA PAZ	LAP-230	230	28.60	31.85	0.943+j4.546	0.310+j3.360	33.31	35.73	0.698+j4.329	0.335+j3.574
LA PAZ	LAP-400	400	27.21	27.51	1.919+j8.268	0.880+j8.473	34.35	32.46	1.180+j7.300	0.922+j8.793
LA QUEBRADA	LAQ-85	85	17.78	7.21	0.562+j2.702	2.339+j14.790	20.48	9.39	0.489+j2.590	2.550+j11.749
LAFARGE	LFG-230	230	21.69	16.32	0.903+j6.055	1.865+j12.087	25.44	18.49	0.688+j5.700	1.876+j12.100
LAGO	LGO-230	230	22.86	24.16	0.897+j5.738	0.784+j4.919	26.15	26.83	0.676+j5.546	0.822+j5.162
LAGO	LGO-400	400	23.45	15.36	1.683+j9.703	3.654+j25.365	28.61	17.16	1.074+j8.813	3.864+j26.475
LAGO DE GUADALUPE	LGD-230	230	26.12	22.92	1.055+j4.973	0.986+j7.268	31.25	26.12	0.764+j4.612	1.011+j7.414
LAS AMÉRICAS	LAR-230	230	25.21	18.75	0.859+j5.197	2.177+j10.579	29.93	21.28	0.619+j4.841	2.207+j10.656
LAS CAÑAS	CAN-69	69	1.51	1.34	11.415+j23.709	12.397+j34.741	1.74	1.51	10.914+j22.689	12.327+j34.874
LÁZARO CÁRDENAS DISTRIBUCIÓN	LCD-115	115	10.04	9.83	1.252+j6.492	1.091+j6.850	12.59	11.77	0.995+j5.714	1.126+j6.899
LÁZARO CÁRDENAS POTENCIA	LCP-115	115	15.02	16.26	0.555+j4.385	0.205+j3.315	20.38	21.15	0.319+j3.570	0.206+j3.163
LÁZARO CÁRDENAS POTENCIA	LCP-230	230	16.84	19.79	1.456+j7.748	0.204+j3.975	32.45	36.97	0.465+j4.477	0.149+j2.679
LÁZARO CÁRDENAS POTENCIA	LCP-400	400	11.96	13.07	3.043+j19.067	0.846+j13.428	29.16	31.84	0.654+j8.687	0.334+j5.810
LECHERÍA	LEC-85	85	26.02	9.16	0.373+j1.848	1.549+j12.262	30.32	12.24	0.306+j1.754	1.809+j9.546
LERMA	LER-85	85	0.87	0.46	14.707+j54.619	50.665+j200.550	2.63	2.92	2.240+j20.396	0.270+j8.751
LIQUIMEX	LQX-85	85	9.75	4.22	1.420+j4.828	5.305+j24.386	12.05	5.14	1.111+j4.342	5.571+j21.930
LOMAS VERDES	LVE-230	230	22.27	19.32	1.257+j5.830	1.499+j8.687	26.35	21.88	0.944+j5.463	1.541+j8.870
LOS REYES	RES-85	85	18.80	2.41	0.419+j2.576	2.024+j55.964	20.15	2.64	0.399+j2.650	2.024+j55.964
LOS REYES	RES-230	230	25.96	27.87	1.011+j5.015	0.436+j4.186	30.17	31.29	0.762+j4.781	0.461+j4.390
MADERO	MAD-230	230	23.54	24.14	0.968+j5.557	1.012+j5.240	27.30	27.07	0.734+j5.300	1.040+j5.465
MAGDALENA	MAG-85	85	21.39	1.99	0.384+j2.262	6.277+j69.291	23.37	2.18	0.341+j2.284	6.277+j69.291
MAGDALENA	MAG-230	230	26.57	27.37	1.077+j4.880	0.720+j4.661	31.42	31.16	0.784+j4.583	0.743+j4.802
MATILDE	MAT-85	85	5.77	3.60	1.649+j8.337	5.282+j23.374	6.26	3.87	1.670+j8.462	5.365+j23.992
MERCED (A)	MER-230	230	18.15	18.03	1.526+j7.156	1.140+j7.555	20.95	20.47	1.231+j6.864	1.109+j7.493
MERCED (B)	MER-230	230	18.15	18.03	1.526+j7.156	1.140+j7.555	20.95	20.47	1.231+j6.864	1.109+j7.493
MILAGROS	MGR-85	85	13.00	2.24	0.736+j3.704	2.734+j58.349	14.14	2.46	0.709+j3.751	2.734+j58.349
MILLÁN DOS	MDO-400	400	15.35	14.11	2.539+j14.832	1.348+j19.113	21.46	17.98	1.419+j11.752	1.689+j18.592
MINERA TIZAPA	MTI-115	115	7.45	5.52	1.683+j8.755	3.291+j17.997	8.78	6.93	1.458+j8.193	2.455+j14.759
MOCTEZUMA	MZA-85	85	8.68	2.63	0.779+j5.600	1.266+j44.922	9.57	2.89	0.749+j5.592	1.266+j44.922
MORALES	MOS-85	85	18.24	6.53	0.485+j2.646	2.937+j16.967	20.30	8.15	0.441+j2.623	3.081+j14.268
MORALES	MOS-230	230	18.55	19.22	1.432+j7.015	1.304+j6.443	21.47	21.47	1.163+j6.704	1.370+j6.785
MORELOS	MOR-230	230	11.26	9.28	1.953+j11.629	3.435+j19.249	12.70	10.19	1.658+j11.382	3.568+j19.829
NACEL Y NACOBRE	NYN-85	85	12.85	5.79	0.820+j3.730	3.108+j17.567	14.33	7.06	0.770+j3.689	3.332+j15.069
NARVARTE	NAR-85	85	11.43	1.61	0.854+j4.208	17.755+j81.104	12.40	1.77	0.825+j4.273	17.755+j81.104
NARVARTE	NAR-230	230	20.85	21.98	1.730+j6.129	1.818+j5.218	24.46	24.84	1.390+j5.808	1.904+j5.474
NAUCALPAN	NAU-85	85	18.35	8.26	0.542+j2.619	1.383+j12.467	20.87	11.17	0.484+j2.541	1.431+j9.262
NECAXA	NEC-85A	85	8.47	6.61	1.101+j5.689	2.260+j10.453	12.24	12.86	0.677+j4.357	0.542+j3.656
NECAXA	NEC-85B	85	8.47	6.61	1.101+j5.689	2.260+j10.453	12.23	12.84	0.680+j4.363	0.542+j3.656
NECAXA	NEC-85C	85	8.47	6.61	1.101+j5.689	2.260+j10.453	12.23	12.84	0.680+j4.363	0.542+j3.656



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$	3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$
NECAXA	NEC-85D	85	8.47	6.61	1.101+j5.689	2.260+j10.453	12.28	12.89	0.669+j4.344	0.542+j3.656
NESTLÉ	NLE-85	85	12.66	6.21	0.806+j3.792	1.554+j15.993	13.92	6.91	0.759+j3.803	1.656+j15.639
NETZAHUALCÓYOTL	NET-85	85	15.17	2.36	0.597+j3.180	2.015+j56.077	16.46	2.59	0.570+j3.229	2.015+j56.077
NISSAN	NIS-85	85	10.59	4.94	0.996+j4.526	2.614+j20.422	11.56	5.47	0.959+j4.572	2.710+j20.141
NOCHISTONGO	NOC-115	115	7.70	7.22	0.927+j8.568	0.711+j10.377	8.06	7.48	0.946+j9.010	0.771+j11.181
NOCHISTONGO	NOC-230	230	32.25	28.30	0.733+j4.051	1.098+j5.813	39.19	32.80	0.503+j3.693	1.113+j5.838
NONOALCO	NON-85	85	28.25	13.85	0.304+j1.710	0.360+j7.209	36.04	28.42	0.210+j1.483	0.148+j2.748
NOPALA	NOP-230A	230	28.13	28.23	1.040+j4.605	0.647+j4.745	33.79	32.25	0.727+j4.262	0.688+j4.952
NOPALA	NOP-230B	230	28.13	28.23	1.040+j4.605	0.647+j4.745	33.79	32.25	0.727+j4.262	0.688+j4.952
NOPALA	NOP-230C	230	28.22	28.55	1.036+j4.590	0.616+j4.623	33.91	32.63	0.724+j4.247	0.656+j4.830
NOPALA	NOP-400	400	26.02	28.08	2.184+j8.601	0.720+j7.199	34.18	34.25	1.276+j7.321	0.774+j7.470
NUEVO AEROPERTO INTERNACIONAL MANIOBRAS	NAI-MAN	230	22.09	23.41	0.960+j5.933	0.881+j5.030	25.38	26.11	0.732+j5.708	0.916+j5.267
NUEVO FANAL	NFA-85	85	20.30	7.79	0.486+j2.368	2.118+j13.969	23.45	10.21	0.415+j2.264	2.343+j11.052
NUTRIGO	NTG-115	115	8.28	6.10	1.568+j7.862	2.938+j16.368	9.12	6.65	1.503+j7.863	2.971+j16.649
OCEAÑÍA	OCE-230	230	17.05	16.08	1.675+j7.605	3.195+j8.853	19.63	18.22	1.380+j7.314	3.164+j8.790
OCEAÑÍA	OCE-230B	230	15.22	12.82	1.609+j8.575	8.658+j11.699	17.43	14.26	1.357+j8.269	8.775+j12.056
ODÓN DE BUEN	ODB-230	230	14.98	13.27	1.823+j8.678	2.085+j12.243	17.18	14.73	1.487+j8.372	2.176+j12.639
OLIVAR	OLI-230	230	22.92	23.81	1.455+j5.607	0.906+j5.216	27.04	27.00	1.117+j5.286	0.933+j5.427
OTUMBA	OTM-230	230	19.49	15.42	1.094+j6.725	1.704+j12.222	22.07	16.95	0.931+j6.552	1.777+j12.581
PACHUCA	PAC-85	85	9.42	5.50	1.290+j5.048	2.061+j16.348	10.25	5.94	1.289+j5.109	2.096+j16.713
PACHUCA POTENCIA	PHP-230	230	12.46	12.69	1.252+j10.587	1.029+j10.079	14.02	13.92	1.017+j10.366	1.093+j10.609
PACHUCA POTENCIA	PHP-400	400	11.66	9.42	2.305+j19.671	4.749+j33.707	13.68	10.62	1.675+j18.490	5.007+j34.287
PALIZADA	PLZ-115	115	8.08	5.27	2.158+j7.931	5.661+j20.622	9.07	5.84	2.080+j7.780	5.680+j20.655
PANTITLAN	PNT-85	85	11.07	2.02	0.948+j4.331	4.557+j64.080	12.11	2.22	0.916+j4.363	4.557+j64.080
PAPELERA EL NEVADO	PDO-115	115	4.12	2.44	3.390+j15.758	9.742+j48.262	4.60	2.71	3.294+j15.532	9.779+j48.234
PAPELERA SAN RAFAEL	PSR-85	85	4.02	1.20	3.170+j11.793	12.608+j97.770	4.38	1.32	3.172+j11.911	12.608+j97.770
PAPELES HIGIÉNICOS DEL CENTRO	PHC-230	230	11.63	8.58	1.896+j11.263	4.293+j23.317	13.17	9.46	1.681+j10.961	4.402+j23.792
PARQUE INDUSTRIAL	PQI-115	115	6.57	5.31	1.607+j9.971	2.924+j17.134	7.02	5.65	1.597+j10.283	2.970+j17.771
PARQUE INDUSTRIAL REFORMA	PIR-85	85	11.55	8.73	0.743+j4.184	0.555+j8.382	12.33	9.12	0.762+j4.310	0.637+j9.000
PASO DE CORTES	PDC-115	115	2.64	1.61	7.924+j23.855	22.450+j70.329	2.92	1.77	7.850+j23.749	22.451+j70.328
PATERA	PAT-85	85	14.05	6.19	0.648+j3.431	2.598+j16.661	15.68	7.61	0.598+j3.390	2.822+j14.162
PATLA	PTL-85	85	5.95	4.97	2.018+j7.991	3.429+j12.694	8.44	8.67	1.342+j6.251	1.094+j5.722
PEMEX	PEX-85	85	15.13	5.44	0.648+j3.178	8.424+j18.925	16.81	6.60	0.604+j3.155	8.559+j16.223
PEMEX	PEX-85B	85	7.87	0.17	0.800+j6.187	0.187-j877.409	9.69	0.19	0.673+j5.530	0.187-j877.409
PEMEX	PMX-230	230	29.67	27.99	0.683+j4.424	0.564+j5.308	36.15	33.65	0.471+j4.013	0.498+j4.932
PEMEX AZCAPOTZALCO	PXA-85	85	16.61	7.95	0.585+j2.896	1.415+j12.601	19.02	10.88	0.520+j2.789	1.411+j9.139
PEMEX -ZLCP	PMX-115	115	7.40	5.88	1.760+j8.797	3.532+j15.457	8.98	6.83	1.514+j7.995	3.545+j15.385
PEMEX -ZOTP	PMX-115	115	6.87	7.91	0.325+j9.654	0.250+j5.878	9.31	11.58	0.194+j7.839	0.148+j3.232
PENSADOR	PEN-230	230	21.19	20.04	1.186+j6.152	2.641+j7.099	24.71	22.42	0.918+j5.840	2.718+j7.441
PENWALT	PEW-85	85	19.98	8.25	0.449+j2.414	1.857+j12.838	24.03	13.21	0.363+j2.217	1.568+j7.648
PERALVILLO	PEV-230	230	17.41	16.52	1.258+j7.522	3.498+j8.450	20.05	18.39	1.006+j7.215	3.613+j8.807
PITIRERA	PIT-230A	230	11.31	12.37	1.570+j11.639	0.663+j8.415	17.13	17.86	0.699+j8.499	0.466+j7.347



Subestación eléctrica	Acónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
PITIRERA	PIT-230B	230	11.31	12.37	1.570+j11.639	0.663+j8.415	17.13	17.86	0.699+j8.499	0.466+j7.347
PITIRERA	PIT-230C	230	11.31	12.37	1.570+j11.639	0.663+j8.415	17.13	17.86	0.699+j8.499	0.466+j7.347
PITIRERA	PIT-230D	230	11.31	12.37	1.570+j11.639	0.663+j8.415	17.13	17.86	0.699+j8.499	0.466+j7.347
PITIRERA	PIT-400	400	11.07	10.69	3.156+j20.630	2.930+j22.199	25.34	26.56	0.785+j9.992	0.641+j8.013
PLACERES DEL ORO	PLO-115	115	1.64	0.96	11.174+j38.983	34.892+j121.329	1.87	1.17	10.434+j37.560	29.591+j105.936
POLANCO	POO-230	230	30.23	29.95	1.074+j4.259	2.539+j4.049	36.82	34.79	0.752+j3.895	2.592+j4.182
PROCTER & GAMBLE	PYG-230	230	25.82	20.76	0.876+j5.069	1.935+j8.773	30.77	23.77	0.648+j4.702	1.956+j8.770
PRODUCTORA MEXICANA DE TUB.	PMT-115	115	7.35	6.40	1.877+j8.833	2.617+j12.701	8.90	7.42	1.620+j8.049	2.678+j12.809
PROGRESO	PGS-85	85	3.47	1.74	4.817+j13.311	14.556+j54.686	3.80	1.91	4.811+j13.377	14.549+j54.894
PROPIIMEX	PRO-85	85	12.94	6.19	0.789+j3.710	1.493+j16.219	14.19	6.89	0.744+j3.730	1.595+j15.897
PUERTA DE HIERRO	PTH-85	85	7.07	4.27	1.349+j6.808	2.190+j20.565	8.59	5.17	1.191+j6.173	2.162+j18.605
PUESTO CENTRAL DE CONTROL	PCC-85	85	9.74	0.17	0.717+j4.985	0.566-j876.484	12.35	0.19	0.590+j4.329	0.566-j876.484
PUESTO CENTRAL DE CONTROL	PCC-85B	85	22.01	9.68	0.476+j2.178	5.249+j9.582	27.15	15.15	0.382+j1.952	5.028+j5.117
REFORMA	REF-85	85	12.11	5.17	0.874+j3.957	3.982+j20.072	13.41	6.26	0.832+j3.940	4.132+j17.399
REMEDIOS	REM-85	85	34.09	10.84	0.265+j1.415	1.009+j10.707	38.19	14.81	0.224+j1.396	1.164+j8.055
REMEDIOS	REM-230	230	35.86	41.42	0.964+j3.576	0.265+j2.329	44.60	48.94	0.643+j3.211	0.281+j2.455
ROBERT BOSCH	RBS-85	85	12.72	6.32	0.798+j3.775	1.463+j15.610	14.01	7.05	0.749+j3.778	1.565+j15.241
SAFIMEX	SAF-85	85	13.66	6.44	0.746+j3.515	1.247+j15.731	14.94	7.15	0.702+j3.544	1.344+j15.419
SAN ANDRÉS	ANS-85	85	14.53	1.84	0.641+j3.316	7.497+j73.156	15.91	2.02	0.599+j3.339	7.497+j73.156
SAN ÁNGEL	SNG-230	230	23.85	25.86	1.443+j5.378	0.744+j4.357	28.23	29.40	1.103+j5.055	0.772+j4.579
SAN BERNABÉ	BRN-230	230	28.59	31.32	1.171+j4.495	0.370+j3.564	34.25	35.86	0.842+j4.181	0.395+j3.750
SAN BERNABÉ	BRN-400	400	25.45	26.08	2.253+j8.792	1.062+j8.661	32.96	31.36	1.343+j7.589	1.112+j8.947
SAN DIEGO	SDI-85	85	7.15	4.30	1.334+j6.733	2.173+j20.432	8.66	5.20	1.179+j6.120	2.152+j18.530
SAN FELIPE DEL PROGRESO	FPG-115	115	4.35	2.82	3.708+j14.819	9.593+j38.982	4.79	3.09	3.644+j14.822	9.626+j39.273
SAN FRANCISCO	SSO-85	85	12.77	7.07	0.810+j3.755	0.895+j13.208	14.16	7.84	0.756+j3.737	1.013+j13.048
SAN FRANCISCO SOYANIQUILPAN	SFS-230	230	6.06	6.02	4.219+j21.492	2.978+j22.358	7.58	7.10	3.147+j19.006	3.253+j22.848
SAN ISIDRO	ISO-115	115	6.72	6.81	2.241+j9.626	1.274+j9.329	8.01	7.83	1.980+j8.901	1.343+j9.661
SAN MATEO	SMT-115	115	5.05	2.99	2.603+j12.899	7.478+j39.551	5.65	3.32	2.508+j12.672	7.515+j39.523
SAN SEBASTIÁN	SSE-115	115	4.25	2.91	3.726+j15.165	10.691+j35.669	4.71	3.20	3.634+j15.090	10.718+j35.834
SANTA CRUZ	CRU-230	230	31.80	37.29	0.961+j4.063	0.235+j2.486	38.18	43.12	0.672+j3.766	0.248+j2.599
SANTA CRUZ	CRU-400	400	26.25	26.70	2.032+j8.560	1.024+j8.617	33.06	31.44	1.256+j7.580	1.075+j8.964
SANTA FÉ	SFE-230	230	23.23	22.27	1.442+j5.533	1.203+j6.480	27.51	25.28	1.108+j5.194	1.243+j6.672
SANTIAGO TLAUTLA	STU-115	115	4.92	3.52	3.341+j13.084	7.478+j28.811	5.35	3.81	3.297+j13.256	7.513+j29.289
SECRETARÍA DE SEGURIDAD PÚBLICA	SSP-85	85	10.47	4.57	0.987+j4.582	4.504+j22.481	11.58	5.47	0.945+j4.564	4.653+j19.806
SMURFIT KAPPA	SKP-85	85	10.74	4.79	0.802+j4.496	3.936+j21.312	11.82	5.64	0.767+j4.504	4.240+j19.173
SUBESTACIÓN CINCO BOMBEO	ENB-115	115	12.40	7.94	0.783+j5.298	2.374+j14.176	14.67	9.01	0.668+j4.933	2.409+j14.168
SUBESTACIÓN CUATRO BOMBEO	ECB-115	115	25.74	20.96	0.324+j2.559	0.491+j4.325	31.35	24.32	0.240+j2.317	0.526+j4.314
SUBESTACIÓN DOS BOMBEO	EDB-115	115	13.84	9.44	0.759+j4.738	1.899+j11.344	16.56	11.40	0.634+j4.365	1.715+j10.243
SUBESTACIÓN SEIS BOMBEO	ESB-115	115	13.95	9.48	0.710+j4.706	1.815+j11.351	16.36	10.73	0.616+j4.423	1.850+j11.338
SUBESTACIÓN TRES BOMBEO	ETB-115	115	21.87	16.55	0.397+j3.010	0.787+j5.922	26.33	19.02	0.312+j2.756	0.822+j5.910
SUBESTACIÓN UNO BOMBEO	EUB-115	115	10.62	6.67	0.999+j6.170	3.097+j17.084	12.34	7.99	0.897+j5.852	2.743+j15.327
TACUBA	TAC-85	85	17.90	8.91	0.554+j2.684	1.118+j11.061	20.99	13.14	0.475+j2.528	1.023+j7.159



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
TACUBAYA	TYA-85	85	9.67	4.29	1.066+j4.962	5.053+j23.758	10.69	5.10	1.025+j4.945	5.201+j21.078
TACUBAYA	TYA-230	230	21.19	20.96	1.539+j6.076	1.001+j6.542	24.86	23.67	1.200+j5.752	1.035+j6.770
TAXQUEÑA	TAX-85	85	13.87	1.73	0.594+j3.488	9.034+j77.750	15.00	1.90	0.565+j3.554	9.034+j77.750
TAXQUEÑA	TAX-230	230	13.54	11.41	1.881+j9.625	2.458+j15.240	15.43	12.61	1.551+j9.339	2.567+j15.702
TAXQUEÑA	TAX-230B	230	13.54	11.41	1.881+j9.625	2.458+j15.240	15.43	12.61	1.551+j9.339	2.567+j15.702
TECÁMAC	TCM-230	230	16.93	12.89	1.090+j7.765	1.989+j15.188	19.33	14.20	0.881+j7.504	2.083+j15.673
TECAMACHALCO	TEH-230	230	23.27	21.00	1.470+j5.513	1.716+j7.483	27.62	23.87	1.141+j5.165	1.753+j7.646
TEJUPILCO	TJP-115	115	8.00	6.62	1.736+j8.114	2.656+j13.246	9.20	7.62	1.590+j7.773	2.564+j12.621
TEOLOAPAN	TLP-69	69	0.88	1.16	18.334+j41.263	1.213+j12.271	0.96	1.26	18.263+j41.678	1.374+j13.391
TENANGO DEL VALLE	TDV-85	85	5.40	2.64	2.254+j8.799	6.735+j37.081	5.98	2.92	2.185+j8.764	6.849+j36.956
TEOTIHUACÁN	TTH-230	230	36.94	35.10	0.658+j3.534	0.512+j4.222	43.58	39.50	0.465+j3.319	0.544+j4.407
TEOTIHUACÁN	TTH-400	400	32.48	32.39	1.430+j6.965	0.770+j7.341	41.54	38.64	0.836+j6.058	0.812+j7.536
TEPEXIC	TEP-85	85	7.59	5.62	1.424+j6.307	3.035+j12.934	10.91	11.13	0.921+j4.862	0.660+j4.530
TEPOTZOTLÁN	TPZ-85	85	10.79	4.56	1.199+j4.386	4.697+j22.845	12.81	5.52	1.024+j4.086	4.964+j20.397
TEXCALTITLAN	TTT-115	115	6.04	5.01	2.305+j10.756	3.444+j17.468	6.82	5.60	2.181+j10.487	3.494+j17.384
TEXCOCO	TEX-230	230	44.36	46.85	0.612+j2.930	0.307+j2.594	54.10	54.13	0.401+j2.670	0.329+j2.726
TEXCOCO	TEX-400	400	33.64	35.53	1.502+j6.698	0.610+j5.978	43.90	43.08	0.862+j5.722	0.645+j6.186
TIANGUISTENCO	TIA-230	230	10.15	8.81	2.802+j12.782	2.715+j18.930	11.70	9.81	2.325+j12.265	2.838+j19.493
TINGAMBATO	TIN-115	115	5.72	4.57	2.168+j11.394	3.855+j20.066	7.37	6.93	1.573+j9.781	1.526+j11.618
TIQUICHEO	TQC-115	115	1.90	1.16	7.952+j33.954	22.907+j100.048	2.41	1.93	6.074+j29.673	9.544+j51.909
TIZAPA MANIOBRAS	TMA-115	115	8.22	6.25	1.526+j7.929	2.830+j15.513	9.76	7.99	1.301+j7.368	1.995+j12.275
TIZAYUCA	TIZ-230	230	15.55	12.19	1.213+j8.455	1.943+j15.559	17.79	13.45	0.991+j8.150	2.041+j16.073
TLAPEHUALA	TPA-115	115	2.47	1.47	8.032+j25.632	24.424+j78.275	2.86	1.83	7.396+j24.420	20.214+j65.997
TLATELULCO MÓVIL	TTO-85	85	10.46	6.55	1.030+j4.575	0.858+j13.188	11.59	7.13	0.974+j4.553	1.007+j13.427
TOLUCA	TOL-85	85	15.68	8.04	0.610+j3.070	0.565+j12.132	17.39	9.05	0.557+j3.054	0.669+j11.701
TOLUCA	TOL-230	230	14.87	15.72	1.976+j8.709	0.560+j7.680	17.39	17.70	1.542+j8.256	0.599+j8.051
TOLUCA 2000	TDK-230	230	11.67	10.21	2.449+j11.115	1.978+j16.315	13.44	11.38	2.029+j10.674	2.048+j16.728
TOPILEJO	TOP-230	230	24.03	24.56	1.116+j5.412	0.518+j5.313	27.94	27.38	0.822+j5.163	0.559+j5.621
TOPILEJO	TOP-400	400	26.40	27.31	2.093+j8.495	1.142+j8.088	33.52	32.46	1.268+j7.473	1.188+j8.371
TOTOLTEPEC	TTC-230	230	14.21	13.81	2.158+j9.095	1.393+j10.240	16.65	15.60	1.706+j8.605	1.440+j10.556
TRATAMIENTO AGUAS RESIDUALES	RAT-230	230	26.30	23.55	0.771+j4.990	1.180+j6.782	31.29	26.88	0.553+j4.635	1.219+j6.889
TREN INTERURBANO MÉXICO-TOLUCA DOS	TTD-230	230	20.96	19.59	1.448+j6.168	1.476+j7.659	24.53	22.13	1.114+j5.850	1.495+j7.828
TREN INTERURBANO MÉXICO-TOLUCA UNO	TTU-230	230	14.98	12.01	1.713+j8.696	3.099+j15.269	17.26	13.45	1.367+j8.352	3.115+j15.426
TREN SUBURBANO	TSU-230	230	23.63	21.72	1.073+j5.517	1.645+j7.035	28.20	24.56	0.767+j5.122	1.744+j7.361
TRIMEX	TRX-85	85	18.92	6.61	0.476+j2.550	2.606+j16.984	22.53	8.28	0.370+j2.367	2.875+j14.545
TULA	TUL-230	230	37.84	41.58	0.546+j3.467	0.188+j2.617	47.11	51.54	0.339+j3.082	0.137+j2.315
TULA	TUL-400	400	28.75	25.46	1.476+j7.896	1.557+j11.219	39.02	37.00	0.773+j6.465	0.744+j7.601
TULANCINGO	TLG-85	85	6.72	3.78	1.981+j7.031	6.545+j23.459	7.51	4.26	1.936+j6.921	6.482+j22.749
UNIVERSIDADES	UNI-85	85	9.24	5.61	1.246+j5.165	1.998+j15.591	10.04	6.05	1.248+j5.232	2.038+j15.992
VALLE DE MÉXICO (230 KV)	VAE-230	230	45.39	48.48	0.559+j2.872	0.306+j2.436	54.15	55.15	0.385+j2.670	0.330+j2.583
VALLE DE MÉXICO (85 KV)	VDM-85	85	12.02	4.49	0.634+j4.035	4.007+j24.338	20.38	23.32	0.269+j2.635	0.102+j1.821
VALLE SAN PEDRO	VAP-230	230	16.63	11.87	1.325+j7.873	2.354+j17.525	19.09	13.21	1.086+j7.575	2.399+j17.764



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
VALLE TULANCINGO	VTU-85	85	5.09	3.20	2.703+j9.246	7.387+j25.795	5.68	3.61	2.660+j9.121	7.298+j24.806
VALLEJO	VAJ-85	85	18.27	7.29	0.416+j2.654	1.903+j14.740	20.08	8.93	0.381+j2.661	2.207+j12.601
VALLEJO	VAJ-230	230	23.63	21.72	1.073+j5.517	1.645+j7.035	28.20	24.56	0.767+j5.122	1.744+j7.361
VERÓNICA	VRN-85	85	14.58	5.68	0.659+j3.300	3.458+j18.926	16.20	6.96	0.615+j3.276	3.602+j16.228
VERÓNICA	VRN-85B	85	8.09	0.17	0.754+j6.018	0.053-j877.911	10.00	0.19	0.627+j5.361	0.053-j877.911
VERÓNICA	VRN-230	230	20.70	21.05	1.318+j6.277	1.189+j6.143	24.12	23.56	1.049+j5.966	1.253+j6.483
VERTIZ	VER-230	230	19.45	19.41	1.390+j6.685	1.977+j6.755	22.52	22.15	1.095+j6.393	1.968+j6.662
VICTORIA	VIC-85	85	26.49	8.65	0.331+j1.823	1.528+j13.289	30.87	11.19	0.261+j1.729	1.799+j10.862
VICTORIA	VIC-230	230	38.20	41.98	0.800+j3.382	0.272+j2.645	47.54	49.34	0.518+j3.029	0.288+j2.781
VICTORIA	VIC-400	400	24.99	23.86	2.011+j9.019	1.464+j10.722	32.18	28.69	1.176+j7.806	1.519+j10.769
VIDRIERA LOS REYES	VLR-85	85	11.28	4.98	0.760+j4.286	3.746+j20.586	12.40	5.88	0.725+j4.293	4.050+j18.446
VIDRIERA TOLUCA	VDT-85	85	14.74	6.68	0.685+j3.257	1.195+j15.422	16.08	7.41	0.645+j3.295	1.291+j15.126
VIDRIO PLANO	VPM-85	85	11.98	5.68	0.785+j4.020	2.811+j17.546	13.51	7.18	0.725+j3.930	2.855+j14.329
VILLA DE LAS FLORES	VDF-85	85	6.98	3.29	1.382+j6.898	5.484+j30.223	9.30	5.84	0.960+j5.723	3.909+j15.796
VILLA GUERRERO	VGU-115	115	2.79	1.81	5.831+j23.093	14.531+j61.094	3.10	2.00	5.700+j22.829	14.581+j61.008
VILLITA	VIL-115	115	11.67	11.89	0.971+j5.604	0.728+j5.238	14.84	14.83	0.718+j4.868	0.561+j4.901
VILLITA	VIL-230	230	11.54	10.51	2.245+j11.290	2.788+j14.224	20.16	22.32	0.935+j7.186	0.484+j5.320
VITO	VIT-85	85	10.27	3.20	0.832+j4.705	6.760+j35.829	11.12	3.50	0.820+j4.786	6.743+j35.985
VITRO FIBRAS	VFI-85	85	12.06	5.68	0.779+j3.994	2.836+j17.582	13.58	7.15	0.720+j3.911	2.895+j14.455
VOLCÁN GORDO	VOG-115	115	8.88	9.13	1.292+j7.364	0.456+j6.931	10.16	10.33	1.170+j7.093	0.506+j6.848
VOLCÁN GORDO	VOG-400	400	7.53	5.85	3.975+j30.397	4.000+j57.101	9.27	6.82	2.782+j27.260	4.314+j56.790
XALOSTOC	XAL-230	230	21.84	20.18	1.064+j5.986	1.250+j7.615	25.39	22.60	0.820+j5.694	1.299+j7.865
XICOTEPEC	XIP-85	85	7.30	8.03	1.452+j6.565	0.309+j4.923	10.25	11.80	0.990+j5.175	0.413+j3.087
XOCHIMILCO	XOC-230	230	20.17	18.94	1.356+j6.443	1.360+j7.927	23.55	21.31	1.044+j6.115	1.409+j8.155
XOCHITLA	XCH-230	230	22.84	16.19	0.943+j5.738	2.640+j12.793	26.91	18.27	0.689+j5.385	2.680+j12.916
YEBUCIBI	YBC-115	115	7.73	5.21	2.164+j8.314	5.346+j20.331	8.61	5.74	2.090+j8.225	5.371+j20.469
ZAPATA ENVASES	ZAE-85	85	18.46	6.47	0.493+j2.612	2.659+j17.338	22.06	8.09	0.381+j2.417	2.928+j14.897
ZARAGOZA	ZAR-230	230	25.37	19.71	1.075+j5.123	1.911+j9.694	29.82	22.18	0.799+j4.832	1.949+j9.858
ZICTEPEC	ZIC-85	85	5.36	2.58	2.287+j8.861	6.578+j38.321	5.98	2.85	2.191+j8.759	6.703+j38.310
ZIRANDARO	ZIR-69	69	1.26	0.99	12.870+j28.945	35.168+j46.877	1.40	1.08	12.365+j28.794	35.222+j47.923
ZUMPANGO	ZUM-85	85	8.23	3.18	1.168+j5.847	6.197+j33.921	8.93	3.47	1.161+j5.932	6.179+j34.076

Gerencia de Control Regional Oriental



[Regresar a mapa del SEN](#)



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
AB CALSA	ABL-115	115	1.40	0.77	10.557+j46.138	43.012+j159.518	2.17	1.19	7.162+j32.818	31.803+j111.968
ABENT 3T	ABT-230	230	8.32	9.65	1.921+j15.847	0.955+j10.864	9.72	10.81	1.576+j14.949	1.059+j11.592
ACACOYAUA	AYA-115	115	2.96	2.10	6.406+j21.463	16.272+j47.117	3.46	2.40	5.664+j20.332	16.121+j46.317
ACAHUIZOTLA	AHZ-115	115	1.94	1.34	9.231+j32.956	17.103+j78.422	2.33	1.53	7.421+j30.408	17.130+j78.318
ACAJETE	ACJ-115	115	5.22	3.39	2.512+j12.480	6.969+j32.653	6.14	3.82	2.136+j11.705	6.980+j32.790
ACALA	AAA-115	115	4.31	3.09	3.774+j14.953	11.079+j31.656	5.00	3.54	3.411+j14.211	10.891+j30.725
ACAPULCO	APC-115	115	5.23	6.69	4.233+j11.980	1.273+j3.822	7.30	8.98	2.531+j9.675	1.327+j3.912
ACATLÁN	ACA-115	115	2.85	2.10	7.118+j22.175	10.225+j47.241	3.15	2.29	7.019+j22.088	10.504+j48.356
ACATZINGO	ACZ-115	115	4.37	2.76	5.576+j14.144	10.663+j40.613	4.84	3.04	5.494+j14.046	10.685+j40.760
ACAYUCAN	ACY-115	115	10.73	7.42	1.339+j6.039	3.170+j14.341	12.85	8.75	1.172+j5.563	2.987+j13.466
ACEROS TLAXCALA	ATX-230	230	6.53	4.89	3.882+j19.963	9.232+j39.906	7.49	5.46	3.440+j19.194	9.314+j40.241
ACTOPAN	AOC-115	115	2.99	1.94	5.899+j21.399	12.360+j57.599	3.32	2.13	5.779+j21.205	12.383+j57.867
ACUITLAPILCO	ACU-115	115	11.59	7.17	1.155+j5.609	4.015+j15.875	13.00	7.95	1.086+j5.513	4.015+j15.879
ADOLFO RUIZ CORTINEZ	ARC-115	115	5.17	6.35	4.324+j12.097	1.352+j5.157	7.19	8.42	2.608+j9.812	1.406+j5.246
AEROPUERTO	ARP-69	69	5.09	3.49	2.055+j7.555	4.554+j18.057	6.44	4.24	1.933+j6.523	4.529+j16.702
AEROPUERTO	ARU-115	115	16.87	17.01	0.678+j3.876	0.982+j3.784	22.44	21.60	0.474+j3.219	0.947+j3.635
AGRONITROGENADOS	ARG-115	115	6.68	4.39	1.671+j9.795	4.965+j25.214	7.92	5.08	1.515+j9.091	4.767+j24.340
AGUA DULCE DOS	ADD-115	115	5.26	4.02	2.794+j12.318	5.617+j23.793	5.93	4.48	2.741+j12.001	5.625+j23.749
AGUA FRÍA	AGF-69	69	2.88	2.58	4.643+j13.020	5.006+j18.079	3.42	3.04	4.492+j12.013	4.981+j16.724
AGUA SANTA	AGA-115	115	9.56	5.84	1.390+j6.804	5.276+j19.602	10.69	6.46	1.315+j6.705	5.279+j19.620
AGUA ZARCA	AZA-115	115	1.55	0.92	14.795+j40.099	35.925+j126.274	1.76	1.02	13.798+j39.255	35.972+j126.392
ALMECATLA	LML-115	115	35.87	30.32	0.328+j1.822	0.495+j2.881	42.29	34.96	0.259+j1.707	0.485+j2.822
ALTOTONGA DOS	TTG-115	115	9.53	10.69	1.146+j6.873	0.484+j4.726	11.65	12.80	0.865+j6.208	0.466+j4.527
ALTZAYANCA	AZY-115	115	5.59	3.57	3.175+j11.444	7.435+j31.266	6.25	3.95	3.077+j11.278	7.453+j31.315
ALTZAYANCA MANIOBRAS	AZM-230	230	5.82	4.31	4.020+j22.474	12.456+j45.400	6.94	5.08	3.325+j20.791	11.504+j42.457
ALUMINIO	AMN-115	115	16.90	19.14	0.674+j3.870	0.501+j2.564	22.09	24.01	0.486+j3.270	0.511+j2.565
ALVARADO DOS	AVD-115	115	1.94	1.12	10.773+j32.478	30.427+j105.178	2.29	1.47	9.426+j30.416	22.817+j82.945
AMATLAN DOS	ATD-115	115	16.25	18.53	0.764+j4.013	0.205+j2.610	19.77	21.63	0.597+j3.645	0.233+j2.761
AMATLAN DOS	ATD-230	230	8.03	8.24	2.873+j16.292	1.303+j15.337	9.65	9.43	2.233+j14.970	1.466+j16.225
AMOZOC	AMZ-115	115	7.29	4.73	3.224+j8.520	6.285+j23.126	8.11	5.22	3.150+j8.433	6.296+j23.212
ANA CHIAUTEMPAN SANTA	ANC-115	115	14.47	9.46	1.033+j4.472	2.969+j11.578	16.28	10.49	0.964+j4.381	2.971+j11.599
ANDRÉS DOS SAN	ADS-115	115	2.06	1.17	11.264+j30.232	27.052+j103.166	2.69	2.49	8.198+j25.914	7.560+j33.277
ANGOSTURA	ANG-115	115	10.40	10.15	0.948+j6.315	0.556+j6.810	13.25	13.28	0.580+j5.483	0.172+j5.419
ANGOSTURA	ANG-400	400	7.31	6.70	5.180+j31.167	6.548+j39.555	15.86	18.86	1.280+j15.966	0.384+j7.681
ANTUÑANO	AUN-115	115	19.09	13.43	0.894+j3.361	1.419+j7.775	21.72	14.94	0.821+j3.261	1.434+j7.832
APAXTLA SWITCHEO	AXS-115	115	2.29	1.62	9.270+j27.454	20.275+j61.421	2.80	1.91	7.451+j25.038	19.620+j59.046
APIZACO DOS	API-115	115	11.29	7.92	1.379+j5.717	3.534+j12.970	12.65	8.75	1.299+j5.624	3.544+j13.058
API	API-115	115	5.37	4.32	2.516+j12.109	6.307+j20.752	6.04	4.78	2.381+j11.851	6.367+j21.001
AQUASISTEMAS	ASI-115	115	3.06	2.98	4.986+j21.105	6.091+j23.339	3.46	3.29	4.741+j20.546	6.281+j24.054
ARRIAGA	ARR-115	115	2.48	2.68	7.004+j25.894	2.853+j20.464	2.88	3.02	6.333+j24.573	2.931+j21.546
ATENCINGO	AEN-115	115	1.80	1.14	11.329+j35.100	23.744+j98.467	1.99	1.25	11.236+j35.012	23.944+j99.167
ATEXCACO	AXO-115	115	3.50	2.83	4.517+j18.406	11.015+j30.833	4.49	4.74	3.366+j15.920	1.945+j13.609



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
ATLIHUETZIA	ATZ-115	115	17.28	12.70	0.921+j3.731	2.030+j7.829	19.51	14.08	0.851+j3.645	2.038+j7.881
ATLIXCO	ATC-115	115	7.99	4.88	1.852+j8.103	5.971+j23.446	8.91	5.40	1.773+j8.001	5.978+j23.479
ATLIXCOYOTL	AXT-115	115	21.11	13.68	0.777+j3.048	1.868+j8.092	24.14	15.29	0.703+j2.943	1.868+j8.098
AUTO MANUFACTURAS	AMF-115	115	17.12	12.78	0.617+j3.829	1.893+j7.642	18.90	13.95	0.578+j3.820	1.904+j7.790
AYUTLA	AYT-115	115	0.82	0.47	24.463+j77.596	64.208+j256.103	0.91	0.52	23.434+j76.778	64.257+j256.224
BALSAS	BAA-115	115	3.22	2.53	6.490+j19.545	12.972+j35.205	4.13	3.10	4.713+j17.050	12.328+j32.848
BARRA NORTE	BRN-115	115	3.08	3.51	4.778+j20.989	2.892+j13.749	3.43	3.85	4.713+j20.796	3.003+j14.171
BELISARIO DOMÍNGUEZ	BDZ-115	115	5.12	4.56	3.571+j12.470	3.676+j17.151	6.41	5.51	2.683+j11.068	3.536+j16.456
BELISARIO DOMÍNGUEZ II	BDD-115	115	2.15	1.45	9.698+j29.291	24.681+j71.008	2.48	1.64	8.812+j28.093	24.542+j70.266
BENITO JUÁREZ	BJU-115	115	7.04	5.76	1.559+j9.303	2.239+j15.925	8.24	6.43	1.438+j8.749	2.398+j16.423
BENTELER	BEN-115	115	15.77	9.96	1.066+j4.075	1.983+j11.432	17.78	11.02	0.995+j3.985	2.000+j11.522
BERRIOZÁBAL	BRZ-115	115	5.19	3.43	2.190+j12.596	6.524+j31.819	5.99	3.85	1.957+j12.044	6.528+j31.780
BII HIOXO	BII-115	115	4.47	5.27	1.478+j14.769	0.279+j8.164	5.68	6.35	1.183+j12.800	0.323+j8.818
BII HIOXO	BII-115B	115	3.50	4.29	2.075+j18.867	0.245+j8.462	4.92	5.64	1.376+j14.767	0.287+j9.166
BII NEE STIPA	BNS-115	115	6.78	8.78	1.635+j9.651	0.213+j3.349	8.70	10.83	1.188+j8.310	0.237+j3.579
BII STINÚ I	BSU-115	115	7.61	9.97	1.543+j8.586	0.217+j2.762	9.93	12.51	1.100+j7.274	0.235+j2.939
BII STINÚ II	BSD-230	230	5.16	5.67	2.327+j25.619	1.823+j18.789	6.93	7.06	1.757+j21.009	2.012+j19.824
BIO PAPEL PRINTING	BPP-115	115	7.07	6.45	1.896+j9.193	1.347+j12.150	9.57	8.13	1.439+j7.495	1.573+j11.740
BOCA DEL MONTE	BDM-115	115	2.29	1.40	6.200+j28.277	26.766+j80.471	2.56	1.55	6.024+j27.919	26.780+j80.526
BOCA DEL RIO	BDR-115	115	14.48	10.49	0.868+j4.502	1.913+j9.717	20.27	14.18	0.586+j3.555	1.561+j8.251
BOCHIL	BCH-115	115	3.63	2.31	4.403+j17.753	10.794+j48.432	4.13	2.58	4.155+j17.201	10.799+j48.394
BONFIL	BNL-115	115	4.87	5.15	4.617+j12.825	2.270+j10.952	6.59	6.49	2.928+j10.695	2.314+j11.105
BOSQUES	BOE-115	115	19.16	13.59	0.691+j3.397	1.662+j7.571	21.68	15.06	0.624+j3.311	1.671+j7.655
BRIDGESTONE	BDG-115	115	8.46	7.26	1.350+j7.729	1.989+j11.574	9.32	7.91	1.226+j7.738	2.031+j11.858
BUENA VISTA	BVI-115	115	6.67	4.40	1.996+j9.750	6.511+j24.632	8.10	5.08	1.819+j8.828	6.424+j24.204
BUGAMBILIAS	BGB-115	115	17.53	10.80	0.939+j3.669	2.747+j10.561	19.89	12.00	0.864+j3.569	2.750+j10.590
BUGAMBILIAS SF6	BGS-115	115	17.36	10.65	0.953+j3.704	2.791+j10.728	19.69	11.84	0.878+j3.604	2.795+j10.757
CACTUS PEMEX	CAX-115	115	7.04	7.26	1.855+j9.245	1.556+j8.978	9.14	8.67	1.341+j7.878	1.688+j9.483
CACTUS SWITCHEO	CSX-115	115	16.32	19.30	0.529+j4.034	0.170+j2.727	19.53	21.91	0.434+j3.715	0.191+j2.929
CALPULALPAN	CPL-115	115	4.40	3.82	4.861+j14.301	4.096+j21.708	4.73	4.07	4.968+j14.619	4.277+j22.663
CANTICAS	CIC-115	115	14.01	11.10	0.990+j4.634	1.661+j8.652	16.82	12.74	0.896+j4.249	1.682+j8.586
CAPILLA	CAP-115	115	2.24	1.29	6.232+j29.041	23.299+j92.359	6.95	4.46	2.254+j10.270	8.068+j27.072
CARACOL	CRL-115	115	1.76	1.19	11.683+j35.856	27.488+j87.515	2.09	1.38	9.854+j33.446	26.829+j85.132
CARACOL	CRL-230	230	3.27	2.70	10.238+j39.359	14.294+j64.168	8.78	9.79	1.601+j16.551	0.306+j9.667
CARDEL	CAE-115	115	4.16	3.61	3.222+j15.640	3.694+j24.279	4.56	3.89	3.231+j15.695	3.836+j25.227
CÁRDENAS	CDN-115	115	11.01	10.19	1.141+j5.920	1.579+j7.635	12.75	11.40	1.021+j5.637	1.610+j7.810
CÁRDENAS DOS	CDD-115	115	13.39	13.91	0.721+j4.905	0.509+j4.665	15.68	15.71	0.595+j4.619	0.516+j4.794
CÁRDENAS DOS	CDD-230	230	8.79	8.89	2.279+j14.932	2.211+j15.430	11.01	10.61	1.680+j13.160	2.205+j15.208
CÁRDENAS SUR	CSU-115	115	8.31	7.78	1.713+j7.808	2.117+j9.723	9.48	8.60	1.601+j7.538	2.229+j10.050
CARLOS A. CARRILLO	CAC-115	115	3.75	2.38	5.427+j16.858	13.935+j46.561	4.53	2.88	4.827+j15.387	12.573+j42.119
CASA BLANCA	CAS-115	115	9.42	7.03	1.269+j6.934	2.821+j14.268	10.94	7.88	1.092+j6.587	2.835+j14.373
CATEMACO	CTO-115	115	2.24	1.27	10.400+j27.735	24.556+j94.550	2.96	2.91	7.449+j23.493	5.818+j25.723



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
CAVERNAS TUZANDEPETL	CVN-115	115	13.62	10.22	1.006+j4.770	1.957+j9.684	16.53	11.71	0.886+j4.330	1.970+j9.734
CAYACO	CAY-115	115	5.96	6.93	3.886+j10.437	0.951+j6.165	8.59	9.28	2.190+j8.210	0.993+j6.293
CAZONES	CZN-115	115	8.58	6.22	1.065+j7.666	3.285+j16.312	11.02	7.50	0.863+j6.570	3.215+j15.489
CD. HIDALGO. CHIAPAS.	CGO-115	115	1.91	1.40	10.134+j33.343	25.769+j67.759	2.17	1.56	9.395+j32.255	25.898+j67.861
CD. INDUSTRIAL VILLAHERMOSA	CIH-115	115	12.98	11.90	0.895+j5.038	1.099+j6.711	15.36	13.45	0.726+j4.700	1.126+j6.876
CEBADAS Y MALTA	CBM-115	115	4.17	3.54	5.127+j15.061	4.860+j24.029	4.50	3.79	5.234+j15.379	5.042+j24.984
CECILIO DEL VALLE	CCL-69	69	1.99	2.37	2.178+j19.927	0.484+j10.236	2.98	3.83	0.980+j14.678	0.098+j4.832
CEFERESO	CFS-85	85	2.96	2.04	2.850+j16.325	6.586+j38.528	3.19	2.21	2.837+j16.672	6.595+j39.036
CEFERESO VILLACOMALTITLAN	CFV-115	115	2.84	2.03	6.683+j22.424	16.766+j48.361	3.31	2.31	5.889+j21.245	16.626+j47.594
CELANESE	CLS-115	115	12.11	8.76	1.206+j5.350	2.419+j11.658	14.52	9.98	1.083+j4.912	2.432+j11.708
CELCSA MANIOBRAS	CCB-115	115	13.59	12.56	0.792+j4.820	0.823+j6.496	15.91	14.05	0.727+j4.533	0.872+j6.715
CEMENTOS APASCO (TABASCO)	CEM-115	115	5.34	4.37	2.589+j12.158	5.903+j20.014	6.28	5.03	2.182+j11.430	5.959+j19.513
CEMENTOS APASCO S.A. DE C.V.	CSS-115	115	5.82	7.32	4.014+j10.679	0.447+j4.149	8.38	9.98	2.308+j8.406	0.492+j4.273
CEMENTOS CRUZ AZUL (OAXACA)	CCA-115	115	4.51	3.25	4.271+j14.079	7.702+j31.059	5.29	3.67	3.966+j13.212	7.726+j31.269
CEMENTOS MOCTEZUMA (MORELOS)	CUM-230	230	12.34	11.99	2.013+j10.569	2.108+j11.557	14.54	13.61	1.474+j9.941	2.188+j11.887
CEMENTOS MOCTEZUMA(APAZAPAN)	CMT-115	115	4.22	2.79	2.954+j15.462	5.738+j39.710	4.71	3.08	2.810+j15.235	5.759+j39.935
CEMENTOS TOLTECA	TOC-230	230	8.35	6.83	2.326+j15.724	5.485+j25.981	9.34	7.53	2.063+j15.502	5.524+j26.410
CEMENTOS VERACRUZ	CVE-115	115	10.65	8.49	1.222+j6.115	2.663+j10.699	12.49	9.63	1.059+j5.750	2.683+j10.760
CENTENARIO	CIO-85	85	3.92	2.70	2.062+j12.335	4.662+j29.083	4.20	2.91	2.040+j12.687	4.670+j29.590
CENTRAL EÓLICA SURESTE UNO FASE DOS	SUD-230	230	8.82	11.76	1.269+j15.005	0.694+j3.777	13.12	16.65	0.813+j11.105	0.711+j3.995
CENTRO DE EXPOSICIONES Y CONVENCIONES FUERTES	CEF-115	115	15.46	9.37	1.084+j4.155	2.348+j12.473	17.43	10.36	1.013+j4.065	2.366+j12.562
CERRO AZUL DOS	CDO-115	115	4.15	2.43	3.596+j15.593	19.524+j46.547	4.62	2.68	3.542+j15.419	19.533+j46.617
CERRO DE ORO	EDO-115	115	18.28	18.45	0.343+j3.616	0.174+j3.593	25.10	23.07	0.198+j2.903	0.211+j3.615
CERRO DE ORO	EDO-400	400	16.33	17.65	2.407+j13.937	1.290+j11.205	25.63	24.47	1.180+j9.840	1.347+j11.290
CERVECERÍA DEL TRÓPICO	CVT-115	115	5.86	4.21	1.981+j11.146	4.439+j24.595	6.81	4.71	1.848+j10.561	4.557+j24.929
CERVECERÍA MOCTEZUMA (ORIZABA)	CMA-115	115	11.91	10.96	1.227+j5.440	1.498+j6.881	14.78	13.24	0.959+j4.847	1.470+j6.525
CHAPULCO	CPO-115	115	8.65	5.07	1.444+j7.535	5.415+j23.325	9.65	5.60	1.371+j7.441	5.418+j23.376
CHICONTEPEC	CHI-115	115	3.13	3.82	5.001+j20.631	1.594+j9.721	3.45	4.19	4.971+j20.557	1.629+j9.976
CHIGNAHUAPAN	CHH-115	115	2.79	1.71	6.261+j22.927	19.205+j65.994	3.09	1.88	6.164+j22.842	19.229+j66.184
CHILAPA	CIP-115	115	3.52	3.24	4.850+j18.254	5.442+j22.832	4.57	3.94	3.048+j15.704	5.481+j22.756
CHILAPAN	CHP-115	115	2.17	1.23	10.786+j28.659	25.507+j97.686	2.91	3.09	7.476+j23.928	4.418+j20.722
CHILPANCINGO	CHG-69	69	1.97	2.15	1.682+j20.189	0.000+j15.080	2.38	2.70	1.104+j18.377	3.338+j11.585
CHILPANCINGO	CHG-115	115	4.45	4.30	4.345+j14.260	2.821+j16.119	6.16	5.45	2.530+j11.584	2.846+j15.972
CHILPANCINGO DOS	CCS-115	115	5.12	5.60	3.679+j12.425	1.168+j9.458	7.30	7.41	1.924+j9.814	1.189+j9.274
CHILPANCINGO POTENCIA	CGP-115	115	5.26	6.18	3.528+j12.122	0.570+j6.849	7.52	8.29	1.785+j9.541	0.609+j6.774
CHILPANCINGO POTENCIA	CGP-230	230	3.33	3.52	11.741+j38.071	4.514+j32.832	5.31	5.05	5.095+j27.053	4.806+j30.364
CHINAMECA DOS	CHD-115	115	19.64	16.55	0.566+j3.333	0.829+j5.400	24.93	19.54	0.437+j2.897	0.843+j5.399
CHINAMECA POTENCIA	CHM-115	115	22.13	21.19	0.453+j2.966	0.397+j3.570	28.43	25.36	0.333+j2.547	0.414+j3.586
CHINAMECA POTENCIA	CHM-400	400	9.09	8.67	3.402+j25.163	4.240+j29.980	13.71	11.30	2.140+j18.409	4.413+j30.457
CHONTALPA	CHT-115	115	3.98	2.97	3.804+j16.223	12.249+j31.874	4.46	3.29	3.681+j15.943	12.280+j32.049
CIA. GRESS	GRE-115	115	12.96	8.23	1.096+j5.005	3.395+j13.600	14.55	9.12	1.028+j4.914	3.396+j13.617
CICLO COMBINADO CENTRO (HUEXCA)	CBE-400	400	16.70	17.68	2.002+j13.686	0.943+j11.765	19.31	19.66	1.393+j13.081	1.053+j12.562



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
CINCO DE MAYO	CIY-115	115	14.36	9.03	1.205+j4.465	3.345+j12.386	16.18	10.01	1.131+j4.370	3.349+j12.434
CINTALAPA DOS	CIT-115	115	4.83	3.33	2.947+j13.420	6.525+j31.633	5.57	3.74	2.684+j12.836	6.533+j31.689
CIUDAD PEMEX	CPX-115	115	7.47	5.25	1.258+j8.797	3.763+j20.005	8.99	6.06	0.913+j8.075	3.673+j19.689
CIUDAD TEXTIL	CDX-115	115	11.62	7.48	1.012+j5.622	3.696+j14.813	12.92	8.21	0.962+j5.569	3.776+j14.959
CIVAC	CIV-115	115	10.63	10.43	1.065+j6.153	0.781+j6.572	11.72	11.31	0.941+j6.161	0.824+j6.855
CLORO DE TEHUANTEPEC	CLO-115	115	13.32	9.72	0.889+j4.904	1.841+j10.460	16.09	11.12	0.755+j4.475	1.854+j10.510
COAPAN	CPA-115	115	4.54	2.77	4.163+j14.012	10.010+j41.524	5.06	3.05	4.025+j13.853	10.031+j41.673
COATEPEC	COP-115	115	4.66	3.70	2.855+j13.968	5.301+j24.885	5.30	4.11	2.586+j13.546	5.343+j25.162
COATZACOALCOS DOS	CTS-115	115	26.65	27.37	0.338+j2.468	0.253+j2.471	36.13	34.40	0.228+j2.008	0.260+j2.427
COATZACOALCOS DOS	CTS-400	400	11.39	12.05	2.884+j20.063	2.074+j18.001	17.36	16.15	1.581+j14.546	2.187+j18.161
COATZINTLA	CZT-115	115	11.77	10.89	0.849+j5.577	1.982+j6.807	16.67	14.47	0.632+j4.335	1.902+j5.924
COGENERACIÓN DE ENERGÍA LIMPIA DE COSOLEACAQUE	CGC-115	115	12.16	12.04	0.848+j5.395	0.529+j6.173	14.01	13.26	0.799+j5.152	0.591+j6.527
COGENERACIÓN NUEVO PEMEX	CNX-115	115	16.32	19.30	0.529+j4.034	0.170+j2.727	19.53	21.91	0.434+j3.715	0.191+j2.929
COLOTLIPA	CLT-69	69	0.94	1.06	11.817+j40.472	22.957+j21.391	1.35	1.74	7.138+j31.611	3.842+j10.162
COMALCALCO	COM-115	115	8.52	7.59	1.526+j7.644	2.937+j10.581	9.74	8.45	1.397+j7.364	2.980+j10.770
COMALCALCO ORIENTE	CAO-115	115	8.88	8.44	1.271+j7.369	1.643+j8.783	10.15	9.38	1.139+j7.103	1.700+j9.020
COMALCALCO POTENCIA	CMP-115	115	9.19	9.30	1.152+j7.133	1.038+j7.199	10.51	10.31	1.019+j6.873	1.098+j7.469
COMALCALCO POTENCIA	CMP-230	230	5.70	5.36	3.674+j23.016	4.739+j28.456	6.76	6.09	3.064+j21.377	4.991+j29.048
COMALCALCO SUR	CMU-115	115	7.06	6.07	2.180+j9.154	4.572+j13.582	8.00	6.72	2.068+j8.888	4.654+j13.811
COMITÁN	CJT-115	115	1.44	0.98	13.943+j43.863	42.707+j101.617	1.64	1.11	13.153+j42.667	42.301+j100.198
COMPLEJO PETROQUÍMICO CANGREJERA	CGJ-115	115	8.04	4.91	1.752+j8.067	5.601+j23.541	9.51	5.68	1.646+j7.501	5.403+j22.667
COMPLEJO PETROQUÍMICO COSOLEACAQUE	CPQ-115	115	6.97	5.89	1.893+j9.335	1.897+j14.837	9.32	7.06	1.314+j7.724	2.054+j15.433
COMPLEJO PETROQUÍMICO INDEPENDENCIA	PEI-115	115	11.96	10.14	1.021+j5.457	1.070+j8.494	13.10	10.88	1.002+j5.486	1.166+j8.915
COMPLEJO PETROQUÍMICO MORELOS	PMO-115	115	6.55	6.99	1.680+j10.002	1.847+j8.328	10.65	9.82	1.007+j6.784	1.973+j8.888
CONALEP	CNL-115	115	7.84	6.40	1.523+j8.328	3.871+j13.870	9.35	7.43	1.185+j7.719	3.781+j13.473
CONEJOS	CNJ-115	115	1.42	0.81	12.924+j44.774	34.234+j148.152	1.59	0.90	12.544+j44.291	34.261+j148.303
CONTLA	CNU-115	115	21.19	14.31	0.622+j3.071	1.724+j7.513	24.22	16.03	0.552+j2.965	1.720+j7.490
CÓRDOBA	COR-115	115	11.91	8.89	1.048+j5.474	2.644+j10.972	14.09	10.10	0.881+j5.108	2.658+j11.043
CÓRDOBA DOS	CBS-115	115	13.93	12.25	0.906+j4.679	1.371+j6.614	16.69	14.04	0.737+j4.313	1.393+j6.733
COSCOMATEPEC	CSE-115	115	4.78	2.87	2.473+j13.674	11.808+j40.030	5.41	3.19	2.301+j13.313	11.821+j40.084
COSOLAPA	CSL-115	115	4.28	3.00	2.304+j15.357	4.586+j35.282	5.43	3.70	1.780+j13.340	4.581+j32.021
COSOLEACAQUE	CSQ-115	115	11.05	7.70	1.494+j5.819	3.084+j13.699	13.15	8.78	1.360+j5.386	3.083+j13.617
COSTA AZUL	CAZ-115	115	5.48	6.30	4.099+j11.409	1.101+j7.073	7.67	8.23	2.402+j9.214	1.143+j7.236
COYOACO MANIOBRAS	CYM-230	230	5.41	5.65	4.161+j24.183	2.570+j21.383	6.82	6.67	3.091+j21.187	2.846+j22.550
COYUCA	CYC-115	115	4.59	4.52	4.497+j13.736	2.815+j14.646	6.50	5.93	2.691+j10.913	2.824+j13.956
CRISOL TEXTIL	CTX-115	115	10.70	7.00	1.049+j6.119	3.843+j15.627	11.84	7.67	1.003+j6.084	3.924+j15.804
CRISTÓBAL SAN	CRI-115	115	3.78	2.50	5.070+j16.838	13.614+j42.262	4.33	2.82	4.720+j16.191	13.556+j41.676
CRUCES	CRC-69	69	6.71	7.21	1.758+j5.675	1.893+j4.201	8.95	9.08	1.120+j4.765	1.970+j4.222
CRUCES GENERACIÓN	CUG-115	115	5.94	6.89	3.875+j10.484	1.013+j6.226	8.59	9.26	2.173+j8.224	1.061+j6.322
CRUZ AZUL MANIOBRAS	CZM-400	400	11.65	9.66	2.795+j19.624	5.886+j31.686	14.53	11.29	1.863+j17.386	6.010+j32.199
CRUZ GRANDE	CGN-115	115	2.07	1.31	10.264+j30.337	27.150+j83.661	2.41	1.47	8.933+j28.937	27.196+j83.759
CRYO INFRA DOS	CRX-115	115	7.24	5.06	2.217+j8.901	4.533+j20.634	8.38	5.68	2.093+j8.465	4.546+j20.684



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
CRYO_INFRA	CRY-115	115	14.35	13.00	0.990+j4.518	0.906+j6.383	17.67	15.61	0.861+j4.042	0.915+j5.947
CRYOINFRA - PRAXAIR	CYX-115	115	6.57	6.51	1.707+j9.953	2.287+j10.483	10.59	8.97	1.037+j6.821	2.377+j10.876
CRYOINFRA CÁRDENAS	ICD-115	115	10.64	9.71	1.197+j6.127	1.803+j8.144	12.29	10.85	1.076+j5.844	1.833+j8.319
CUAUHTÉMOC	CTM-115	115	8.63	5.94	1.797+j7.485	4.084+j17.736	9.66	6.57	1.705+j7.366	4.096+j17.825
CUAUTLA	CUA-115	115	9.34	7.89	1.431+j6.965	1.539+j10.954	10.19	8.49	1.372+j7.036	1.614+j11.363
CUAUTLA DOS	CUS-115	115	7.13	4.90	1.929+j9.106	4.647+j21.525	7.80	5.35	1.871+j9.177	4.662+j21.774
CUAUTLA INDUSTRIAL	CIL-115	115	6.38	4.61	2.492+j10.096	5.464+j21.711	6.99	5.02	2.436+j10.167	5.506+j22.038
CUCHAPA PEMEX	CUH-115	115	8.98	6.11	1.617+j7.218	3.659+j17.608	10.55	6.92	1.503+j6.760	3.666+j17.564
CUERNAVACA	CUE-85	85	6.29	5.23	1.073+j7.723	1.535+j12.446	6.63	5.52	1.046+j8.077	1.543+j12.952
CUICATLAN	CUX-115	115	1.50	1.07	12.333+j42.404	37.481+j90.461	1.66	1.18	12.175+j42.236	37.521+j90.788
CUICHAPA DOS	CCP-115	115	9.23	6.25	1.564+j7.025	3.583+j17.288	10.86	7.08	1.450+j6.567	3.591+j17.244
CUITLÁHUAC	CTH-115	115	4.60	2.87	2.630+j14.195	8.999+j39.487	5.20	3.19	2.459+j13.829	9.027+j39.638
CUNDUACÁN	DUA-115	115	5.89	4.01	1.864+j11.127	5.669+j26.862	6.66	4.45	1.731+j10.822	5.679+j26.955
CYCNA DE ORIENTE	CYR-400	400	8.81	6.80	3.330+j25.991	9.078+j48.763	10.64	7.78	2.393+j23.755	9.310+j49.543
DISTRIBUCIÓN TRC-115	TRC-115	115	5.88	3.81	1.934+j11.129	6.082+j29.314	6.80	4.28	1.679+j10.616	6.058+j29.197
DISTRITO INDUSTRIAL	DIN-69	69	9.41	9.27	0.438+j4.209	0.413+j4.436	13.59	12.44	0.321+j3.207	0.516+j3.924
DONAJI	DOJ-115	115	4.03	2.53	4.046+j15.962	10.165+j44.638	4.61	2.83	3.841+j15.380	10.157+j44.657
DOS BOCAS CICLO COMBINADO	DBC-115	115	19.25	18.51	0.598+j3.398	0.775+j3.855	30.13	32.06	0.306+j2.405	0.259+j2.136
DOS BOCAS CICLO COMBINADO	DBC-230	230	10.19	9.10	2.131+j12.856	3.907+j17.446	13.06	10.94	1.477+j11.090	3.948+j17.483
DOS BOCAS PEMEX	DBX-115	115	4.55	3.55	3.105+j14.272	8.591+j25.943	5.10	3.92	2.969+j14.015	8.651+j26.193
DPA DRAEXLMAIER, PARTES AUTOMOTORAS DE MÉXICO	DXM-115	115	11.22	7.14	1.047+j5.825	3.829+j15.654	12.48	7.85	0.994+j5.768	3.899+j15.783
EASTMAN (CHEMICAL)	EAS-115	115	6.73	4.35	2.936+j9.418	6.279+j25.553	7.76	4.87	2.804+j8.986	6.294+j25.552
EDF ENERGIES NOUVELLES MÉXICO, S. DE R.L. DE C.V. (EÓLICA GUN)	EGS-230	230	8.68	11.02	1.064+j15.270	0.599+j5.553	11.35	13.83	0.671+j12.850	0.628+j5.920
EJUTLA	EJT-115	115	3.30	3.04	4.868+j19.519	5.301+j24.745	3.68	3.34	4.656+j19.308	5.374+j25.167
EL CARMEN	CNM-115	115	12.28	14.09	0.643+j5.368	0.277+j3.623	13.98	15.51	0.540+j5.197	0.300+j3.879
EL CARMEN	CNM-230	230	9.30	10.61	1.936+j14.146	1.182+j10.188	11.23	12.22	1.478+j12.921	1.253+j10.648
EL CASTILLO	ELC-115	115	7.73	8.98	1.650+j8.430	0.367+j5.090	9.03	10.15	1.378+j7.967	0.415+j5.390
EL CASTILLO	ELC-230	230	4.94	4.95	4.990+j26.396	3.207+j26.801	6.04	5.72	3.881+j23.865	3.637+j27.667
EL CERRO	CEO-115	115	6.76	4.37	1.971+j9.629	5.574+j25.361	7.89	4.90	1.673+j9.101	5.597+j25.548
EL CONDE	ECN-115	115	20.37	14.99	0.735+j3.175	1.265+j6.696	23.26	16.78	0.664+j3.068	1.263+j6.697
EL GIRASOL	GIS-115	115	1.33	0.92	13.430+j48.153	41.262+j109.685	1.47	1.01	13.272+j47.986	41.302+j110.013
EL GUAYABO	GYB-115	115	2.62	1.48	4.998+j24.839	18.870+j82.303	11.91	7.41	1.045+j6.044	3.648+j17.027
EL JÍCARO	JIC-115	115	3.98	2.34	3.034+j16.395	11.221+j50.602	6.51	3.85	1.827+j11.071	7.160+j33.712
EL MORAL (OAXACA)	MOR-115	115	2.62	1.97	7.047+j24.330	18.210+j47.249	2.91	2.17	6.891+j24.162	18.248+j47.574
EL MORAL (PUEBLA)	MOA-115	115	10.15	6.63	1.089+j6.451	3.852+j16.557	11.22	7.27	1.045+j6.428	3.884+j16.698
EL SABINO	SAB-115	115	16.83	16.58	0.530+j3.909	0.371+j4.134	21.71	20.30	0.313+j3.350	0.375+j4.041
EL SABINO	SAB-400	400	9.14	9.07	3.692+j24.995	3.463+j25.612	16.09	14.03	1.288+j15.732	3.541+j22.109
EL TEJAR	TJR-115	115	18.64	17.40	0.617+j3.509	0.872+j4.307	28.76	28.62	0.327+j2.518	0.396+j2.707
EL TREINTA	ETT-115	115	5.02	5.05	4.427+j12.460	2.461+j12.545	6.96	6.43	2.710+j10.131	2.514+j12.615
EL TULE	TLE-115	115	4.01	3.10	4.016+j16.067	6.893+j30.325	4.48	3.42	3.845+j15.851	6.929+j30.646
EL ZOPO	ZOP-115	115	5.89	4.81	2.324+j11.038	5.395+j18.206	6.97	5.59	1.914+j10.304	5.377+j17.586
EMILIANO ZAPATA	EMZ-115	115	2.45	1.54	7.117+j26.124	21.729+j72.461	2.75	1.71	6.950+j25.650	21.644+j72.070



Subestación eléctrica	Acónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
ENCANTO	ECT-115	115	4.46	4.86	3.398+j14.479	2.096+j11.196	5.33	5.97	2.903+j13.396	1.403+j9.221
ENTABLADERO	ETD-115	115	6.33	4.02	1.904+j10.314	9.823+j27.027	7.06	4.44	1.872+j10.178	9.868+j27.089
ESCÁMELA	ECM-115	115	10.89	8.67	1.159+j5.986	2.392+j10.561	12.89	9.91	0.981+j5.581	2.394+j10.543
ESFUERZO	ESF-115	115	3.38	3.02	4.467+j19.124	7.876+j26.003	3.76	3.32	4.401+j18.927	7.919+j26.263
ESPERANZA	ERZ-115	115	6.97	6.12	2.546+j9.180	2.171+j13.339	7.80	6.69	2.438+j9.038	2.283+j13.883
ETLA	ETX-115	115	4.16	3.65	4.150+j15.411	7.477+j21.469	4.64	4.02	3.989+j15.229	7.513+j21.820
EXCELOPOLIS	EXE-115	115	18.64	11.52	0.863+j3.455	2.362+j9.927	21.20	12.83	0.788+j3.353	2.362+j9.944
FENO QUIMIA	FNQ-115	115	7.04	4.70	1.924+j9.228	4.859+j23.246	8.50	5.35	1.682+j8.427	4.901+j23.405
FERMEX	FEM-115	115	10.84	8.71	1.653+j5.899	2.971+j10.226	13.23	10.35	1.406+j5.340	2.856+j9.727
FLORES MAGÓN	FLM-115	115	3.55	2.65	4.428+j18.157	13.238+j35.459	4.16	3.07	3.895+j17.126	12.844+j34.055
FORJAMEX	FJM-115	115	13.09	10.08	1.141+j4.944	2.277+j9.404	14.74	11.15	1.053+j4.842	2.288+j9.510
FORTÍN	FOR-115	115	13.90	10.76	0.863+j4.698	2.163+j8.731	16.65	12.32	0.698+j4.331	2.176+j8.785
FRAMBOYANES	FRY-115	115	19.26	27.01	0.585+j3.397	0.222+j0.511	25.58	35.88	0.403+j2.827	0.225+j0.460
FRONTERA	FRT-115	115	1.62	1.13	11.143+j39.416	37.899+j87.895	1.80	1.24	10.968+j39.106	37.920+j88.055
FRONTERA COMALAPA	FCM-115	115	1.00	0.62	18.463+j63.602	52.826+j179.157	1.13	0.69	17.517+j62.473	52.682+j178.405
FUERTES	FUE-115	115	16.62	11.25	1.011+j3.866	1.770+j9.576	18.77	12.45	0.940+j3.776	1.788+j9.666
GABINO BARREDA	GBA-115	115	9.05	6.96	1.364+j7.208	3.079+j13.758	11.71	8.42	1.110+j6.137	3.130+j13.282
GARITA	GAR-115	115	5.61	6.28	3.925+j11.168	1.261+j7.710	8.00	8.30	2.227+j8.850	1.311+j7.795
GAVIOTAS	GAV-115	115	12.45	10.12	0.950+j5.247	1.728+j9.130	14.79	11.49	0.767+j4.877	1.740+j9.212
GIRANDAS PEMEX	GIR-115	115	5.39	3.71	2.540+j12.047	7.192+j28.467	6.08	4.11	2.436+j11.770	7.208+j28.588
GRAN PRIDECO	GRA-115	115	14.91	14.11	0.861+j4.370	1.618+j5.042	18.92	17.06	0.679+j3.799	1.622+j4.991
GRJALVA	GJA-115	115	6.35	4.19	2.454+j10.158	5.440+j26.176	7.50	4.78	2.166+j9.498	5.374+j25.778
GUADALUPE ANALCO	GAN-115	115	17.53	11.96	0.909+j3.676	2.052+j8.868	19.84	13.27	0.836+j3.585	2.058+j8.930
GUTIÉRREZ ZAMORA DOS	GZD-115	115	5.86	4.13	1.721+j11.194	5.417+j25.044	6.59	4.59	1.642+j10.958	5.423+j24.981
HELIPUERTO	HEL-115	115	2.47	2.47	6.576+j26.089	3.688+j26.410	3.03	2.90	4.736+j23.594	3.754+j26.962
HUAJUAPAN	HJP-115	115	1.83	1.18	10.613+j34.768	22.760+j93.880	2.02	1.29	10.492+j34.663	22.942+j94.569
HUAMANTLA DOS	HUA-115	115	9.18	6.41	1.636+j7.048	3.745+j16.253	10.29	7.09	1.545+j6.924	3.756+j16.335
HUAMUXTITLAN	HUU-115	115	1.02	0.65	18.825+j62.217	40.565+j172.845	1.18	0.73	16.857+j59.816	40.606+j172.765
HUATULCO	HCO-115	115	1.42	0.82	13.402+j44.737	34.238+j146.566	1.58	0.90	13.028+j44.288	34.267+j146.726
HUATUSCO	HTU-115	115	3.50	2.04	3.367+j18.670	16.617+j57.457	3.93	2.26	3.192+j18.311	16.631+j57.512
HUAUTLA DE JIMENEZ	HUJ-69	69	0.68	0.50	31.251+j49.629	50.810+j109.157	0.74	0.55	31.309+j50.637	50.814+j110.309
HUEJOTZINGO	HJO-115	115	12.47	8.30	0.927+j5.245	3.536+j12.922	13.83	9.08	0.881+j5.207	3.644+j13.122
HUEYAPAN	HYN-115	115	2.78	2.16	5.924+j23.094	15.468+j41.853	3.45	3.23	4.764+j20.617	6.395+j24.626
HUEYAPAN DE OCAMPO	HOC-115	115	3.17	1.77	6.978+j19.771	18.017+j68.711	3.87	2.75	5.849+j17.966	9.884+j40.880
HUIMANGUILLO	HMG-115	115	5.92	4.94	2.596+j10.908	5.596+j17.387	6.67	5.45	2.496+j10.659	5.716+j17.716
HUIXTLA	HUX-115	115	3.23	2.42	6.206+j19.570	13.403+j38.846	3.82	2.78	5.349+j18.335	13.268+j38.111
HUMEROS DOS	HMD-115	115	6.84	7.80	1.821+j9.541	0.812+j6.144	7.98	9.07	1.672+j8.998	0.863+j5.817
HUMEROS LOS	HMS-115	115	4.54	4.85	2.730+j14.356	2.163+j11.736	5.36	5.90	2.410+j13.403	1.501+j9.818
HUMEROS TRES	HMT-115	115	6.68	7.26	1.801+j9.776	0.871+j7.584	7.69	8.23	1.687+j9.349	0.965+j7.606
IDESA	IDE-115	115	7.16	6.77	1.564+j9.138	2.401+j10.922	11.26	9.13	0.974+j6.411	2.467+j11.198
IGUALA	IGU-115	115	2.42	2.81	6.914+j26.506	0.784+j16.092	2.97	3.30	5.056+j24.037	0.917+j17.108
INDEPENDENCIA	IPD-115	115	3.39	2.22	4.612+j19.019	10.664+j49.490	3.93	2.53	4.147+j18.111	10.369+j48.322



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
INDUSTRIAL	INT-115	115	18.41	12.57	0.879+j3.497	1.627+j8.503	20.83	13.93	0.810+j3.411	1.638+j8.582
INDUSTRIAL CUAUTLA DOS	ICS-115	115	6.50	4.81	2.437+j9.920	5.206+j20.328	7.11	5.23	2.380+j9.992	5.251+j20.669
INDUSTRIAL PATRONA	IPA-115	115	13.86	11.63	0.913+j4.704	1.607+j7.400	16.59	13.30	0.744+j4.338	1.628+j7.520
INFONAVIT	IFN-115	115	19.05	17.64	0.643+j3.426	0.806+j4.319	26.43	22.90	0.431+j2.729	0.765+j4.090
INFRA VILLA HERMOSA	IVH-115	115	12.04	10.76	1.063+j5.412	1.422+j7.636	14.17	12.12	0.893+j5.075	1.458+j7.818
INGENIO LA GLORIA	GLR-115	115	3.70	3.68	3.540+j17.602	1.568+j19.992	4.02	3.90	3.620+j17.812	1.771+j21.421
INGENIO SAN NICOLÁS	ISN-115	115	3.38	1.87	3.139+j19.399	15.940+j65.549	4.80	4.58	1.907+j15.082	1.564+j17.416
IQUISA	IQU-115	115	16.15	15.13	0.799+j4.032	0.570+j5.300	20.24	18.45	0.670+j3.547	0.590+j4.882
ISLA	ISL-115	115	2.65	1.59	6.776+j24.167	21.417+j72.647	2.99	1.77	6.575+j23.556	21.360+j72.132
ITUNDUJIA	ITU-115	115	0.77	0.46	22.929+j82.759	60.271+j249.323	0.85	0.51	22.779+j82.629	60.371+j249.716
IXHUATLAN DE MADERO	IXH-115	115	1.49	1.31	8.376+j43.634	24.456+j58.847	1.65	1.45	8.301+j43.422	24.469+j58.955
IXTAPA POTENCIA	ITP-115	115	5.83	4.99	1.243+j11.328	2.745+j16.835	8.87	7.06	1.107+j8.163	2.633+j14.303
IXTAPA POTENCIA	ITP-230	230	6.15	4.54	3.656+j21.288	10.945+j42.822	8.57	6.00	2.262+j16.884	9.863+j37.659
IXTEPEC	IXP-115	115	3.99	3.08	3.831+j16.179	7.048+j30.895	4.76	3.52	3.402+j14.967	7.062+j31.040
IXTEPEC POTENCIA	IPO-115	115	16.64	20.66	0.220+j3.983	0.093+j1.676	23.62	27.43	0.108+j3.090	0.099+j1.800
IXTEPEC POTENCIA	IPO-230	230	9.97	13.51	0.868+j13.295	0.178+j2.899	15.43	19.87	0.424+j9.456	0.192+j3.112
IXTEPEC POTENCIA	IPO-400	400	7.18	9.34	2.745+j32.038	0.727+j10.043	11.09	13.46	1.383+j22.862	0.781+j10.756
IXTLAN DE JUÁREZ	IXJ-115	115	3.06	2.05	4.972+j21.151	11.696+j52.564	3.41	2.26	4.813+j20.871	11.732+j52.793
IZUCAR DE MATAMOROS	IzM-115	115	2.83	1.88	7.753+j22.156	14.324+j57.190	3.13	2.06	7.661+j22.067	14.523+j57.889
IZUCAR DE MATAMOROS DOS	IZD-115	115	2.94	1.93	7.490+j21.272	14.483+j56.181	3.26	2.12	7.399+j21.182	14.658+j56.757
J. B. LOBOS	JBL-115	115	17.91	17.08	0.636+j3.651	0.841+j4.237	24.41	21.99	0.427+j2.961	0.809+j4.019
JALACINGO	JAL-115	115	9.74	11.16	1.111+j6.727	0.382+j4.256	11.94	13.41	0.830+j6.062	0.364+j4.057
JALACINGO	JAL-230	230	7.64	7.50	3.097+j17.101	2.736+j18.272	10.03	9.36	2.100+j14.417	2.641+j17.046
JALAPA DOS	JLD-115	115	4.80	3.89	2.802+j13.557	4.837+j23.125	5.46	4.33	2.527+j13.125	4.881+j23.411
JALPA	JAA-115	115	7.64	6.04	1.604+j8.541	4.381+j15.344	8.71	6.72	1.476+j8.258	4.399+j15.473
JARDÍN	JDN-115	115	21.48	25.76	0.520+j3.046	0.200+j1.606	29.82	34.09	0.328+j2.427	0.213+j1.619
JARDÍN	JDN-230	230	12.78	14.09	1.812+j10.227	1.215+j7.568	17.12	17.74	1.151+j8.456	1.289+j7.745
JIUTEPEC	JIU-115	115	9.89	8.94	1.051+j6.628	1.038+j8.808	10.92	9.71	0.949+j6.620	1.097+j9.124
JOJUTLA	JJT-115	115	6.59	4.71	2.075+j9.855	4.358+j21.739	7.34	5.19	1.942+j9.758	4.377+j21.913
JUCHITÁN DOS	JUD-115	115	8.79	12.07	1.236+j7.453	0.110+j1.638	11.76	15.61	0.800+j6.161	0.115+j1.755
JUCHITÁN DOS	JUD-230	230	5.32	6.91	3.780+j24.679	0.815+j8.194	8.05	9.78	2.059+j18.023	0.858+j8.708
JUCHITÁN UNO	JUC-115	115	6.92	7.33	1.881+j9.411	1.663+j8.152	8.78	8.81	1.456+j8.194	1.678+j8.297
JUILE	JUI-115	115	4.31	2.69	3.890+j14.890	9.844+j42.410	4.90	3.01	3.726+j14.422	9.734+j41.887
JUILE	JUI-230	230	10.81	12.69	1.037+j12.243	0.524+j6.940	13.74	15.30	0.566+j10.613	0.558+j7.394
JUILE	JUI-400	400	13.29	12.95	2.359+j17.221	3.061+j18.722	21.35	17.66	1.101+j11.845	3.206+j19.082
JUY JUY	JUY-115	115	12.38	12.98	0.815+j5.299	0.592+j4.608	15.12	15.18	0.622+j4.792	0.601+j4.715
KILOMETRO VEINTE	KLV-115	115	19.92	21.42	0.528+j3.292	0.291+j2.835	25.06	25.42	0.336+j2.895	0.301+j2.902
KILOMETRO VEINTE	KLV-230	230	12.36	12.94	1.872+j10.578	1.309+j9.887	16.93	16.33	1.042+j8.562	1.347+j9.813
KIMBERLEY CLARK	KIA-115	115	12.58	10.31	1.120+j5.159	1.624+j8.664	14.11	11.34	1.030+j5.071	1.647+j8.853
KIMBERLEY CLARK, PUÉ.	KIC-115	115	11.67	9.30	1.219+j5.559	1.905+j9.906	13.07	10.23	1.129+j5.471	1.929+j10.095
KIMBERLEY CLARK, VER.	KIM-115	115	12.86	11.60	0.902+j5.082	1.002+j6.801	15.54	13.27	0.716+j4.644	1.073+j7.051
KRUPP METALÚRGICA	KRU-115	115	14.20	9.03	0.795+j4.608	2.972+j12.411	15.96	10.03	0.734+j4.517	2.969+j12.399



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
LA BARRA	LBR-115	115	3.50	4.22	4.077+j18.515	1.395+j9.507	3.89	4.65	4.012+j18.322	1.444+j9.828
LA CHOCA	LCH-115	115	15.06	13.82	0.803+j4.334	1.173+j5.785	18.00	15.75	0.647+j4.005	1.184+j5.882
LA CIÉNEGA	CIG-115	115	6.53	6.92	2.257+j9.908	0.992+j8.432	7.37	7.61	2.084+j9.693	1.069+j8.894
LA CIÉNEGA	CIG-230	230	3.63	3.69	7.774+j35.706	4.607+j34.681	4.16	4.09	7.000+j34.433	4.956+j36.394
LA CURVA	LVA-115	115	7.99	5.88	1.200+j8.222	3.192+j17.148	9.57	6.79	0.872+j7.585	3.102+j16.832
LA GARZA	LGZ-115	115	1.89	1.13	9.659+j33.740	28.522+j102.247	2.12	1.25	9.396+j33.225	28.524+j102.215
LA GLORIA MANIOBRAS	GLM-115	115	3.78	3.63	3.522+j17.201	2.111+j21.264	4.12	3.87	3.589+j17.374	2.301+j22.579
LA GRANJA TRES	GRT-115	115	8.57	5.65	1.421+j7.613	4.376+j19.380	13.58	9.62	0.838+j5.313	2.421+j11.756
LA GUADALUPE	LGP-115	115	1.65	1.11	10.244+j38.911	30.760+j94.942	1.86	1.24	9.879+j38.113	30.358+j93.531
LA HACIENDA	HDA-115	115	11.58	8.06	1.122+j5.623	2.792+j13.266	13.63	9.08	0.969+j5.271	2.798+j13.327
LA MALINCHE	MLC-115	115	19.88	23.93	0.654+j3.275	0.133+j1.723	22.56	26.46	0.571+j3.186	0.147+j1.853
LA MALINCHE	MLC-230	230	12.54	13.86	2.182+j10.360	0.922+j7.689	14.83	15.75	1.784+j9.684	1.010+j8.109
LA MIRA	MRA-115	115	4.59	4.80	4.520+j13.728	2.758+j11.882	6.20	6.06	2.819+j11.441	2.804+j11.968
LA REFORMA	RFA-115	115	10.12	7.66	1.060+j6.472	2.646+j13.058	11.73	8.57	0.951+j6.151	2.658+j13.175
LA REINA	RNA-115	115	6.57	6.19	1.978+j9.917	2.078+j11.886	7.57	6.93	1.718+j9.488	2.119+j12.162
LA TINAJA	TNJ-115	115	1.60	0.88	9.493+j40.272	37.560+j139.723	2.64	1.45	6.123+j26.933	26.365+j92.199
LA TRINITARIA	TNI-115	115	1.27	0.86	15.303+j49.798	46.830+j118.398	1.44	0.96	14.506+j48.608	46.424+j116.979
LA UNIÓN	UNN-115	115	5.50	2.34	2.626+j11.784	16.535+j58.778	8.42	4.19	1.798+j8.489	9.231+j33.649
LA VENTA DOS	VED-115	115	4.79	3.80	3.046+j13.517	5.665+j24.266	5.36	4.21	3.035+j13.285	5.672+j24.222
LA VENTA DOS	LVD-230	230	4.54	5.76	4.268+j28.942	1.427+j11.092	6.79	8.02	2.395+j21.391	1.493+j11.737
LA VENTA MANIOBRAS	VMN-230	230	4.02	4.99	4.639+j32.721	1.110+j14.309	6.04	6.91	2.515+j24.036	1.221+j15.243
LA VENTA PEMEX	VEP-115	115	4.73	3.72	3.086+j13.699	5.863+j24.990	5.28	4.12	3.078+j13.473	5.871+j24.946
LACANJÁ	LCJ-115	115	0.71	0.48	24.457+j90.016	90.661+j210.103	0.80	0.54	23.293+j88.523	87.706+j203.312
LAGUNA DE TRES PALOS	LTP-115	115	4.78	5.08	4.635+j13.087	2.288+j10.978	6.45	6.39	2.940+j10.943	2.332+j11.130
LAGUNA VERDE	LAV-230	230	11.05	11.65	1.205+j11.958	0.653+j10.216	13.24	13.60	0.817+j11.001	0.602+j10.237
LAGUNA VERDE	LAV-400	400	14.08	15.87	2.042+j16.277	0.842+j10.964	20.71	23.83	0.938+j12.228	0.399+j7.581
LAMOSA	LOA-115	115	22.17	18.89	0.479+j2.956	0.777+j4.522	24.49	20.52	0.440+j2.950	0.796+j4.670
LAPSOLITE	LSL-115	115	16.01	11.72	0.681+j4.090	2.200+j8.477	17.68	12.80	0.642+j4.080	2.208+j8.627
LAS BRISAS	BRS-115	115	18.69	16.73	0.621+j3.497	0.760+j4.813	25.40	20.91	0.418+j2.845	0.761+j4.781
LAS CHOAPAS DOS	LHD-115	115	3.35	2.08	5.608+j19.037	12.402+j54.992	3.77	2.31	5.489+j18.584	12.410+j54.948
LAS JUNTAS	LJU-115	115	1.75	1.12	10.905+j36.278	24.661+j99.174	1.94	1.23	10.779+j36.167	24.822+j99.786
LAS MARGARITAS	MGS-115	115	4.51	2.89	2.676+j14.465	8.161+j38.808	5.16	3.23	2.477+j13.931	8.185+j38.629
LAS MATAS	MAS-115	115	11.81	9.19	0.953+j5.541	1.828+j10.436	15.24	10.84	0.711+j4.739	1.870+j10.594
LAS TRANCAS	TRN-115	115	6.23	5.53	2.111+j10.444	2.721+j14.567	7.16	6.18	1.858+j10.033	2.759+j14.832
LAS VIGAS DOS	VGS-115	115	4.63	3.15	2.811+j14.056	7.288+j33.791	5.59	3.60	2.301+j12.868	7.281+j33.897
LERDO	LRD-115	115	1.84	1.05	11.880+j33.997	31.163+j114.567	2.24	1.56	9.842+j31.122	18.454+j73.180
LIBERACIÓN MEXICANA	LMX-115	115	2.67	2.17	6.220+j24.057	8.302+j41.236	3.06	2.43	5.760+j23.125	8.344+j41.810
LIBRES	LIB-115	115	4.80	3.16	3.603+j13.353	8.111+j34.488	5.38	3.50	3.486+j13.117	8.147+j34.514
LOMA BONITA DOS	LBD-115	115	3.39	2.04	5.182+j18.890	17.255+j56.063	3.89	2.30	4.950+j18.091	17.257+j55.598
LOMAS COCOYOC	LOC-115	115	9.22	6.49	1.514+j7.043	3.234+j15.992	10.06	7.06	1.454+j7.114	3.247+j16.220
LOMAS DEL MAR	LMM-115	115	5.45	6.26	4.129+j11.453	1.147+j7.136	7.63	8.18	2.432+j9.258	1.189+j7.299
LÓPEZ MATEOS	LME-115	115	11.84	9.46	1.644+j5.362	1.923+j10.024	14.18	11.00	1.532+j4.919	1.935+j9.686



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
LOS AMATES	LAT-115	115	6.08	7.90	3.858+j10.207	0.221+j3.166	8.81	10.88	2.167+j8.002	0.263+j3.328
LOS AMATES	LAT-230	230	3.30	4.04	13.723+j37.809	1.606+j17.523	4.94	5.60	7.189+j28.686	1.871+j18.170
LOS ARCOS	AOS-115	115	14.09	15.33	0.621+j4.672	0.289+j3.573	15.38	16.49	0.550+j4.717	0.300+j3.788
LOS RÍOS	LRS-115	115	5.43	4.32	2.409+j11.980	4.715+j21.300	6.94	6.10	1.374+j10.426	2.139+j14.865
LOS RÍOS	LRS-230	230	3.95	2.90	7.738+j32.754	17.317+j68.805	6.11	5.08	3.358+j23.652	7.058+j38.486
MACTUMATZA	MAA-115	115	9.71	6.15	1.422+j6.689	2.973+j18.573	11.71	7.04	1.187+j6.121	2.969+j18.453
MACULTEPEC	MCL-115	115	4.55	3.44	3.716+j14.114	10.981+j27.130	5.13	3.81	3.548+j13.798	11.001+j27.289
MACUSPANA	MCP-115	115	6.05	4.77	2.201+j10.744	6.135+j19.083	7.12	5.49	1.836+j10.091	6.057+j18.594
MACUSPANA DOS	MCD-115	115	11.76	10.56	0.777+j5.590	1.082+j7.667	14.51	12.59	0.460+j5.013	0.992+j7.351
MACUSPANA DOS	MCD-230	230	9.27	7.99	2.700+j14.061	4.160+j21.419	12.85	10.40	1.430+j11.281	3.704+j19.362
MAGDALENA MANIOBRAS	MMA-400	400	10.14	10.35	2.546+j22.635	2.240+j21.445	12.47	12.00	1.798+j20.292	2.479+j22.708
MAGDALENA MANIOBRAS DOS	MDM-230	230	8.18	8.75	2.469+j16.042	1.581+j13.073	9.80	10.02	1.966+j14.779	1.734+j13.832
MALINALTEPEC	MLN-115	115	0.84	0.48	22.557+j76.133	61.515+j245.057	0.93	0.54	21.536+j75.302	61.564+j245.178
MALPASO	MPS-115	115	6.20	7.39	1.562+j10.589	0.299+j5.673	6.85	8.00	1.527+j10.548	0.345+j6.126
MALPASO	MPS-400	400	15.10	16.74	2.173+j15.135	1.065+j11.063	29.10	31.72	0.616+j8.709	0.429+j6.254
MALPASO DOS	MPD-230	230	12.71	14.52	0.948+j10.409	0.280+j6.761	17.83	19.59	0.370+j8.184	0.207+j5.949
MALPASO TRES	MPE-115	115	6.10	7.13	1.606+j10.767	0.426+j6.258	6.74	7.73	1.571+j10.726	0.472+j6.711
MANDINGA	MDG-115	115	9.87	3.92	1.152+j6.630	14.243+j34.792	13.05	4.71	0.845+j5.530	13.721+j32.993
MANIOBRAS GENERADORES EÓLICOS DE MÉXICO	GEM-115	115	2.35	2.54	7.365+j27.272	3.436+j21.573	2.72	2.86	6.700+j25.966	3.515+j22.699
MANIOBRAS PRO MDF	MPR-115	115	6.75	6.17	2.206+j9.587	3.011+j12.668	7.63	6.78	2.109+j9.343	3.189+j13.102
MANIOBRAS SOLAR XOXOCOTLA	SMX-115	115	9.32	9.17	1.173+j7.025	0.934+j7.438	10.57	10.13	1.025+j6.834	0.965+j7.760
MANLIO FABIO ALTAMIRANO	MFA-230	230	16.02	18.79	1.443+j8.162	0.543+j4.735	21.75	24.16	0.866+j6.661	0.570+j4.826
MANLIO FABIO ALTAMIRANO	MFA-400	400	11.21	11.99	3.222+j20.357	2.150+j16.711	15.73	15.69	1.712+j16.064	2.205+j16.428
MANUEL MORENO TORRES	MMT-115	115	13.96	16.90	0.649+j4.713	0.069+j2.296	17.21	20.07	0.461+j4.218	0.079+j2.417
MANUEL MORENO TORRES	MMT-400	400	14.40	16.97	2.308+j15.871	0.584+j8.685	31.70	36.48	0.497+j7.999	0.252+j4.474
MAPASTEPEC	MAP-115	115	3.76	2.62	4.873+j16.959	11.481+j38.997	4.44	3.01	4.225+j15.890	11.297+j38.130
MARTÍNEZ DE LA TORRE DOS	MDD-115	115	3.78	3.09	4.141+j17.071	8.796+j28.211	4.37	3.57	3.786+j16.266	8.399+j26.808
MARTÍNEZ DE LA TORRE TRES	MTT-115	115	3.70	2.86	4.021+j17.507	9.366+j32.705	4.25	3.27	3.703+j16.781	9.031+j31.507
MATAPIONCHE	MPH-115	115	1.69	0.94	9.159+j38.265	34.805+j127.911	2.86	1.62	5.829+j24.904	23.633+j80.431
MATÍAS ROMERO	MRO-115	115	6.71	5.47	2.064+j9.683	3.345+j16.382	8.13	6.29	1.765+j8.807	3.369+j16.593
MATÍAS ROMERO POTENCIA	MSP-115	115	9.37	9.89	1.052+j7.010	0.832+j6.016	11.61	11.59	0.795+j6.241	0.865+j6.305
MATÍAS ROMERO POTENCIA	MSP-230	230	5.98	6.17	3.267+j21.974	4.089+j20.136	8.00	7.63	2.194+j18.132	4.232+j20.678
MAZATAN	MAZ-115	115	4.16	3.63	3.762+j15.503	6.471+j21.884	4.98	4.18	3.068+j14.356	6.599+j21.985
MAZATEPEC	MZT-230	230	6.69	5.10	2.951+j19.633	8.978+j37.547	10.87	10.46	1.323+j13.378	1.225+j13.177
MEDIA LUNA	MLU-115	115	3.11	2.42	6.740+j20.283	13.783+j37.049	3.95	2.95	4.960+j17.795	13.139+j34.692
METALOIDES	MET-115	115	19.91	14.44	0.765+j3.246	1.354+j7.038	22.73	16.16	0.694+j3.138	1.351+j7.035
METEPEC	MEC-115	115	6.99	4.25	2.323+j9.204	7.173+j26.972	7.79	4.70	2.245+j9.102	7.178+j26.995
METLATONOC	MTL-115	115	0.94	0.59	19.590+j67.722	44.468+j192.268	1.08	0.66	17.627+j65.298	44.509+j192.187
MEZCALA	MZL-115	115	6.70	6.77	2.721+j9.532	1.519+j9.374	10.56	10.35	1.039+j6.840	0.892+j7.038
MEZCALA	MZL-230	230	4.46	4.41	9.198+j28.350	6.119+j29.822	8.90	8.37	2.837+j16.167	3.490+j18.150
MEZCALAPA	MEZ-115	115	6.20	4.95	2.288+j10.467	6.156+j18.091	6.98	5.47	2.192+j10.232	6.182+j18.288
MEZCALAPA SWITCHEO	MZW-230	230	7.92	6.41	2.367+j16.602	5.433+j28.786	10.46	8.26	1.557+j13.873	4.583+j24.985



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
MIAHUATLAN	MHT-115	115	1.99	1.37	9.505+j32.067	19.226+j75.997	2.20	1.51	9.261+j31.841	19.287+j76.342
MIAHUATLÁN DOS	MUD-115	115	2.12	1.51	8.698+j30.014	16.819+j67.269	2.36	1.66	8.462+j29.791	16.883+j67.629
MINAS	MIS-69	69	1.54	1.06	5.589+j25.255	14.928+j59.030	2.27	2.70	2.932+j19.056	0.415+j10.251
MINATITLÁN DOS	MID-115	115	27.28	30.92	0.344+j2.410	0.092+j1.710	36.85	38.71	0.224+j1.969	0.105+j1.760
MINATITLÁN DOS	MID-400	400	12.21	13.52	2.793+j18.706	1.394+j14.517	19.23	18.65	1.501+j13.126	1.524+j14.730
MINATITLÁN UNO	MIU-115	115	9.38	5.86	1.190+j6.979	4.308+j19.529	10.98	6.61	1.067+j6.564	4.317+j19.517
MINERA AUTLÁN, PUÉ.	MAU-115	115	7.69	8.59	1.696+j8.460	0.900+j5.966	9.52	10.47	1.345+j7.555	0.940+j5.515
MINERA CAPELA	MCA-115	115	1.53	1.00	14.151+j40.894	31.137+j107.466	1.80	1.15	12.282+j38.610	30.479+j105.085
MINERA CUZCATLAN	MCN-115	115	3.03	2.25	5.464+j21.198	9.487+j43.800	3.37	2.47	5.274+j20.991	9.563+j44.247
MINERA FILOS-BERMEJAL	MFB-115	115	4.74	3.91	3.789+j13.490	4.445+j22.408	6.62	5.13	2.095+j10.824	3.817+j20.072
MISANTLA DOS	MSD-115	115	2.08	1.62	8.441+j30.801	20.883+j55.508	2.35	1.83	8.073+j30.004	20.482+j54.099
MITLA	MTX-115	115	1.94	1.29	8.691+j33.042	19.652+j84.223	2.15	1.42	8.515+j32.832	19.688+j84.545
MOCAMBO	MCB-115	115	14.89	9.76	0.865+j4.376	1.787+j11.446	20.63	12.62	0.597+j3.490	1.524+j10.321
MOCAMBO	MCB-115B	115	14.89	9.76	0.865+j4.376	1.787+j11.446	20.63	12.62	0.597+j3.490	1.524+j10.321
MOTOZINTLA	MTO-115	115	1.61	1.04	13.300+j38.958	36.047+j103.350	1.84	1.16	12.390+j37.790	35.904+j102.602
MOZIMBA	MOZ-115	115	5.12	5.85	4.091+j12.302	1.924+j7.562	7.11	7.64	2.402+j9.985	1.964+j7.651
MUNDO IMPERIAL	MIP-115	115	4.64	4.56	4.773+j13.478	3.059+j14.488	6.22	5.66	3.077+j11.335	3.102+j14.641
NANCHITAL DOS	NND-115	115	9.91	6.81	1.562+j6.517	3.351+j15.638	11.69	7.69	1.438+j6.082	3.364+j15.688
NAONILCO	NAO-115	115	4.20	3.38	3.551+j15.411	5.470+j26.854	4.77	3.75	3.277+j14.951	5.517+j27.154
NISSAN	NSN-115	115	10.31	10.02	1.163+j6.331	0.897+j6.956	11.37	10.88	1.039+j6.340	0.935+j7.229
NOCHIXTLAN	NCH-115	115	1.93	1.30	9.764+j32.962	25.547+j80.682	2.14	1.43	9.614+j32.815	25.612+j81.012
NOGALES	NGL-115	115	9.34	6.75	1.917+j6.842	3.540+j14.909	11.10	7.78	1.711+j6.350	3.490+j14.633
NORTE	NOR-115	115	33.57	27.61	0.416+j1.933	0.563+j3.258	39.41	31.56	0.346+j1.821	0.557+j3.226
NUEVO MORELOS	NMO-115	115	3.73	2.28	4.627+j17.197	11.675+j50.505	4.23	2.55	4.444+j16.692	11.629+j50.316
NUEVO PEMEX	NPX-115	115	4.51	3.44	3.109+j14.375	10.912+j27.131	5.08	3.80	3.014+j14.056	10.933+j27.333
OAXACA	OAX-115	115	4.61	4.14	3.511+j13.973	4.400+j18.815	5.16	4.57	3.333+j13.755	4.439+j19.157
OAXACA DOS	OXD-115	115	5.83	5.29	2.658+j11.078	3.155+j14.531	6.56	5.85	2.488+j10.860	3.191+j14.851
OAXACA PONIENTE	OAP-115	115	4.96	5.05	3.254+j12.981	2.544+j12.462	5.56	5.57	3.081+j12.770	2.583+j12.817
OAXACA POTENCIA	OXP-115	115	6.81	8.09	2.169+j9.511	0.319+j5.169	7.66	8.91	2.007+j9.318	0.360+j5.543
OAXACA POTENCIA	OXP-230	230	3.99	4.18	7.072+j32.514	2.756+j28.839	4.59	4.65	6.309+j31.187	3.090+j30.513
OAXACA UNO	OAU-230	230	3.61	4.36	5.715+j36.295	2.114+j18.345	5.12	5.75	3.698+j28.285	2.256+j19.266
OCOTLÁN	OCL-115	115	3.59	3.49	3.943+j18.056	3.738+j19.702	4.01	3.84	3.746+j17.847	3.812+j20.138
OCOZINGO	OCO-115	115	1.13	0.74	18.379+j55.743	57.733+j141.075	1.26	0.82	17.968+j55.167	57.669+j140.478
OCOZOCUAUTLA	OCZ-115	115	6.51	4.46	2.304+j9.934	4.899+j23.845	7.59	5.03	2.071+j9.395	4.902+j23.813
OJO DE AGUA POTENCIA	OJP-115	115	20.79	21.94	0.520+j3.151	0.248+j2.709	26.03	26.15	0.360+j2.783	0.268+j2.771
OJO DE AGUA POTENCIA	OJP-400	400	12.12	12.90	3.234+j18.774	1.561+j15.821	18.40	17.29	1.991+j13.660	1.681+j16.510
OLINALA	OLN-115	115	1.28	0.88	14.632+j49.645	34.701+j117.056	1.49	1.00	12.717+j47.181	34.741+j116.977
OLMECA	OLM-115	115	21.47	22.47	0.498+j3.052	0.368+j2.720	31.11	31.72	0.288+j2.330	0.306+j2.313
OLMECA	OLM-400	400	10.73	11.27	3.344+j21.259	2.473+j18.602	14.96	14.69	1.796+j16.884	2.383+j18.107
OMEALCA	OME-115	115	3.68	1.86	2.811+j17.840	15.978+j69.221	4.85	3.40	2.011+j14.929	6.368+j33.813
OMETEPEC	OMT-115	115	1.50	0.88	15.460+j41.533	36.750+j131.790	1.68	0.98	14.583+j40.836	36.798+j131.919
ORIENTE	ORT-115	115	18.10	12.90	0.823+j3.575	1.594+j7.978	20.47	14.29	0.754+j3.488	1.601+j8.053



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
ORIZABA	ORI-115	115	15.13	14.33	0.886+j4.299	0.886+j5.074	19.25	17.95	0.639+j3.740	0.772+j4.574
OXCHUC	OXC-115	115	1.58	1.03	12.939+j39.967	39.892+j100.923	1.77	1.15	12.545+j39.370	39.828+j100.328
PACHAMAMA II MANIOBRAS	MPA-400	400	11.70	12.61	2.599+j19.562	1.852+j15.530	15.15	15.45	1.579+j16.692	1.971+j16.155
PAGÉS	PAG-115	115	18.63	14.93	0.663+j3.502	0.878+j6.234	25.93	19.15	0.442+j2.781	0.812+j5.882
PAGÉS	PAG-115B	115	18.63	14.93	0.663+j3.502	0.878+j6.234	25.93	19.15	0.442+j2.781	0.812+j5.882
PAJARITOS DOS	PJD-115	115	16.64	15.68	0.768+j3.915	0.544+j5.079	20.97	19.29	0.636+j3.424	0.553+j4.615
PAKAL	PKN-115	115	2.62	1.89	6.004+j24.616	18.180+j51.802	3.09	2.31	4.946+j23.096	15.584+j45.349
PALENQUE	PLQ-115	115	2.11	1.50	7.724+j30.436	24.405+j65.932	2.46	1.79	6.657+j28.931	21.808+j59.478
PALMAR DE BRAVO	PLB-115	115	4.57	3.23	4.906+j13.669	7.935+j31.702	5.08	3.55	4.806+j13.544	8.009+j32.080
PALMAS	PMM-115	115	10.16	8.06	0.823+j6.485	2.174+j11.523	13.75	10.12	0.602+j5.278	2.094+j10.658
PANOTLA	PNA-115	115	12.12	8.04	1.537+j5.257	3.895+j13.319	13.53	8.88	1.477+j5.193	3.902+j13.377
PANTEPEC	PPC-115	115	8.90	10.46	1.183+j7.363	0.299+j4.255	10.05	11.52	1.125+j7.179	0.336+j4.541
PANTEPEC	PPC-230	230	5.53	5.48	3.745+j23.723	2.277+j24.945	6.39	6.08	3.422+j22.597	2.547+j26.279
PAPAGAYO	PPG-115	115	4.09	2.95	5.302+j15.323	13.717+j32.095	5.29	3.49	3.664+j13.304	13.768+j32.199
PAPALOTLA	PPL-115	115	19.68	13.16	0.626+j3.315	1.897+j8.223	22.46	14.75	0.555+j3.205	1.890+j8.182
PAPANOA	PPN-115	115	1.26	1.17	11.932+j51.163	39.111+j55.513	2.40	1.99	7.719+j29.483	25.506+j43.235
PAPANTLA DISTRIBUCIÓN	PAP-115	115	8.91	6.48	1.059+j7.373	3.329+j15.557	10.84	7.60	0.925+j6.672	3.295+j14.905
PAPANTLA POTENCIA	PPT-115	115	19.79	18.77	0.256+j3.345	0.508+j3.880	22.71	20.99	0.224+j3.208	0.554+j3.941
PAPANTLA POTENCIA	PPT-400	400	15.74	13.42	1.432+j14.604	4.175+j21.851	19.58	15.82	0.996+j12.939	4.339+j21.694
PAPELERA TUXTEPEC	PTU-230	230	5.08	3.65	3.851+j25.867	12.545+j55.449	5.96	4.17	3.293+j24.272	12.536+j54.731
PARAÍSO	PSO-115	115	6.89	5.89	1.784+j9.477	3.514+j14.405	7.80	6.52	1.649+j9.217	3.574+j14.655
PAREDÓN PEMEX	PPX-115	115	2.58	1.84	6.268+j24.957	21.464+j52.804	2.87	2.03	6.168+j24.726	21.489+j53.001
PARQUE INDUSTRIAL	PRQ-115	115	5.53	3.76	2.044+j11.822	6.539+j28.525	6.25	4.17	1.912+j11.520	6.551+j28.621
PARQUE INDUSTRIAL DE ENERGÍA RENOVABLE, S.A. DE C.V.	PIE-230	230	4.07	4.51	3.195+j32.435	1.585+j23.184	4.46	4.84	3.070+j32.628	1.771+j25.000
PARQUE INDUSTRIAL DE ENERGÍA RENOVABLE, S.A. DE C.V.	PIE-230B	230	3.86	4.20	3.486+j34.210	2.261+j26.089	4.22	4.51	3.365+j34.415	2.460+j27.966
PARRILLA	PLL-115	115	15.90	14.27	0.673+j4.122	0.947+j5.753	19.43	16.50	0.482+j3.727	0.956+j5.817
PASO DEL TORO	PDT-115	115	10.56	7.44	1.142+j6.184	3.041+j13.968	15.82	10.79	0.757+j4.554	2.312+j10.960
PE INGENIO	EIN-230	230	3.67	4.35	5.124+j35.818	2.397+j19.559	5.39	5.87	2.951+j26.939	2.508+j20.493
PEÑITAS	PEA-115	115	4.19	3.40	3.324+j15.477	9.645+j25.542	4.67	3.74	3.250+j15.311	9.667+j25.810
PEÑITAS	PEA-230	230	10.16	8.87	1.688+j12.963	3.321+j18.924	16.26	17.16	0.687+j8.958	0.518+j7.571
PEÑITAS DOS	PED-115	115	4.19	3.40	3.321+j15.499	9.616+j25.480	4.66	3.74	3.247+j15.335	9.638+j25.750
PEROTE DOS	PEE-115	115	4.88	5.14	2.640+j13.355	2.645+j11.282	6.13	6.16	2.002+j11.739	2.606+j11.436
PETATLÁN	PTT-115	115	1.96	1.76	7.233+j33.182	23.388+j39.888	3.06	2.60	5.628+j23.203	18.010+j32.553
PETROQUÍMICA ESCOLIN	PQS-115	115	11.89	11.11	0.841+j5.520	1.939+j6.554	16.90	14.84	0.624+j4.275	1.858+j5.670
PICHUCALCO	PCO-115	115	2.23	1.54	7.964+j28.726	27.703+j64.694	2.48	1.70	7.745+j28.354	27.713+j64.763
PIE DE LA CUESTA	PIC-115	115	6.11	7.94	3.546+j10.264	0.244+j3.158	8.95	11.04	1.912+j7.931	0.290+j3.303
PIE DE LA CUESTA	PIC-230	230	3.54	4.33	12.600+j35.350	1.644+j16.124	5.33	6.05	6.477+j26.634	1.891+j16.704
PIEDRAS NEGRAS	PNS-115	115	2.69	1.51	5.026+j24.143	18.748+j80.650	6.78	3.92	1.984+j10.590	7.784+j33.506
PIER II QUECHOLAC FELIPE ÁNGELES S.A. DE C.V.	PDQ-115	115	5.97	5.77	2.850+j10.750	1.370+j12.287	6.66	6.26	2.748+j10.618	1.519+j13.064
PINOTEPA NACIONAL	PIN-115	115	1.59	0.95	13.959+j39.303	31.115+j122.317	1.77	1.05	13.461+j38.946	31.169+j122.518
PLAYA DIAMANTE	PDI-115	115	4.91	5.17	4.513+j12.751	2.261+j10.949	6.66	6.53	2.817+j10.605	2.305+j11.101
PLAYA NORTE	PYN-115	115	19.19	16.04	0.641+j3.400	0.788+j5.522	26.68	20.50	0.429+j2.704	0.746+j5.281



Subestación eléctrica	Acónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
PLAYA VICENTE	PVC-115	115	1.83	1.05	9.422+j35.027	35.912+j111.352	2.06	1.17	9.183+j34.230	35.913+j110.885
PLAYAS	PYS-115	115	4.64	4.90	4.530+j13.585	2.588+j11.338	6.27	6.20	2.823+j11.301	2.635+j11.424
POCHUTLA	POC-115	115	1.61	0.98	13.146+j39.025	28.807+j116.762	1.79	1.08	12.823+j38.730	28.852+j116.990
POLIDESA	PLS-115	115	11.89	8.74	1.273+j5.437	2.805+j11.352	13.36	9.66	1.185+j5.336	2.815+j11.458
POLIFIL	POF-115	115	18.65	14.91	0.657+j3.499	1.198+j6.155	20.59	16.25	0.618+j3.492	1.216+j6.304
POMOCA	PMC-115	115	15.43	16.46	0.717+j4.243	0.475+j3.752	18.44	18.78	0.556+j3.921	0.493+j3.903
PONIENTE	PON-115	115	23.65	16.95	0.675+j2.725	1.222+j6.050	27.18	19.03	0.601+j2.619	1.223+j6.050
PORCEL	POR-115	115	19.85	13.18	0.657+j3.279	1.872+j8.269	22.63	14.74	0.587+j3.173	1.868+j8.247
POTRERO DOS	PTD-115	115	6.42	4.68	3.096+j9.867	6.328+j20.994	7.35	5.23	2.926+j9.501	6.355+j21.145
POZA RICA	PRI-69	69	14.37	16.17	0.178+j2.767	0.052+j1.878	25.27	31.65	0.058+j1.733	0.027+j0.523
POZA RICA	PRI-115	115	16.70	19.58	0.394+j3.957	0.141+j2.258	27.55	31.86	0.164+j2.646	0.053+j1.356
POZA RICA	PRI-230	230	14.22	15.16	0.899+j9.295	0.835+j7.610	18.77	19.18	0.502+j7.767	0.665+j6.974
POZA RICA DOS	PRD-230	230	15.67	17.32	0.724+j8.445	0.416+j6.077	20.40	21.48	0.400+j7.149	0.398+j5.816
POZA RICA DOS	PRD-400	400	23.99	20.99	0.899+j9.583	2.201+j13.457	31.36	25.81	0.536+j8.082	2.202+j12.973
POZA RICA TRES	PRT-69	69	9.27	7.65	0.470+j4.274	1.126+j6.995	13.43	10.60	0.341+j3.245	1.101+j5.640
POZO RANEY	PZR-115	115	4.12	2.84	5.198+j15.241	26.797+j28.674	5.41	3.39	3.512+j13.032	26.848+j28.767
POZOS HUAZUNTLAN	POZ-115	115	5.39	3.50	4.267+j11.547	8.585+j31.438	6.16	3.90	4.136+j11.113	8.599+j31.436
PROCTER & GAMBLE MANUFACTURAS S DE R.L. DE C.V.	PGC-115	115	9.21	8.05	1.294+j7.088	1.325+j10.707	10.17	8.67	1.253+j7.071	1.441+j11.205
PROENERMEX SANTA GERTRUDIS	PSG-115	115	12.80	10.46	0.970+j5.095	1.821+j8.512	15.81	13.17	0.743+j4.559	1.362+j7.287
PUEBLA DOS	PBD-115	115	40.42	40.28	0.310+j1.613	0.129+j1.688	47.19	45.15	0.244+j1.528	0.139+j1.775
PUEBLA DOS	PBD-115B	115	40.42	40.28	0.310+j1.613	0.129+j1.688	47.19	45.15	0.244+j1.528	0.139+j1.775
PUEBLA DOS	PBD-230	230	17.34	18.84	1.153+j7.570	0.406+j5.866	19.78	20.82	0.891+j7.331	0.441+j6.265
PUEBLA DOS	PBD-400	400	21.17	22.79	2.224+j10.678	1.048+j8.789	28.02	28.14	1.368+j8.963	1.091+j9.046
PUEBLA DOS MIL	PDM-115	115	25.80	20.36	0.548+j2.515	0.806+j4.593	29.50	22.64	0.481+j2.429	0.815+j4.674
PUEBLA UNO SF6	PSF-115	115	19.20	14.24	0.873+j3.345	1.096+j7.021	21.81	15.73	0.801+j3.251	1.129+j7.164
PUENTE DE IXTLA	PTI-85	85	3.15	2.21	2.646+j15.338	5.853+j35.153	3.39	2.38	2.632+j15.686	5.861+j35.661
PUERTO CHIAPAS	PUC-115	115	2.89	2.26	6.701+j21.969	13.466+j39.886	3.37	2.55	5.982+j20.859	13.595+j39.987
PUERTO ESCONDIDO	PUE-115	115	1.24	0.74	18.608+j50.237	39.762+j159.251	1.37	0.81	18.236+j49.974	39.812+j159.474
PUERTO FRANCO	PFR-115	115	11.64	9.68	1.545+j5.491	1.735+j9.399	13.95	11.29	1.429+j5.037	1.747+j9.035
PUERTO MADERO	PTM-115	115	3.08	2.43	6.337+j20.583	12.014+j36.583	3.60	2.76	5.618+j19.471	12.142+j36.684
PUERTO MARQUEZ	PUM-115	115	5.57	6.50	4.039+j11.219	0.948+j6.476	7.84	8.56	2.345+j9.020	0.990+j6.638
PUNTA IXTAPA, GRO.	PUI-115	115	4.27	3.24	2.283+j15.366	6.250+j29.764	6.00	4.25	2.075+j11.989	6.069+j26.456
PUNTA LIMÓN	PLI-115	115	1.99	1.43	8.151+j32.306	14.316+j72.920	2.18	1.55	8.218+j32.478	14.508+j74.239
QUEMADO	QMD-69	69	8.11	10.80	1.332+j4.725	0.018+j1.162	11.30	14.56	0.694+j3.815	0.095+j1.183
QUEMADO	QMD-115	115	6.44	8.65	3.690+j9.623	0.111+j2.200	9.65	12.41	1.985+j7.306	0.168+j2.292
QUEMADO	QMD-230	230	3.39	4.28	13.559+j36.789	0.893+j13.984	5.13	6.05	7.017+j27.618	1.164+j14.571
REAL DEL BOSQUE	RDB-115	115	9.51	6.98	1.363+j6.845	2.686+j14.351	11.47	8.06	1.128+j6.268	2.678+j14.207
REFINERÍA LÁZARO CÁRDENAS RECONFIGURACIÓN	RLC-115	115	10.58	6.96	1.048+j6.189	3.500+j15.856	13.67	11.62	0.773+j5.285	0.898+j8.199
REFINERÍA MINATITLÁN	RMN-115	115	9.60	5.92	1.088+j6.830	4.352+j19.500	11.19	6.65	0.983+j6.450	4.361+j19.502
REFINERÍA PEMEX	RFP-115	115	10.79	7.11	1.014+j6.070	3.401+j15.494	13.94	11.75	0.748+j5.186	0.936+j8.182
REFINERÍA SALINA CRUZ	RSC-115	115	4.29	4.06	3.542+j15.054	4.266+j18.072	4.87	4.46	3.347+j14.615	4.521+j19.046
RENACIMIENTO	REN-115	115	5.93	7.52	3.965+j10.480	0.376+j3.841	8.58	10.32	2.260+j8.206	0.422+j3.965



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
RESURRECCIÓN	RSN-115	115	14.82	9.87	0.968+j4.375	2.354+j11.012	16.71	10.96	0.898+j4.277	2.356+j11.039
REYES MANTECÓN	RMC-115	115	5.27	4.69	2.793+j12.287	3.500+j16.883	5.92	5.17	2.617+j12.062	3.563+j17.285
RIO BLANCO	RBO-115	115	9.07	6.50	1.612+j7.140	3.535+j15.643	10.68	7.42	1.419+j6.691	3.513+j15.499
RÍO COATAN	RCT-69	69	1.99	2.38	2.155+j19.879	0.466+j10.163	2.98	3.83	0.972+j14.658	0.119+j4.885
RÍO COATAN	RCT-115	115	3.61	3.13	5.168+j17.629	4.393+j26.426	4.58	3.94	3.806+j15.473	3.439+j23.351
RÍO MEDIO	RME-115	115	16.63	13.14	0.701+j3.930	1.170+j7.153	21.98	15.91	0.500+j3.285	1.176+j7.143
RODRÍGUEZ CLARA	RDC-115	115	2.65	1.63	6.714+j24.149	19.053+j69.867	2.98	1.82	6.526+j23.618	18.956+j69.287
SACRIFICIOS	SCF-115	115	15.82	10.44	0.796+j4.122	1.522+j10.661	21.94	13.37	0.544+j3.284	1.326+j9.786
SALINA CRUZ	SAC-115	115	4.53	4.22	3.288+j14.287	4.480+j17.910	5.19	4.67	3.044+j13.728	4.670+j18.624
SALOYA	SYA-115	115	14.49	12.87	0.877+j4.497	1.259+j6.494	17.26	14.62	0.721+j4.169	1.272+j6.600
SAMARIA	SMI-115	115	6.24	4.03	1.960+j10.459	6.348+j27.720	7.10	4.48	1.803+j10.123	6.355+j27.804
SAMARIA	SMI-115B	115	5.43	3.48	1.948+j12.077	6.970+j32.545	6.14	3.85	1.830+j11.752	6.983+j32.664
SAN CRISTÓBAL ORIENTE	SCO-115	115	2.73	1.80	7.282+j23.181	20.842+j58.432	3.10	2.01	6.914+j22.554	20.782+j57.843
SAN FELIPE OAXACA	SFO-115	115	4.56	4.02	3.471+j14.141	4.789+j19.907	5.11	4.43	3.296+j13.914	4.830+j20.247
SAN JACINTO TLACOTEPEC	JTL-115	115	1.66	1.06	10.114+j38.763	23.825+j105.220	1.84	1.17	9.795+j38.512	23.889+j105.522
SAN JERÓNIMO	JRN-115	115	1.74	1.37	11.468+j36.299	21.482+j65.504	2.80	2.13	6.855+j25.178	16.312+j47.661
SAN JOSÉ CHIAPA	JOC-230	230	4.38	3.11	5.298+j29.852	17.901+j65.153	5.12	3.60	4.580+j28.185	16.944+j62.202
SAN LORENZO	LRZ-115	115	39.58	35.79	0.294+j1.651	0.273+j2.254	47.03	41.63	0.225+j1.536	0.262+j2.194
SAN LUIS	SNL-115	115	1.78	0.99	8.646+j36.280	32.793+j121.957	3.10	1.76	5.328+j22.911	21.633+j74.497
SAN LUIS ACATLÁN	SLU-115	115	1.18	0.69	18.818+j53.105	46.877+j171.171	1.32	0.76	17.803+j52.272	46.925+j171.291
SAN LUIS MORELIA	SSM-115	115	1.13	0.71	17.771+j55.756	36.468+j159.160	1.25	0.78	17.668+j55.670	36.766+j160.312
SAN LUIS SAN PEDRO	SLS-115	115	1.05	0.72	18.608+j60.361	39.596+j143.788	2.29	1.73	8.370+j30.830	23.832+j58.254
SAN MARTIN	MAR-115	115	25.32	21.76	0.409+j2.590	0.617+j3.893	28.09	23.68	0.367+j2.574	0.634+j4.030
SAN MARTIN POTENCIA	MPT-115	115	28.26	26.01	0.352+j2.323	0.367+j2.969	31.23	28.11	0.312+j2.318	0.386+j3.120
SAN MARTIN POTENCIA	MPT-400	400	16.82	14.59	2.243+j13.544	3.130+j20.038	20.37	16.71	1.529+j12.379	3.244+j20.544
SAN MIGUEL	SMG-115	115	12.60	8.77	0.878+j5.195	4.128+j11.575	13.92	9.50	0.839+j5.179	4.356+j11.920
SAN MIGUEL SANTA FLOR	SMF-115	115	1.17	0.79	14.672+j54.727	45.438+j131.129	1.29	0.87	14.513+j54.560	45.478+j131.458
SAN PABLO HUIXTEPEC	HTP-115	115	4.47	4.33	3.252+j14.484	2.383+j16.131	5.00	4.77	3.071+j14.273	2.460+j16.584
SAN RAFAEL DOS	RFD-115	115	2.26	1.61	7.620+j28.437	23.389+j61.180	2.56	1.81	7.257+j27.638	22.988+j59.771
SÁNCHEZ TABOADA	SNT-115	115	1.60	0.94	11.147+j39.875	30.298+j125.765	1.79	1.04	10.960+j39.372	30.251+j125.574
SANTA ANITA	STN-115	115	16.24	14.70	0.910+j3.986	1.507+j5.309	18.26	16.21	0.842+j3.910	1.526+j5.423
SANTA FE	SNF-115	115	9.75	7.56	1.143+j6.710	3.061+j12.522	11.53	8.63	0.987+j6.257	3.067+j12.517
SANTA ROSA	RSO-115	115	1.24	0.73	18.169+j50.503	40.325+j160.142	1.37	0.81	17.738+j50.209	40.378+j160.355
SANTA SOFÍA	SNS-115	115	4.04	2.75	2.907+j16.161	9.091+j38.583	4.57	3.08	2.748+j15.758	8.989+j38.165
SANTO DOMINGO	STD-115	115	3.54	2.52	4.594+j18.181	9.447+j40.683	4.15	2.85	4.192+j17.083	9.454+j40.815
SANTO DOMINGO	SND-115	115	5.96	4.70	2.733+j10.806	7.428+j19.088	6.76	5.23	2.566+j10.489	7.448+j19.246
SARABIA	SRB-115	115	5.27	4.75	2.790+j12.276	3.356+j16.547	6.14	5.36	2.560+j11.607	3.383+j16.794
SCHPOINA	SCH-115	115	2.59	1.86	6.652+j24.783	20.607+j51.993	3.01	2.13	5.936+j23.499	20.209+j50.583
SIMOJOVEL	SMJ-115	115	1.22	0.77	14.412+j52.705	45.968+j141.436	1.35	0.85	14.186+j52.334	45.979+j141.505
SÍNTESIS ORGÁNICAS, TLAXCALA	SIA-115	115	10.87	7.98	1.391+j5.946	3.036+j12.440	12.20	8.82	1.303+j5.845	3.047+j12.547
SIVESA	SIV-115	115	12.03	11.18	1.211+j5.386	1.381+j6.664	14.96	13.52	0.941+j4.789	1.362+j6.321
SN. LORENZO POTENCIA	LRP-115	115	47.46	48.96	0.251+j1.376	0.094+j1.330	57.38	58.26	0.182+j1.260	0.083+j1.267



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
SN. LORENZO POTENCIA	LRP-115B	115	47.46	48.96	0.251+j1.376	0.094+j1.330	57.38	58.26	0.182+j1.260	0.083+j1.267
SN. LORENZO POTENCIA	LRP-400	400	21.16	22.23	2.161+j10.697	1.075+j9.566	27.47	27.11	1.342+j9.152	1.078+j9.724
SOLEDAD DE DOBLADO	SOD-115	115	4.03	2.36	3.830+j16.011	12.069+j49.996	4.60	2.64	3.640+j15.447	12.073+j49.946
SOYALÓ	SOY-115	115	5.28	3.58	2.968+j12.219	6.824+j29.587	6.10	4.03	2.717+j11.657	6.826+j29.525
SWITCHEO VILLACOMALTITLAN	SWV-115	115	2.92	2.11	6.573+j21.741	16.253+j45.997	3.42	2.41	5.779+j20.562	16.113+j45.231
TABACHINES	TBH-85	85	6.20	5.13	1.094+j7.840	1.558+j12.805	6.53	5.41	1.067+j8.193	1.567+j13.310
TABASCO POTENCIA	TSP-230	230	13.46	15.39	1.636+j9.726	0.583+j6.650	18.73	19.72	0.793+j7.759	0.645+j6.810
TABASCO POTENCIA	TSP-400	400	8.69	8.90	4.406+j26.208	2.542+j25.597	12.46	11.40	1.980+j20.289	2.805+j26.192
TABASQUILLO	TBQ-115	115	2.25	1.60	8.138+j28.313	26.173+j61.354	2.51	1.76	7.964+j28.000	26.193+j61.513
TACOTALPA	TCT-115	115	2.51	1.75	6.993+j25.557	24.115+j56.413	2.80	1.94	6.775+j25.183	24.125+j56.481
TAJÍN	TAJ-115	115	13.89	13.81	0.636+j4.738	1.246+j4.744	16.90	16.77	0.544+j4.287	1.235+j4.211
TALLERES Y ACEROS S.A. (TYASA)	TYS-400	400	11.69	12.39	3.303+j19.486	1.523+j16.579	17.49	16.45	2.055+j14.374	1.657+j17.346
TAMARINDO DOS	TDD-115	115	5.60	4.23	2.146+j11.664	4.572+j23.559	6.25	4.64	2.058+j11.507	4.609+j23.948
TAMAZULAPAN DOS	TAD-115	115	1.70	1.08	11.177+j37.468	27.057+j103.063	1.88	1.18	11.041+j37.345	27.179+j103.524
TAMSA DOS	TSD-230	230	11.68	10.55	2.022+j11.190	3.052+j14.845	14.89	12.63	1.424+j9.707	3.078+j14.935
TAMSA DOS	TSD-230B	230	11.68	10.55	2.022+j11.190	3.052+j14.845	14.89	12.63	1.424+j9.707	3.078+j14.935
TAMULTE	TAT-115	115	14.16	12.15	0.814+j4.619	1.672+j7.200	16.82	13.78	0.683+j4.288	1.681+j7.291
TAMULTE MANIOBRAS	TMM-115	115	12.74	10.66	0.827+j5.144	1.747+j8.510	14.99	12.01	0.709+j4.819	1.759+j8.628
TAPACHULA	TCH-115	115	4.21	3.45	4.057+j15.254	4.585+j25.459	5.22	4.16	3.083+j13.650	4.337+j24.120
TAPACHULA AEROPUERTO	TAE-115	115	5.89	5.57	2.803+j10.925	1.716+j12.986	7.40	6.71	2.026+j9.655	1.766+j12.682
TAPACHULA NORTE	TNE-115	115	4.32	3.73	3.949+j14.840	3.705+j22.188	5.45	4.60	2.894+j13.079	3.283+j20.388
TAPACHULA ORIENTE	TOE-115	115	4.43	3.62	3.742+j14.528	4.270+j24.409	5.46	4.31	2.847+j13.080	4.161+j23.551
TAPACHULA POTENCIA	THP-115	115	6.65	7.03	2.297+j9.714	0.499+j8.310	8.38	8.45	1.606+j8.563	0.626+j8.411
TAPACHULA POTENCIA	THP-400	400	2.46	2.71	22.239+j91.166	5.101+j67.098	3.27	3.41	14.739+j76.329	6.417+j66.975
TAPANATEPEC	TNP-115	115	2.24	1.77	7.909+j28.504	11.295+j52.474	2.57	1.97	7.382+j27.399	11.342+j53.129
TAPIJULAPA	TPJ-115	115	2.05	1.42	8.511+j31.249	30.124+j69.825	2.28	1.57	8.292+j30.876	30.134+j69.894
TAXCO	TXO-115	115	2.30	2.01	7.190+j27.990	7.300+j40.546	2.80	2.33	5.340+j25.512	7.326+j40.856
TEAPA, TABASCO.	TTB-115	115	3.38	2.40	5.154+j18.986	17.133+j40.732	3.79	2.66	4.940+j18.609	17.143+j40.800
TEAPA, VERACRUZ	TEA-115	115	17.63	14.56	0.551+j3.725	1.071+j6.249	23.98	19.21	0.396+j3.020	0.873+j5.375
TECALI	TCL-115	115	25.83	26.18	0.429+j2.534	0.130+j2.492	29.10	28.51	0.366+j2.483	0.148+j2.681
TECALI	TCL-230	230	15.75	17.61	1.033+j8.366	0.389+j5.795	17.87	19.42	0.771+j8.139	0.428+j6.224
TECALI	TCL-400	400	18.22	18.92	2.315+j12.461	1.435+j11.394	24.41	23.29	1.411+j10.312	1.558+j11.925
TECAMACHALCO	TML-115	115	7.47	4.85	2.208+j8.605	4.862+j22.799	8.30	5.33	2.130+j8.537	4.877+j22.946
TECAMACHALCO II	TLD-115	115	7.15	4.65	2.186+j9.028	5.005+j23.766	7.93	5.11	2.113+j8.965	5.021+j23.922
TECNOLÓGICO	TNL-115	115	4.34	3.62	3.090+j14.990	5.485+j24.199	5.02	4.06	2.790+j14.273	5.603+j24.673
TECOMAXTLAHUACA	TCX-115	115	0.80	0.48	22.144+j79.830	54.247+j238.599	0.88	0.53	22.039+j79.745	54.549+j239.760
TECPAN	TCA-115	115	1.27	0.90	15.617+j49.981	31.984+j111.531	2.39	1.76	8.095+j29.467	21.302+j59.855
TEHUACÁN	THN-115	115	5.19	3.25	3.755+j12.232	8.147+j34.649	5.79	3.59	3.628+j12.090	8.174+j34.826
TEHUANTEPEC	THT-115	115	3.92	3.29	4.076+j16.433	7.125+j26.485	4.55	3.70	3.748+j15.599	7.203+j26.878
TEJALPA	TJA-115	115	10.61	10.28	1.070+j6.166	0.852+j6.819	11.69	11.16	0.946+j6.174	0.890+j7.091
TELMAC	TLM-115	115	15.68	13.97	0.896+j4.138	1.134+j5.735	17.72	15.40	0.806+j4.042	1.153+j5.903
TEMASCAL DOS	TMD-230	230	14.70	17.03	1.155+j8.959	0.288+j5.419	19.79	22.46	0.618+j7.353	0.280+j4.703



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
TEMASCAL DOS	TMD-400	400	17.12	18.77	2.388+j13.276	1.178+j10.174	27.36	26.65	1.155+j9.213	1.161+j10.025
TEMASCAL UNO	TMU-115	115	13.06	6.92	0.688+j5.036	3.761+j18.304	20.20	17.99	0.351+j3.599	0.332+j4.755
TEMASCAL UNO	TMU-230	230	11.91	11.78	1.526+j11.045	1.834+j11.481	16.20	17.35	0.866+j8.976	0.714+j7.099
TEMAXCALAC	TXB-115	115	19.76	15.66	0.518+j3.320	1.233+j5.910	21.82	17.05	0.479+j3.313	1.249+j6.057
TEMIXCO	TMX-85	85	6.43	5.07	1.134+j7.546	1.676+j13.679	6.77	5.36	1.107+j7.899	1.684+j14.185
TENOSIQUE	TNQ-115	115	1.48	1.02	12.020+j43.198	39.520+j97.956	1.69	1.19	10.884+j41.708	36.701+j91.292
TEPALCINGO	TPL-115	115	4.41	2.79	3.142+j14.712	8.270+j40.588	4.84	3.05	3.084+j14.783	8.282+j40.819
TEPEACA	TPE-115	115	7.45	5.05	1.444+j8.791	4.817+j21.089	8.25	5.55	1.380+j8.740	4.835+j21.278
TEPEJI	TPI-115	115	3.77	2.46	4.649+j16.963	9.568+j44.899	4.17	2.70	4.568+j16.893	9.641+j45.255
TEPEYAC, VERACRUZ	TPY-115	115	9.34	6.88	1.020+j7.036	3.012+j14.481	11.97	8.31	0.838+j6.044	2.951+j13.702
TEREFTALATOS	TRT-115	115	6.71	4.27	2.948+j9.448	6.497+j26.358	7.73	4.78	2.816+j9.016	6.512+j26.357
TERNIUM MÉXICO - LARGOS PUEBLA	TRP-230	230	6.89	5.11	3.584+j18.942	8.338+j38.307	7.68	5.63	3.315+j18.726	8.374+j38.706
TEZIUTLAN	TZT-69	69	3.61	3.89	0.584+j11.024	0.110+j8.677	4.30	4.60	0.440+j10.188	0.331+j8.181
TEZIUTLAN	TZT-115	115	8.04	9.24	1.586+j8.103	0.521+j5.106	10.00	11.37	1.236+j7.197	0.561+j4.656
TEZIUTLAN DOS	TZD-115	115	6.52	4.76	1.938+j9.990	4.132+j21.124	7.84	5.50	1.621+j9.173	4.164+j20.776
TEZOYUCA	TEZ-115	115	10.51	9.35	1.194+j6.205	1.385+j8.574	11.62	10.20	1.070+j6.192	1.423+j8.803
TIERRA BLANCA	TBL-115	115	3.89	2.29	4.136+j16.567	12.226+j51.782	4.96	2.93	3.522+j14.295	10.267+j44.148
TIERRA COLORADA	TIE-115	115	2.97	2.21	6.629+j21.365	9.535+j44.114	3.74	2.60	4.852+j18.918	9.567+j44.068
TIHUATLAN DOS	THD-115	115	8.35	5.80	1.338+j7.840	6.070+j17.671	9.45	6.43	1.276+j7.625	6.082+j17.777
TILAPA	TIL-69	69	1.04	0.83	14.768+j35.477	24.571+j61.735	1.11	0.90	14.806+j36.520	24.574+j62.886
TIXTLA	TIT-115	115	4.26	4.34	4.145+j15.011	2.829+j14.276	5.77	5.47	2.371+j12.442	2.868+j14.201
TLACOACHISTLAHUACA	THU-115	115	1.16	0.68	18.836+j53.885	45.978+j172.517	1.30	0.75	17.955+j53.194	46.025+j172.645
TLACOLULA	TLL-115	115	2.40	1.64	6.974+j26.795	14.965+j64.396	2.66	1.81	6.799+j26.583	15.001+j64.717
TLACOTALPAN	TTA-115	115	2.36	1.40	8.522+j26.790	25.412+j82.837	2.78	1.72	7.646+j25.181	21.476+j71.820
TLACOTEPEC	TTP-115	115	2.14	1.41	14.967+j27.191	29.551+j73.390	2.36	1.55	14.887+j27.126	29.565+j73.537
TLACOTEPEC	TCE-115	115	1.32	0.86	14.838+j47.952	36.401+j126.949	1.54	0.98	13.001+j45.551	35.739+j124.562
TLALTIZAPAN	TLZ-85	85	3.87	2.79	1.976+j12.513	4.278+j27.106	4.15	3.00	1.957+j12.864	4.286+j27.613
TLAPA NUEVA	TAN-115	115	1.42	0.93	13.650+j44.649	27.350+j117.036	1.67	1.05	11.701+j42.222	27.390+j116.956
TLAPACOYAN	TLY-115	115	4.80	6.19	3.209+j13.465	0.526+j4.576	5.71	7.33	2.762+j12.495	0.485+j4.333
TLATLAUQUITEPEC	TUQ-115	115	1.82	1.27	10.334+j34.907	19.150+j81.875	2.18	1.45	8.428+j32.438	19.190+j81.796
TLAXIACO	TXI-115	115	1.03	0.64	18.676+j61.520	46.118+j177.886	1.14	0.70	18.527+j61.391	46.217+j178.277
TONALÁ	TNA-115	115	1.62	1.46	11.096+j39.566	16.717+j51.719	1.84	1.62	10.410+j38.283	16.797+j52.847
TONANTZINTLA	TNZ-115	115	15.25	9.80	0.869+j4.267	2.688+j11.344	17.24	10.91	0.794+j4.161	2.686+j11.339
TRANSISTMICA (MANIOBRAS SEDENA)	TST-115	115	4.60	4.70	3.331+j14.053	3.013+j14.013	5.44	5.36	2.976+j13.100	3.091+j14.367
TRES ESTRELLAS	TTE-400	400	23.89	24.64	0.580+j9.650	0.416+j8.226	30.26	31.25	0.369+j8.388	0.348+j7.082
TRES VALLES	TVS-115	115	7.55	6.90	1.739+j8.620	1.314+j11.306	10.44	8.91	1.265+j6.880	1.504+j10.663
TROY	TOY-115	115	7.16	4.52	1.601+j9.135	4.965+j25.214	9.00	8.38	1.294+j8.011	0.756+j10.017
TULIPÁN	TLN-115	115	7.08	6.28	2.184+j9.119	3.685+j12.728	8.01	6.92	2.095+j8.880	3.847+j13.056
TUXPAN DOS	TUD-115	115	3.55	2.89	4.430+j18.197	10.368+j30.238	3.94	3.18	4.364+j17.997	10.404+j30.467
TUXPAN MANIOBRAS	TXM-400	400	16.87	18.76	1.021+j13.653	0.565+j9.544	27.55	31.37	0.406+j9.210	0.360+j5.728
TUXPAN VAPOR	TUV-400	400	16.72	17.48	1.053+j13.775	1.264+j11.968	28.54	33.10	0.377+j8.894	0.213+j5.087
TUXPANGO	TPG-115	115	9.98	8.42	1.309+j6.524	1.752+j10.226	12.46	10.62	0.993+j5.775	1.352+j8.828



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
TUXTEPEC DOS	TXD-115	115	5.95	4.27	1.944+j10.996	4.319+j24.238	6.91	4.78	1.812+j10.411	4.437+j24.572
TUXTEPEC TRES	TPS-115	115	8.04	5.98	1.416+j8.132	3.507+j16.644	9.84	6.91	1.228+j7.324	3.604+j16.582
TUXTLA GUTIÉRREZ	TGU-115	115	10.71	8.17	1.223+j6.076	2.215+j11.838	13.05	9.49	0.988+j5.508	2.211+j11.717
TUXTLA GUTIÉRREZ DOS	TGD-115	115	9.39	6.74	1.527+j6.906	3.049+j15.171	11.36	7.80	1.271+j6.305	3.024+j14.953
TUXTLA NORTE	TXN-115	115	10.79	8.18	1.191+j6.037	2.190+j11.899	13.18	9.52	0.951+j5.461	2.182+j11.753
TUXTLA SUR	TXS-115	115	12.70	10.45	0.840+j5.161	1.342+j8.541	15.75	12.30	0.617+j4.595	1.342+j8.434
UNILIVER	UNL-115	115	3.96	4.84	3.628+j16.361	1.024+j7.599	4.36	5.29	3.505+j16.370	1.062+j7.871
UNIÓN CARBIDE TEAPA	UCT-115	115	12.84	9.22	0.940+j5.085	2.197+j11.248	16.41	11.33	0.783+j4.381	1.999+j10.375
UNIÓN HIDALGO	UHI-230	230	9.10	11.92	0.987+j14.558	0.289+j4.283	12.06	15.18	0.583+j12.094	0.308+j4.626
UNIÓN HIDALGO	UHI-400	400	6.50	8.06	2.874+j35.434	1.571+j14.922	9.56	11.03	1.557+j26.522	1.674+j15.838
UXPANAPA DOS	UXD-115	115	6.00	3.88	2.584+j10.758	6.278+j28.798	6.89	4.34	2.469+j10.301	6.285+j28.754
UXPANAPA UNO	UXU-115	115	3.14	1.85	5.325+j20.460	14.507+j63.963	3.53	2.05	5.210+j20.003	14.514+j63.919
VALLE NACIONAL	VAN-115	115	3.12	2.02	4.560+j20.805	11.653+j54.821	3.50	2.24	4.423+j20.372	11.745+j55.127
VALSEQUILLO	VSE-115	115	7.93	4.85	1.509+j8.240	5.257+j23.760	8.82	5.35	1.438+j8.155	5.269+j23.845
VEGA DE ALATORRE	VDA-115	115	1.37	0.98	15.815+j45.736	31.194+j102.653	1.54	1.09	15.443+j44.942	30.792+j101.240
VENTA	VEN-69	69	2.44	2.88	6.074+j15.154	10.103+j4.695	4.05	5.06	2.656+j10.491	1.562+j4.111
VERACRUZ DOS	VRD-115	115	22.08	33.36	0.498+j2.966	0.098+j0.000	30.23	46.59	0.317+j2.395	0.101-j0.050
VERACRUZ DOS	VRD-230	230	13.79	14.67	1.681+j9.484	1.247+j7.968	18.72	18.73	1.036+j7.734	1.275+j7.899
VERACRUZ UNO	VRU-115	115	19.82	18.96	0.587+j3.298	0.657+j3.823	28.46	26.14	0.360+j2.540	0.560+j3.331
VETROTEX	VET-115	115	14.56	12.73	0.947+j4.460	1.129+j6.490	16.39	13.99	0.858+j4.372	1.152+j6.679
VIDRIERA DE TIERRA BLANCA	VTB-115	115	4.12	2.40	2.993+j15.848	12.462+j49.346	6.53	3.82	1.839+j11.039	8.336+j33.980
VILLA FLORES DOS	VFD-115	115	1.53	0.91	12.107+j41.709	36.355+j128.410	1.70	1.00	11.838+j41.198	36.357+j128.378
VILLAHERMOSA CENTRO	VHC-115	115	12.84	9.34	1.070+j5.059	2.424+j11.061	15.17	10.54	0.930+j4.724	2.432+j11.137
VILLAHERMOSA DOS	VID-115	115	13.08	10.80	0.901+j4.996	1.578+j8.423	15.61	12.29	0.716+j4.623	1.589+j8.499
VILLAHERMOSA NORTE	VHN-115	115	16.21	18.54	0.676+j4.040	0.252+j2.828	19.46	21.24	0.514+j3.718	0.272+j2.985
VILLAHERMOSA NORTE	VHN-230	230	10.25	10.37	2.080+j12.787	1.731+j13.276	12.99	12.24	1.395+j11.154	1.844+j13.692
VILLAHERMOSA PONIENTE	VIP-115	115	12.64	10.42	1.009+j5.155	2.206+j8.653	14.93	11.79	0.853+j4.818	2.213+j8.736
VILLAHERMOSA UNO	VIU-115	115	9.70	7.36	1.221+j6.735	2.627+j13.423	11.28	8.26	1.046+j6.392	2.642+j13.536
VISTAMAR	VIS-115	115	10.83	8.25	1.512+j5.941	2.484+j12.026	12.82	9.46	1.403+j5.520	2.501+j11.775
VOLKSWAGEN	VWG-115	115	41.88	39.15	0.283+j1.560	0.244+j1.962	50.04	45.84	0.214+j1.444	0.233+j1.899
XALAPA DE DÍAZ	JDD-230	230	5.48	4.25	3.373+j24.011	12.156+j43.821	6.46	4.87	2.783+j22.443	12.175+j43.305
XICOTENCATL	XIT-115	115	17.51	16.81	0.745+j3.719	0.624+j4.275	19.80	18.48	0.656+j3.630	0.647+j4.459
XOCHICALCO	XCH-85	85	3.08	2.17	2.726+j15.696	5.949+j35.601	3.32	2.34	2.711+j16.044	5.958+j36.109
XOXTLA	XOX-115	115	16.81	11.01	0.713+j3.885	2.332+j9.979	19.09	12.31	0.641+j3.772	2.324+j9.935
YAUTEPEC POTENCIA	YTP-115	115	19.72	20.68	0.369+j3.347	0.152+j2.918	21.29	21.92	0.307+j3.417	0.163+j3.140
YAUTEPEC POTENCIA	YTP-230	230	18.64	21.59	1.167+j7.030	0.335+j4.264	21.56	24.19	0.801+j6.727	0.361+j4.569
YAUTEPEC POTENCIA	YTP-400	400	21.07	21.85	2.116+j10.756	1.294+j9.945	25.57	25.18	1.340+j9.843	1.362+j10.427
YECAPIXTLA	YCP-230	230	10.53	9.55	1.849+j12.477	2.340+j16.390	11.91	10.51	1.504+j12.170	2.481+j17.002
YOLOMECATL	YOL-115	115	1.42	0.90	13.545+j44.661	33.796+j124.145	1.57	0.99	13.400+j44.529	33.893+j124.532
YUCUDAA	YUC-115	115	1.74	1.12	11.073+j36.448	27.624+j97.324	1.93	1.23	10.930+j36.315	27.719+j97.708
ZACAPOAXTLA	ZXP-115	115	2.69	2.12	5.771+j23.999	16.139+j42.123	3.03	2.36	5.611+j23.463	16.190+j41.796
ZACATEPEC	ZTP-115	115	2.03	1.25	7.617+j31.876	21.785+j91.162	2.25	1.38	7.493+j31.644	21.821+j91.189



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
ZANATEPEC	ZNT-115	115	2.45	1.70	7.130+j26.099	14.180+j61.671	2.81	1.90	6.705+j25.083	14.201+j61.973
ZAPATA	ZAP-85	85	8.38	8.37	0.639+j5.819	0.174+j5.904	8.70	8.61	0.608+j6.174	0.182+j6.409
ZAPATA	ZAP-115	115	15.71	18.30	0.630+j4.179	0.150+j2.447	17.33	19.83	0.505+j4.185	0.157+j2.617
ZAPATA	ZAP-230	230	14.34	14.62	1.921+j9.059	1.270+j8.680	17.41	16.97	1.301+j8.287	1.329+j8.918
ZAPATA DOS	ZPD-115	115	5.40	4.29	2.432+j12.056	4.805+j21.503	6.89	6.04	1.398+j10.502	2.229+j15.069
ZAPATA PONIENTE	EZA-115	115	2.28	1.62	7.216+j28.191	22.485+j60.799	2.67	1.95	6.125+j26.672	19.772+j54.234
ZIHUATANEJO	ZIH-115	115	3.87	2.84	2.773+j16.931	7.575+j34.981	5.37	3.71	2.517+j13.373	7.324+j30.980
ZIHUATANEJO DOS	ZHD-115	115	3.92	2.87	2.735+j16.727	7.146+j34.635	5.67	3.97	2.404+j12.645	6.719+j28.631
ZINACATEPEC	ZIP-69	69	2.01	2.34	2.859+j19.577	0.000+j11.419	2.10	2.42	2.859+j20.652	0.000+j12.563
ZINACATEPEC	ZIP-115	115	2.77	1.64	6.918+j22.950	18.207+j71.340	3.07	1.80	6.775+j22.796	18.228+j71.488
ZOCAC	ZOC-115	115	18.23	18.18	0.715+j3.572	0.494+j3.694	20.64	19.98	0.625+j3.483	0.517+j3.883
ZOCAC	ZOC-230	230	12.59	12.44	2.163+j10.325	2.151+j10.864	15.07	14.24	1.733+j9.539	2.232+j11.198
ZONGOLICA	ZGL-115	115	4.26	2.46	2.602+j15.357	12.386+j48.532	5.70	5.12	1.767+j12.689	2.455+j17.026

Gerencia de Control Regional Occidental



[Regresar a mapa del SEN](#)



Subestación eléctrica	Acónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
3M	P3M-115	115	19.02	17.26	0.702+j3.419	0.881+j4.496	20.59	18.61	0.700+j3.477	0.893+j4.613
ABASOLO	ABS-115	115	10.55	10.10	1.425+j6.129	1.585+j6.999	11.75	11.02	1.364+j6.063	1.638+j7.291
ABASOLO DOS	ABA-115	115	11.94	12.55	1.180+j5.432	0.568+j4.774	13.31	13.65	1.117+j5.370	0.624+j5.077
ABASOLO DOS	ABA-230	230	6.78	6.08	3.641+j19.251	3.574+j26.271	7.67	6.64	3.285+j18.770	3.907+j27.662
ABASTOS	ABT-115	115	8.53	6.95	2.012+j7.520	3.060+j12.891	9.41	7.60	1.953+j7.513	3.082+j13.065
ACÁMBARO	AQM-110	115	5.65	3.43	3.091+j11.330	9.913+j33.518	6.39	3.80	2.864+j11.073	9.928+j33.619
ACAPONETA	ACP-115	115	1.22	0.82	20.908+j50.102	52.846+j122.064	1.37	0.92	20.293+j49.198	52.827+j121.807
ACATLÁN	ATN-69	69	24.76	28.11	0.252+j1.589	0.050+j1.050	28.20	30.93	0.185+j1.543	0.055+j1.142
ACATLÁN	ATN-115	115	12.48	15.27	0.597+j5.287	0.086+j2.447	14.86	17.57	0.450+j4.895	0.107+j2.631
ACATLÁN	ATN-230	230	17.76	21.35	1.694+j7.285	0.375+j3.852	24.64	27.45	0.891+j5.862	0.410+j4.068
ACATLÁN	ATN-400	400	14.19	15.72	3.749+j15.840	1.570+j11.882	22.29	21.66	1.548+j11.294	1.689+j12.217
ACERLAN SA	ACR-69	69	12.93	11.04	0.733+j2.992	1.041+j4.565	14.95	12.40	0.664+j2.855	1.045+j4.620
ACERLAN SA	ACR-115	115	12.54	13.01	1.160+j5.168	0.801+j4.682	14.98	14.92	0.998+j4.771	0.828+j4.833
ACERO SAN LUIS	ACE-115	115	17.82	15.69	0.868+j3.623	1.198+j5.131	19.34	16.95	0.865+j3.677	1.210+j5.250
ACUEDUCTO	ACU-69	69	13.84	7.95	0.721+j2.787	2.132+j9.055	15.79	8.82	0.643+j2.701	2.143+j9.113
ACUEDUCTO II	AUD-115	115	2.90	2.55	4.166+j22.486	5.395+j31.841	3.61	3.07	2.990+j20.034	5.023+j30.197
AEROESPACIAL	ARL-115	115	7.35	4.86	2.480+j8.686	5.481+j22.334	8.56	5.46	2.267+j8.225	5.488+j22.395
AEROPUERTO	AER-115	115	5.47	4.02	3.179+j11.717	7.887+j24.293	6.00	4.40	3.153+j11.753	7.901+j24.428
AEROPUERTO ZACATECAS	AEZ-115	115	6.52	5.61	2.425+j9.885	3.149+j14.855	7.43	6.27	2.198+j9.577	3.163+j14.995
AEROTECH	AET-115	115	7.61	5.06	2.350+j8.399	5.099+j21.338	8.90	5.70	2.134+j7.926	5.106+j21.400
AGAVE	AVE-115	115	3.80	3.50	5.308+j16.636	5.534+j21.318	4.26	3.88	5.124+j16.341	5.575+j21.550
AGOSTADERITO	AGO-115	115	13.87	10.70	0.893+j4.701	0.768+j9.064	15.81	11.88	0.786+j4.551	0.779+j9.201
AGROGEN, S.A. DE C.V.	AGR-115	115	11.00	8.42	1.493+j5.850	1.951+j11.461	12.11	9.17	1.467+j5.848	2.010+j11.710
AGROINDUSTRIAL	AIL-115	115	6.56	4.06	2.681+j9.762	9.225+j27.367	7.27	4.46	2.620+j9.696	9.245+j27.530
AGUA AZUL	AGZ-230	230	9.86	8.79	2.778+j13.173	4.283+j18.071	12.12	10.16	1.985+j11.890	4.404+j18.523
AGUAMILPA	AGM-115	115	2.33	1.71	7.316+j27.579	23.204+j55.170	2.98	2.91	5.473+j23.892	7.244+j25.210
AGUAMILPA	AGM-400	400	5.89	5.37	7.299+j38.537	8.711+j50.058	14.46	16.19	1.223+j17.525	0.682+j11.144
AGUAPIETA	APR-230	230	9.90	8.98	2.826+j13.115	3.256+j17.410	14.10	13.25	1.504+j10.249	1.735+j12.102
AGUAPIETA	APR-230B	230	9.90	8.98	2.826+j13.115	3.256+j17.410	14.10	13.25	1.504+j10.249	1.729+j12.085
AGUASCALIENTES NORTE	AGN-115	115	18.56	13.40	0.754+j3.497	0.642+j7.737	21.34	14.92	0.652+j3.359	0.651+j7.844
AGUASCALIENTES ORIENTE	AGS-115	115	24.01	26.30	0.513+j2.717	0.190+j2.064	27.90	29.49	0.414+j2.585	0.201+j2.198
AGUASCALIENTES ORIENTE	AGS-230	230	17.92	18.87	1.444+j7.267	1.124+j6.268	22.18	22.20	1.030+j6.506	1.165+j6.491
AGUASCALIENTES PONIENTE	AGP-115	115	13.56	10.53	0.908+j4.810	0.604+j9.156	15.39	11.67	0.806+j4.676	0.617+j9.304
AGUASCALIENTES POTENCIA	APT-115	115	22.59	23.10	0.489+j2.898	0.205+j2.766	26.45	25.85	0.382+j2.734	0.222+j2.958
AGUASCALIENTES POTENCIA	APT-230	230	20.36	23.46	1.254+j6.400	0.469+j3.995	25.26	27.74	0.868+j5.716	0.505+j4.234
AGUASCALIENTES POTENCIA	APT-400	400	16.94	18.66	2.684+j13.368	1.331+j10.038	22.29	22.88	1.584+j11.285	1.410+j10.497
AGUASCALIENTES SUR	ASS-115	115	13.72	9.99	0.938+j4.746	1.611+j10.153	15.67	11.12	0.828+j4.587	1.620+j10.271
AGUASCALIENTES UNO	AGT-115	115	17.29	16.41	0.655+j3.785	0.493+j4.461	19.58	18.02	0.562+j3.688	0.508+j4.683
AGUASCALIENTES UNO	AGT-230	230	13.25	11.92	1.860+j9.844	2.611+j13.200	15.82	13.60	1.447+j9.120	2.686+j13.514
AGYDSA	AGY-69	69	22.15	19.06	0.437+j1.744	0.438+j2.659	25.71	21.20	0.362+j1.665	0.456+j2.758
AHRETTY	ART-115	115	7.15	6.51	2.507+j8.939	3.085+j11.644	8.17	7.28	2.284+j8.642	3.109+j11.828
AHUACATLÁN	AHN-110	115	1.29	1.15	12.523+j49.877	21.129+j67.219	1.40	1.24	12.842+j50.644	21.416+j69.240



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
ALAMEDA	ALA-69	69	9.36	7.55	1.081+j4.115	1.958+j7.075	10.70	8.47	0.978+j3.979	1.947+j7.054
ALAMOS	ALS-69	69	11.23	13.01	0.634+j3.491	0.135+j2.113	12.75	14.37	0.570+j3.389	0.148+j2.276
ALAMOS	ALS-230	230	10.00	8.94	2.758+j12.993	3.572+j17.797	12.31	10.35	1.958+j11.700	3.716+j18.259
ALFA NISSAN	ALF-115	115	13.80	11.99	0.882+j4.730	0.966+j6.947	15.76	13.32	0.774+j4.569	0.982+j7.128
ALFA NISSAN MANIOBRAS	AIS-115	115	15.81	14.97	0.768+j4.128	0.524+j4.912	18.16	16.66	0.660+j3.966	0.540+j5.094
ALKANOVA	ALK-69	69	6.35	4.80	1.246+j6.151	2.498+j12.104	7.12	5.29	1.180+j6.045	2.511+j12.263
ALMERIA	ALM-69	69	3.35	2.10	4.987+j10.811	11.988+j30.912	3.75	2.32	4.764+j10.654	11.994+j31.005
ALUPRINT	ALU-115	115	21.21	20.88	0.668+j3.058	0.479+j3.272	22.96	22.43	0.663+j3.111	0.493+j3.393
ALZA	ALZ-115	115	6.23	5.73	3.476+j10.074	3.921+j12.916	7.10	6.40	3.237+j9.762	3.944+j13.101
ALZADA	AZA-115	115	3.32	2.36	5.721+j19.174	12.209+j42.797	3.87	2.89	5.185+j18.147	10.168+j36.664
AMATITÁN	AMT-69	69	2.48	1.66	5.801+j14.973	9.975+j38.852	3.84	2.95	3.564+j10.848	6.349+j20.352
AMECA	AMK-115	115	2.21	1.42	6.681+j29.286	20.679+j77.637	2.51	1.58	6.228+j28.463	20.701+j77.824
AMERI AXLE& MANUF DE MEX S.A. DE C.V.	AXL-115	115	7.21	6.41	2.322+j8.913	4.635+j11.899	8.02	7.18	2.289+j8.812	4.593+j11.495
AMISTAD BAJÍO	AMB-115	115	18.93	9.95	0.562+j3.463	3.069+j12.673	20.68	10.85	0.538+j3.490	3.082+j12.792
ANDARES	ADS-69	69	14.36	9.38	0.681+j2.690	1.492+j7.069	16.39	10.40	0.604+j2.605	1.505+j7.141
ANGAMACUTIRO DOS	ARD-115	115	3.29	2.27	7.088+j18.878	14.709+j45.260	3.80	2.88	6.514+j18.067	10.762+j36.024
ANTEA	NTA-115	115	15.07	12.92	1.287+j4.214	0.302+j6.755	16.82	14.25	1.242+j4.160	0.309+j6.825
ANTÚNEZ	ANN-69	69	3.42	4.58	3.079+j11.234	0.160+j2.828	4.61	6.00	2.124+j9.267	0.165+j2.755
ANTÚNEZ	ANN-115	115	2.99	3.27	6.439+j21.223	1.676+j16.716	3.98	4.07	4.279+j17.839	1.879+j16.776
APA	APA-115	115	17.72	17.67	0.611+j3.697	0.541+j3.756	19.15	18.90	0.603+j3.766	0.561+j3.941
APASCO	APP-115	115	5.53	4.10	3.318+j11.548	8.828+j23.014	6.48	4.63	3.028+j10.858	8.837+j23.114
APASEO	APS-110	115	19.06	15.13	0.608+j3.430	1.235+j6.106	20.79	16.35	0.589+j3.464	1.258+j6.272
APASEO ORIENTE	APO-115	115	9.28	6.56	2.312+j6.774	4.672+j15.373	10.16	7.17	2.297+j6.813	4.681+j15.493
APATZINGÁN	APZ-115	115	3.86	4.18	4.804+j16.533	1.670+j13.210	5.38	5.59	2.862+j13.272	1.569+j11.594
APATZINGÁN	APZ-161	161	2.68	2.64	8.782+j33.528	4.492+j36.307	3.69	3.46	5.445+j27.199	4.239+j32.118
ARANCIA	ARN-115	115	13.76	14.48	0.901+j4.742	0.573+j4.092	16.58	16.68	0.738+j4.343	0.601+j4.253
ARANDAS	ARS-115	115	3.31	2.78	6.203+j19.089	8.965+j30.262	3.70	3.07	6.019+j18.801	9.004+j30.479
ARBOLEDAS	ABL-115	115	7.54	6.21	2.245+j8.520	4.728+j13.713	8.47	6.86	2.112+j8.360	4.759+j13.908
ARELLANO	ARE-115	115	12.72	9.48	0.984+j5.126	1.656+j10.471	14.48	10.53	0.875+j4.966	1.665+j10.599
ARIO DE ROSALES	ADR-69	69	1.60	1.00	9.697+j22.969	20.347+j66.509	2.27	1.37	6.478+j18.162	15.539+j54.761
ARMERÍA	AIA-115	115	5.15	3.58	3.013+j12.525	9.679+j28.251	6.02	4.04	2.731+j11.826	9.691+j28.361
ARRAYANAL	AYL-115	115	5.99	4.39	2.644+j10.770	7.280+j22.045	7.07	4.98	2.373+j10.059	7.284+j22.145
ARTEVA SPECIAL TES S.R.L. C.V.	ATV-115	115	15.72	14.35	0.920+j4.121	1.044+j5.369	17.50	15.79	0.880+j4.079	1.050+j5.448
ASMOLES	ASM-115	115	5.68	4.49	3.295+j11.226	7.920+j19.458	6.66	5.09	2.997+j10.552	7.932+j19.564
ASUNCIÓN	ASU-115	115	18.84	16.27	0.663+j3.461	0.750+j5.172	21.65	18.15	0.563+j3.327	0.758+j5.283
ATEQUIZA	ATQ-69	69	19.66	25.73	0.417+j1.983	0.030+j0.610	23.34	29.77	0.348+j1.845	0.034+j0.665
ATEQUIZA	ATQ-230	230	17.45	20.63	1.681+j7.420	0.442+j4.268	22.88	25.31	1.017+j6.302	0.478+j4.538
ATEQUIZA	ATQ-400	400	15.13	16.66	3.239+j14.911	1.643+j11.619	22.00	21.66	1.484+j11.452	1.734+j12.115
ATOTONILCO	ATO-115	115	5.15	6.62	3.716+j12.354	0.480+j4.342	5.82	7.38	3.535+j12.048	0.522+j4.588
AUTLÁN	AUT-115	115	1.21	0.82	16.813+j52.114	34.418+j128.084	1.35	0.91	16.474+j51.479	34.438+j128.248
ALUMINICASTE	AUT-115	115	7.90	6.19	2.004+j8.167	3.198+j15.090	9.08	7.39	1.820+j7.834	2.716+j13.328
AVENTEC	AVN-115	115	18.83	16.99	0.714+j3.453	0.901+j4.608	20.39	18.32	0.712+j3.511	0.912+j4.724



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
AYALA	AYA-115	115	12.45	8.81	1.111+j5.215	2.698+j11.673	13.83	9.69	1.050+j5.175	2.711+j11.773
AYOTLAN	AYN-115	115	3.82	3.28	5.046+j16.626	7.782+j24.733	4.28	3.64	4.870+j16.343	7.814+j24.924
AYUNTAMIENTO	AYU-115	115	12.96	9.20	0.983+j5.029	1.802+j11.292	14.76	10.22	0.873+j4.869	1.811+j11.412
AZUFRES SWITCHEO	AZS-115	115	11.42	13.83	0.986+j5.732	0.429+j3.282	12.26	14.68	1.010+j5.870	0.450+j3.501
BANDERAS	BAN-115	115	4.19	4.08	4.804+j15.110	5.251+j16.336	4.99	4.69	4.085+j14.060	5.271+j16.534
BAÑÓN	BON-110	115	2.62	1.80	9.872+j23.350	20.291+j56.725	3.00	2.01	9.165+j22.573	20.306+j56.857
BARRACUDA	BCD-115	115	13.21	9.84	0.995+j4.928	1.876+j10.037	14.36	10.69	0.994+j4.987	1.891+j10.164
BELTICOS S.A. DE C.V.	BEL-69	69	19.45	15.17	0.472+j1.993	0.842+j3.702	22.40	16.91	0.400+j1.915	0.848+j3.765
BICENTENARIO	BCT-115	115	7.88	7.87	1.871+j8.221	1.659+j8.305	9.41	9.05	1.574+j7.597	1.688+j8.480
BMW	BMW-230	230	11.22	8.83	2.100+j11.650	5.170+j20.898	12.37	9.67	2.038+j11.626	5.206+j21.148
BOCAS	BOC-115	115	4.51	3.66	3.178+j14.381	8.183+j23.769	4.99	4.02	3.111+j14.303	8.197+j23.911
BOLAÑOS	BLA-110	115	0.92	0.58	34.248+j63.913	61.398+j192.414	1.01	0.63	34.140+j63.836	61.418+j192.655
BONLAN	BNL-115	115	18.44	15.59	0.740+j3.523	1.103+j5.492	19.99	16.84	0.738+j3.579	1.114+j5.608
BOQUILLA	BOQ-115	115	2.14	1.13	9.389+j29.633	32.296+j110.053	2.39	1.25	9.149+j29.139	32.301+j110.115
BOTELLO	BOT-115	115	4.28	3.04	4.608+j14.818	9.149+j33.194	5.13	4.78	3.854+j13.693	2.515+j17.326
BUENA VISTA NORTE	BVN-115	115	11.18	8.62	1.605+j5.717	3.109+j10.833	12.50	9.53	1.548+j5.634	3.115+j10.910
BUENAVISTA	BNA-115	115	11.86	8.48	1.556+j5.378	3.152+j11.931	13.25	9.36	1.503+j5.305	3.159+j12.005
BUGAMBILIAS	BUG-69	69	10.92	7.03	0.925+j3.530	2.093+j9.487	12.29	7.78	0.854+j3.463	2.096+j9.531
BURNER S	BRN-115	115	7.17	5.86	3.230+j8.680	4.853+j14.701	7.88	6.42	3.201+j8.696	4.875+j14.858
C. H. SANTA ROSA	SRO-69	69	2.80	1.78	5.114+j13.261	10.365+j37.290	5.32	5.98	1.808+j8.031	0.289+j5.054
C.H. LA YESCA	LYE-400	400	5.11	3.50	5.907+j44.774	24.024+j105.313	10.36	11.15	1.447+j24.474	1.012+j18.405
CABLESA	CAB-115	115	13.66	13.88	1.187+j4.713	0.718+j4.615	15.24	15.31	1.135+j4.656	0.727+j4.698
CALERA	CAL-115	115	10.15	13.10	1.621+j6.340	0.181+j2.147	11.79	14.92	1.399+j6.037	0.196+j2.308
CALERA	CAL-230	230	6.27	7.37	5.274+j20.506	1.378+j11.746	7.37	8.41	4.453+j19.304	1.485+j12.466
CALERA INDUSTRIAL	CAI-115	115	6.89	7.55	2.251+j9.374	1.011+j7.078	8.09	8.59	1.920+j8.816	1.073+j7.416
CALVILLO	CVO-115	115	4.17	2.55	3.457+j15.549	7.467+j45.663	4.62	2.81	3.358+j15.459	7.484+j45.893
CAMPESTRE	CPE-115	115	8.63	7.56	1.985+j7.435	2.375+j10.829	9.54	8.26	1.910+j7.415	2.404+j11.047
CAMPOS	CMP-115	115	11.89	9.75	0.873+j5.517	1.741+j9.093	15.10	11.46	0.633+j4.795	1.748+j9.219
CAÑADA	KDA-115	115	20.50	20.93	0.533+j3.194	0.246+j3.062	23.31	22.99	0.446+j3.101	0.266+j3.272
CAÑADA	KDA-230	230	18.82	22.63	1.231+j6.949	0.362+j3.552	23.17	26.73	0.841+j6.249	0.390+j3.788
CAÑADA	KDA-400	400	15.33	16.62	2.820+j14.800	1.528+j11.684	19.74	20.03	1.754+j12.748	1.629+j12.267
CAPILLA DE GUADALUPE	CJA-115	115	2.15	1.32	9.361+j29.491	24.797+j85.711	2.54	1.49	8.601+j27.435	24.888+j85.967
CARAPAN DISTRIBUCIÓN	CRD-115	115	9.38	6.00	1.488+j6.924	4.087+j18.649	10.46	6.63	1.438+j6.832	4.096+j18.665
CARAPAN POTENCIA	CRP-115	115	16.19	19.28	0.817+j4.019	0.167+j2.155	18.96	21.92	0.660+j3.796	0.192+j2.276
CARAPAN POTENCIA	CRP-230	230	14.30	17.17	1.769+j9.114	0.412+j4.732	17.60	20.21	1.188+j8.216	0.455+j5.027
CARAPAN POTENCIA	CRP-400	400	10.72	10.61	3.718+j21.224	2.453+j22.328	13.50	12.43	2.310+j18.679	2.701+j23.480
CARTONES PODEROSA S.A. DE	PON-115	115	13.65	14.10	1.001+j4.760	0.706+j4.370	16.44	16.23	0.839+j4.363	0.732+j4.521
CASTILLO	CST-69	69	17.54	16.58	0.591+j2.193	0.717+j2.582	20.45	18.77	0.525+j2.077	0.718+j2.622
CASTRO DEL RIO	CDR-115	115	11.33	7.47	1.239+j5.730	3.182+j14.635	12.68	8.27	1.190+j5.637	3.191+j14.652
CATARINA	CTA-69	69	4.50	2.88	3.618+j8.076	8.238+j22.327	5.09	3.20	3.395+j7.918	8.244+j22.419
CD. HIDALGO	CDH-115	115	5.68	4.18	3.046+j11.278	8.712+j23.022	6.24	4.58	3.035+j11.295	8.718+j23.130
CELANESE (CARAPAN)	CME-115	115	5.45	4.44	3.953+j11.517	5.116+j19.878	6.29	5.40	3.598+j11.046	4.302+j16.849



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
CELAYA AEROPUERTO	CAE-110	115	14.32	12.06	1.023+j4.521	1.684+j7.087	15.67	13.08	0.993+j4.554	1.705+j7.261
CELAYA DOS	CYA-115	115	22.89	24.20	0.524+j2.853	0.266+j2.452	25.09	26.01	0.494+j2.869	0.288+j2.610
CELAYA DOS	CYA-230	230	15.86	14.21	1.620+j8.213	1.689+j11.308	18.11	15.68	1.442+j7.935	1.801+j11.781
CELAYA I	CLY-115	115	16.80	13.50	0.886+j3.851	1.699+j6.678	18.43	14.69	0.856+j3.869	1.712+j6.805
CELAYA III	CEY-115	115	18.42	19.43	0.676+j3.540	0.339+j3.068	20.07	20.79	0.648+j3.581	0.365+j3.268
CELAYA III	CEY-230	230	16.82	14.89	1.673+j7.714	1.922+j10.990	19.61	16.64	1.453+j7.307	2.019+j11.374
CELAYA INDUSTRIAL	CYI-110	115	17.50	14.37	0.835+j3.701	1.487+j6.124	19.21	15.62	0.806+j3.716	1.502+j6.266
CELAYA PONIENTE	CLP-115	115	12.37	9.47	1.257+j5.216	2.802+j9.945	13.62	10.36	1.222+j5.219	2.817+j10.061
CELAYA SUR	CYS-115	115	12.09	8.44	1.303+j5.335	3.514+j12.163	13.29	9.23	1.272+j5.348	3.527+j12.280
CEMENTOS MOCTEZUMA (MATEHUALA)	CMZ-115	115	1.24	0.89	22.230+j48.821	35.597+j110.536	1.39	0.99	21.283+j48.035	35.651+j111.120
CEMEX MÉXICO S.A. DE C.V. (C.D GUZMÁN)	CMX-115	115	3.66	3.03	4.656+j17.524	6.639+j28.794	4.43	3.49	4.133+j15.964	6.732+j28.966
CEMEX MÉXICO S.A. DE C.V. (GUADALAJARA)	CMX-69	69	6.03	4.32	1.598+j6.415	3.269+j14.052	6.74	4.76	1.536+j6.317	3.282+j14.215
CEMEX MÉXICO S.A. DE C.V. (HUICHAPAN)	CMX-230	230	5.36	4.41	4.869+j24.308	8.514+j39.930	6.73	5.24	3.705+j21.401	8.550+j39.072
CENTRO	CTR-115	115	4.21	4.09	4.528+j15.095	4.072+j16.730	5.06	4.73	3.712+j13.949	4.091+j16.934
CENTRO LOGÍSTICO JALISCO	CLJ-115	115	5.40	4.50	2.539+j12.037	7.154+j18.511	7.23	5.87	2.115+j9.877	6.064+j16.104
CEPAMISA	CMS-115	115	7.83	7.16	2.113+j8.212	2.199+j10.723	8.67	7.83	2.024+j8.181	2.236+j10.994
CERRO BLANCO	CBL-400	400	7.99	7.49	5.821+j28.317	7.085+j34.313	17.81	17.03	1.196+j14.217	2.772+j15.540
CERRO GORDO	GOC-115	115	16.20	13.16	0.913+j3.996	1.497+j6.807	18.03	14.44	0.859+j3.959	1.511+j6.923
CERRO HUECO	CHC-69	69	0.99	0.61	18.317+j35.897	38.489+j107.997	1.24	0.75	15.299+j31.808	34.313+j97.672
CERVECERÍA MODELO DE GUADALAJARA	MOD-69	69	11.67	7.82	0.923+j3.288	2.091+j8.204	13.19	8.66	0.849+j3.211	2.099+j8.272
CH ZIMAPAN	ZMN-115	115	4.15	5.04	2.503+j15.805	0.584+j7.535	5.46	6.65	1.367+j13.300	0.211+j5.893
CH ZIMAPAN	ZMN-230	230	3.63	3.54	7.128+j35.888	5.368+j39.110	6.38	6.89	2.818+j22.731	1.119+j16.391
CHAMELA	CML-115	115	1.45	1.14	12.377+j44.087	32.103+j77.363	1.62	1.26	12.076+j43.414	32.122+j77.525
CHAPALA	CHA-69	69	5.11	2.95	2.080+j7.516	6.260+j24.179	5.67	3.24	2.048+j7.458	6.270+j24.253
CHAPALILLA	CPI-115	115	1.77	1.81	7.880+j36.637	6.543+j34.486	1.91	1.93	8.188+j37.414	6.817+j36.486
CHARAPAN	CHN-115	115	4.29	3.03	4.500+j14.796	12.415+j32.516	4.88	3.38	4.193+j14.368	12.422+j32.570
CHARAPAN	CHN-230	230	6.48	6.79	2.963+j20.291	2.325+j17.581	7.46	7.57	2.649+j19.408	2.486+j18.547
CHARCAS	CAK-110	115	6.18	6.95	2.161+j10.525	1.727+j6.987	6.72	7.49	2.173+j10.652	1.759+j7.294
CHARCAS POTENCIA	CHK-115	115	7.07	8.71	1.657+j9.246	0.285+j4.105	7.67	9.35	1.669+j9.374	0.317+j4.413
CHARCAS POTENCIA	CHK-230	230	3.83	4.18	5.999+j34.150	2.137+j25.944	4.19	4.49	5.957+j34.329	2.391+j27.817
CHILATÁN	CHL-115	115	1.69	1.25	11.687+j37.425	21.743+j77.846	2.54	2.46	6.328+j28.032	4.295+j31.211
CHIPILO	CHI-115	115	7.77	6.89	2.047+j8.296	3.080+j11.482	8.98	8.06	1.846+j7.925	2.938+j10.581
CÍCLO COMBINADO TIERRA MOJADA S. DE R.L. DE C.V.	TIM-400	400	15.14	17.46	3.042+j14.948	1.028+j9.933	21.47	22.43	1.415+j11.749	1.134+j10.518
CIENEGUILLAS	CGS-115	115	5.26	4.33	3.229+j12.204	5.598+j20.016	5.95	4.82	2.994+j11.896	5.611+j20.146
CIENEGUILLAS	CGS-115.0	115	4.57	5.34	5.112+j13.612	1.001+j8.402	5.54	6.21	4.221+j12.490	1.112+j8.995
CIFUNSA DEL BAJÍO S.A. DE C.V.	CIF-115	115	24.45	24.47	0.540+j2.661	0.444+j2.731	27.86	27.11	0.482+j2.577	0.455+j2.837
CIHUATLAN	CHT-115	115	3.25	2.80	5.143+j19.782	11.013+j28.260	3.71	3.14	4.863+j19.096	11.028+j28.415
CIMATARIO	CIM-115	115	12.30	10.44	1.297+j5.239	0.239+j8.419	13.79	11.55	1.237+j5.150	0.244+j8.489
CIUDAD GUZMÁN	CGM-115	115	6.09	7.24	2.376+j10.644	0.463+j5.752	7.90	8.97	1.880+j9.051	0.555+j5.924
CIUDAD GUZMÁN	CGM-230	230	4.61	4.60	6.662+j28.043	3.614+j28.863	5.90	5.50	4.993+j24.248	4.030+j29.792
CNH DE MÉXICO S.A. DE C.V.	HOL-115	115	16.55	15.07	0.843+j3.922	0.973+j5.134	18.44	16.59	0.803+j3.879	0.979+j5.213
COAHUAYANA	CHY-115	115	1.95	1.29	10.134+j32.438	30.002+j80.905	2.20	1.43	9.815+j31.780	30.012+j81.003



Subestación eléctrica	Acónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
COALCOMÁN	CMN-115	115	1.26	0.83	19.779+j48.686	48.873+j127.019	1.48	1.15	17.743+j46.008	26.978+j88.550
COBANO	CBN-69	69	3.07	2.41	4.570+j12.136	6.637+j22.783	6.87	6.22	1.204+j6.263	0.895+j7.972
COBANO	CBN-161	161	3.33	3.09	6.189+j27.250	6.200+j33.807	5.31	5.37	3.024+j19.035	2.092+j17.139
COBRECEL	COB-115	115	8.60	7.25	1.581+j7.557	2.947+j11.691	9.43	7.92	1.553+j7.589	2.964+j11.846
COCULA	CLA-115	115	4.89	3.92	3.216+j13.179	8.580+j22.189	5.77	4.46	2.779+j12.339	8.602+j22.376
COLIMA DOS	CMD-115	115	9.65	11.53	1.389+j6.736	0.337+j3.533	11.77	13.54	1.096+j6.108	0.366+j3.708
COLIMA DOS	CMD-230	230	6.79	6.92	3.860+j19.186	2.664+j18.238	8.92	8.40	2.705+j16.157	2.858+j18.958
COLIMA NORTE	CNO-115	115	6.61	6.04	2.390+j9.752	3.041+j12.516	7.80	6.88	2.091+j9.133	3.071+j12.691
COLIMILLA	CLL-69	69	10.86	7.34	0.948+j3.544	2.264+j8.679	13.87	13.75	0.688+j3.083	0.379+j3.117
COLINAS	COI-115	115	11.62	8.41	1.131+j5.599	2.218+j12.074	12.63	9.14	1.134+j5.669	2.236+j12.222
COLINAS DE LEÓN DOS MANIOBRAS	CCL-115	115	15.88	13.89	0.820+j4.101	1.127+j5.903	17.56	15.17	0.762+j4.089	1.140+j6.037
COLINAS DEL RINCÓN PARQUE INDUSTRIAL	RPI-115	115	13.75	10.44	0.881+j4.747	1.877+j9.265	15.16	11.39	0.825+j4.746	1.898+j9.428
COLOMO	COL-115	115	16.07	19.43	0.607+j4.087	0.156+j1.987	21.52	24.33	0.367+j3.374	0.166+j2.136
COLOMO	COL-230	230	10.93	12.92	1.634+j12.037	0.965+j6.474	16.57	17.67	0.735+j8.784	0.995+j6.794
COLOMO DISTRIBUCIÓN	CDI-115	115	15.86	19.06	0.628+j4.138	0.185+j2.076	21.19	23.81	0.387+j3.425	0.195+j2.225
COLON	CLN-230	230	12.83	11.76	2.488+j10.046	2.749+j13.047	16.31	13.89	1.701+j8.793	2.803+j13.340
COMALA	COM-115	115	5.82	5.04	2.708+j11.082	4.479+j16.126	6.84	5.77	2.385+j10.414	4.404+j15.964
COMPOSTELA	CMP-110	115	3.30	2.36	7.467+j18.669	15.463+j41.474	3.85	2.67	6.878+j17.688	15.454+j41.377
CONTICÓN	CON-115	115	8.88	7.37	1.511+j7.322	2.887+j11.776	9.73	8.04	1.482+j7.356	2.906+j11.940
CONDEBARO	CON-115	115	2.02	1.64	9.475+j31.433	16.717+j53.112	2.55	2.01	7.170+j27.714	15.863+j48.984
CONDUCTORES MONTERREY	CDM-115	115	19.64	17.42	0.712+j3.305	0.777+j4.632	21.28	18.79	0.708+j3.358	0.789+j4.751
CONIN	CNI-115	115	19.51	22.74	0.614+j3.347	0.119+j1.993	22.05	25.05	0.554+j3.266	0.128+j2.139
CONIN	CNI-230	230	16.11	16.18	1.544+j8.095	0.989+j8.235	19.48	18.58	1.221+j7.398	1.046+j8.602
CORONEO	COO-110	115	2.56	2.08	9.963+j23.892	12.849+j41.974	2.81	2.27	10.018+j23.973	13.041+j42.835
CORPORACIÓN DE OCCIDENTE	COC-69	69	13.94	12.56	0.681+j2.775	0.846+j3.719	16.19	14.16	0.611+j2.637	0.850+j3.774
CORTÁZAR	CZR-115	115	7.37	6.82	1.920+j8.800	2.767+j10.869	8.09	7.46	1.891+j8.826	2.781+j11.004
COTIJA	CTJ-115	115	5.17	3.36	3.402+j12.388	8.795+j32.436	5.80	3.72	3.247+j12.166	8.810+j32.533
CRUCERO	CCR-115	115	2.06	1.56	9.679+j30.764	14.696+j61.887	2.97	2.67	5.669+j23.917	6.158+j32.162
CRUZ AZUL	CZA-230	230	5.85	4.23	4.254+j22.296	12.743+j47.265	6.69	4.72	3.755+j21.521	12.782+j47.501
CRYOINFRA	CRI-115	115	9.51	9.95	1.754+j6.755	1.405+j5.951	10.87	11.15	1.654+j6.514	1.414+j6.075
CRYOINFRA	CRY-115	115	21.43	23.83	0.719+j3.013	0.407+j2.158	23.97	26.24	0.679+j2.971	0.413+j2.237
CUAUHTÉMOC	SCC-115	115	3.52	2.54	5.139+j18.171	11.039+j39.030	4.06	2.97	4.712+j17.339	10.166+j36.424
CUERÁMARO	CUE-110	115	7.75	5.29	1.865+j8.366	6.906+j19.432	8.60	5.82	1.802+j8.297	6.926+j19.565
CUITZEO MORELIA	CTZ-115	115	5.13	3.44	3.655+j12.418	10.772+j30.234	5.67	3.79	3.595+j12.377	10.784+j30.346
CUITZEO OCOTLAN	CZO-115	115	8.47	7.42	2.138+j7.546	2.477+j10.916	10.70	8.69	1.744+j6.597	2.570+j11.267
CUITZILLOS	CZS-115	115	6.36	4.83	2.737+j10.077	6.234+j19.659	6.99	5.29	2.699+j10.095	6.249+j19.801
CUMBRES	CUB-115	115	18.19	18.53	0.687+j3.585	0.431+j3.450	20.89	20.70	0.586+j3.447	0.442+j3.578
CUMMINS FILTRACIÓN	CSF-115	115	13.71	8.79	0.956+j4.748	2.383+j12.774	14.89	9.56	0.957+j4.810	2.402+j12.914
CUPATITZIO	CPT-161	161	3.82	3.93	4.686+j23.863	2.971+j22.264	6.05	6.50	2.132+j16.766	1.116+j12.072
CUPRO	CPO-115	115	21.27	21.11	0.722+j3.037	0.626+j3.156	23.03	22.68	0.718+j3.089	0.639+j3.277
CUQUIO	CUQ-115	115	1.92	1.29	9.889+j33.138	31.320+j79.938	2.25	1.45	9.198+j31.136	31.407+j80.189
DAIDO METAL	DAI-69	69	6.20	3.82	1.554+j6.235	4.055+j18.013	6.91	4.21	1.481+j6.168	4.057+j18.059



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
DAL-TILE MÉXICO S. DE R.L. DE C.V	DLT-115	115	18.65	17.80	0.648+j3.501	0.810+j4.044	21.25	19.75	0.585+j3.387	0.821+j4.170
DANISCO MEXICANA	DAM-115	115	5.53	4.11	3.392+j11.524	8.939+j22.824	6.48	4.64	3.095+j10.841	8.949+j22.921
DANONE DE MÉXICO S.A. DE C.V.	DNN-115	115	10.86	7.65	1.356+j5.961	4.496+j13.151	12.12	8.44	1.299+j5.886	4.504+j13.237
DAÑU	DAN-230	230	8.40	8.74	3.141+j15.485	1.926+j13.945	11.49	11.27	2.000+j12.553	1.962+j13.089
DE ACERO MORELIA	DEO-115	115	8.76	7.10	1.938+j7.324	3.186+j12.672	9.66	7.77	1.888+j7.325	3.204+j12.826
DE ACERO CELAYA	DEA-230	230	13.76	11.07	2.025+j9.436	3.356+j16.523	15.85	12.32	1.800+j9.036	3.453+j16.908
DELCO REMY	DLC-115	115	19.84	18.47	0.662+j3.279	0.702+j4.051	21.43	19.84	0.663+j3.344	0.717+j4.181
DENSO	DEN-115	115	6.82	5.16	2.337+j9.444	4.377+j18.705	7.54	5.79	2.295+j9.407	4.247+j17.989
DESCANSADERO	DSC-69	69	1.52	1.28	11.443+j23.569	13.628+j38.778	1.77	1.46	10.840+j22.322	13.413+j38.459
DESTILADERAS	DST-115	115	3.77	3.39	5.007+j16.874	5.170+j23.064	4.46	3.87	4.267+j15.827	5.188+j23.253
DICUMSA	DIC-115	115	19.61	17.36	0.714+j3.310	0.782+j4.664	21.25	18.72	0.709+j3.363	0.795+j4.783
DISTEX	DTX-115	115	17.05	15.81	1.006+j3.763	0.922+j4.760	19.00	17.40	0.966+j3.720	0.928+j4.839
DOLORES HIDALGO	DHD-115	115	6.94	4.78	2.698+j9.176	5.632+j21.903	7.66	5.26	2.672+j9.153	5.634+j21.975
DOMINICA	DMN-115	115	4.08	5.33	1.503+j16.186	0.125+j4.873	4.39	5.68	1.552+j16.573	0.137+j5.314
DOMO SAN PEDRO	DSP-115	115	1.73	1.91	7.401+j37.722	2.625+j27.706	1.85	2.01	7.806+j38.758	2.962+j30.008
DON VASCO	VCO-115	115	2.74	1.88	7.912+j22.944	20.160+j53.932	3.07	2.08	7.591+j22.570	20.183+j54.076
EATON	EAT-115	115	17.08	14.32	0.827+j3.798	1.123+j6.056	18.51	15.48	0.827+j3.858	1.136+j6.179
EDOSA	EDO-69	69	7.36	4.88	1.496+j5.199	3.368+j13.262	10.03	5.85	1.052+j4.238	3.372+j13.317
EFFEM (LA CIÉNEGA)	EFF-115	115	3.30	2.14	4.429+j19.615	11.349+j51.709	5.20	3.11	3.061+j13.709	9.665+j41.265
EFFEM (SAN JUAN DEL RÍO)	EFF-115	115	6.40	4.07	3.046+j9.913	7.391+j27.189	7.36	4.55	2.853+j9.502	7.397+j27.240
EL ARBOLITO	ABO-115	115	4.18	2.83	5.828+j14.774	13.482+j36.080	4.56	3.10	5.844+j14.896	13.487+j36.236
EL CAJÓN	CJN-400	400	6.97	6.05	6.156+j32.540	10.562+j47.361	15.45	15.87	1.224+j16.398	1.395+j14.510
EL CAMPANARIO	CAM-115	115	9.43	10.63	2.217+j6.684	4.889+j2.912	10.54	11.79	2.148+j6.585	4.890+j2.987
EL GRANJENO	EGJ-115	115	13.57	11.35	1.239+j4.735	2.029+j7.525	14.99	12.41	1.182+j4.726	2.043+j7.671
EL GRULLO	GRU-110	115	0.82	0.52	27.649+j75.695	60.071+j215.188	0.91	0.57	27.296+j75.075	60.091+j215.352
EL MARQUÉS	MRQ-115	115	14.70	12.36	1.112+j4.377	1.477+j6.962	16.70	13.71	1.031+j4.249	1.484+j7.085
EL MARQUÉS ORIENTE	MQO-115	115	10.02	6.67	1.807+j6.375	3.755+j16.197	11.61	7.48	1.681+j6.063	3.760+j16.270
EL MIRADOR	MRR-115	115	5.60	4.95	3.385+j11.361	3.317+j16.223	6.96	5.80	2.540+j10.174	3.339+j16.313
EL MONTEON	MTN-115	115	2.78	2.23	8.725+j22.246	17.033+j38.110	3.22	2.51	8.030+j21.221	17.041+j38.222
EL PALMAR	EPM-115	115	3.59	1.81	5.773+j17.555	21.249+j70.043	4.07	2.01	5.535+j17.059	21.254+j70.104
EL PARDILLO	PRL-110	115	3.52	2.55	4.984+j18.182	11.451+j38.888	3.95	2.82	4.761+j17.880	11.466+j39.050
EL POTOSÍ	EPS-115	115	21.61	22.19	0.449+j3.040	0.246+j2.839	23.37	23.60	0.433+j3.095	0.270+j3.035
EL POTOSÍ	EPS-230	230	17.61	20.05	1.192+j7.447	0.519+j4.828	19.53	21.82	1.088+j7.401	0.563+j5.134
EL POTOSÍ	EPS-400	400	12.49	12.56	2.723+j18.285	2.250+j18.260	14.32	13.92	2.258+j17.592	2.442+j19.239
EL REALITO	ELR-115	115	2.50	1.46	4.970+j26.094	16.058+j81.970	2.75	1.60	4.954+j26.111	16.072+j82.098
EL REFUJIO	RFJ-115	115	3.08	1.96	6.469+j20.555	16.877+j56.256	3.78	2.24	5.732+j18.473	16.968+j56.512
EL SALTO	ESJ-69	69	16.22	17.16	0.639+j2.371	0.457+j2.019	18.70	19.30	0.577+j2.271	0.463+j2.074
EL SAUCITO	MSU-115	115	6.97	6.62	2.573+j9.166	1.622+j10.999	7.92	7.38	2.367+j8.915	1.640+j11.152
EL SAUZ	SAU-115	115	16.81	20.65	0.746+j3.878	0.099+j1.795	24.58	27.35	0.410+j2.943	0.111+j1.950
EL SAUZ	SAU-230	230	14.45	15.44	1.616+j9.050	0.642+j7.572	18.75	18.59	1.063+j7.716	0.707+j8.081
EL SOL	SOL-69	69	19.24	14.82	0.497+j2.010	0.867+j3.839	22.16	16.52	0.424+j1.932	0.874+j3.904
EL SOL	SOL-69B	69	19.53	15.15	0.487+j1.981	0.838+j3.731	22.51	16.89	0.414+j1.902	0.846+j3.796



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
EL SOL (CARAPAN)	ESO-115	115	5.83	4.04	3.307+j10.900	8.843+j25.033	6.57	4.48	3.223+j10.647	8.854+j25.105
EL TARAY	TAY-115	115	4.48	2.83	3.612+j14.370	2.236+j41.010	4.97	3.11	3.516+j14.277	2.253+j41.237
EL TORO	TOO-115	115	11.29	5.80	1.127+j5.772	5.833+j21.839	12.42	6.35	1.073+j5.781	5.859+j22.041
EMMAN TABLEROS S.A. DE C.V.	EMM-115	115	6.00	4.50	2.748+j10.716	4.812+j21.651	7.75	5.39	2.199+j9.166	4.785+j21.262
EMPAQUES MODERNOS	EMP-69	69	8.04	5.88	1.836+j4.604	3.712+j9.753	9.05	6.52	1.774+j4.505	3.718+j9.806
ENCARNACIÓN DE DÍAZ	ENC-110	115	4.76	3.25	4.113+j13.327	10.965+j31.632	5.30	3.58	4.007+j13.189	10.976+j31.773
ENVASES INNOVATIVOS	ENV-69	69	12.52	8.96	0.858+j3.064	1.711+j6.769	14.20	9.95	0.798+j2.981	1.716+j6.825
ENVASES UNIVERSALES	EVS-69	69	13.64	12.08	0.700+j2.835	0.911+j3.967	15.82	13.60	0.631+j2.698	0.915+j4.022
ENVASES Y TAPAS	EYT-115	115	6.67	7.12	2.335+j9.671	1.293+j7.999	7.83	8.09	2.004+j9.113	1.355+j8.337
EÓLICA CERRITOS (MESA MORENOS) MANIOBRAS	ECM-230	230	5.87	5.80	3.944+j22.280	3.645+j23.181	6.87	6.54	3.441+j20.988	3.869+j24.221
HUMEDADES	HUM-115	115	1.40	0.98	15.857+j44.796	28.478+j105.582	1.63	1.11	14.609+j42.465	28.094+j103.919
EÓLICA HUIMILPAN (SAN PEDRO) MANIOBRAS HUIMILPAN	HUM-115	115	4.16	4.28	5.475+j14.987	2.322+j14.632	4.55	4.60	5.531+j15.069	2.513+j15.491
EÓLICA SANTIAGO MANIOBRAS	ESM-230	230	8.29	7.37	2.274+j15.848	4.270+j21.647	9.28	8.09	2.160+j15.594	4.401+j22.292
ESTADIO CORREGIDORA	ECO-115	115	12.50	9.14	0.962+j5.224	1.045+j11.178	13.91	10.06	0.917+j5.172	1.052+j11.258
ESTANCIA DE ANIMAS	EDA-115	115	2.51	1.72	8.711+j24.942	20.448+j59.901	2.79	1.89	8.520+j24.707	20.462+j60.145
ESTANCITA	ETA-115	115	0.80	0.49	26.903+j78.938	59.017+j232.964	1.06	0.77	17.180+j66.950	30.442+j143.723
EXPERIENCIA	EXP-69	69	8.19	5.38	1.038+j4.753	3.195+j12.085	9.30	6.00	0.938+j4.618	3.188+j12.073
EZEQUIEL MONTES	EZM-110	115	5.85	3.51	3.255+j10.874	10.170+j32.565	6.76	3.92	3.027+j10.367	10.175+j32.626
FERTIMEX	FER-69	69	5.09	3.49	2.007+j7.563	4.453+j18.091	5.68	3.84	1.945+j7.466	4.467+j18.254
FIBERWEB DE MÉXICO S.A. DE C.V.	VTC-115	115	6.70	5.39	2.508+j9.591	4.494+j16.634	7.72	6.56	2.292+j9.179	3.902+j13.977
FLAMINGOS	FLA-115	115	5.15	5.88	3.541+j12.407	1.594+j7.922	6.23	6.89	2.827+j11.373	1.621+j8.158
FLEXTRONICS PLANTA SUR	SLT-69	69	9.91	6.24	1.040+j3.882	2.454+j10.864	11.13	6.90	0.969+j3.815	2.457+j10.908
FLUVIAL	FLU-115	115	4.70	4.94	3.966+j13.552	2.522+j11.839	5.67	5.75	3.196+j12.469	2.541+j12.043
FORJAS	FRJ-115	115	17.02	16.47	0.812+j3.817	0.811+j4.245	19.00	18.17	0.768+j3.767	0.815+j4.307
FRESNILLO INDUSTRIAL	FRI-110	115	6.90	6.80	2.759+j9.213	2.513+j9.774	7.83	7.58	2.557+j8.967	2.530+j9.940
FRESNILLO NORTE	FRN-115	115	7.92	9.62	2.146+j8.109	0.557+j3.933	8.99	10.73	1.955+j7.887	0.579+j4.142
FRESNILLO POTENCIA	FSO-115	115	8.19	10.56	2.048+j7.841	0.194+j2.707	9.31	11.79	1.858+j7.622	0.216+j2.922
FRESNILLO POTENCIA	FSO-230	230	4.51	5.38	7.291+j28.496	1.344+j15.422	5.19	6.03	6.473+j27.371	1.498+j16.546
FRESNILLO SUR	FNO-115	115	7.50	7.30	2.481+j8.500	1.968+j9.424	8.55	8.16	2.272+j8.237	1.982+j9.564
FRESNO	FRE-69	69	13.33	9.29	0.784+j2.885	1.693+j6.687	15.13	10.30	0.711+j2.809	1.701+j6.754
GENERADORA ELÉCTRICA SAN RAFAEL, S.A.P.I. DE C.V.	SRA-115	115	2.79	2.09	6.003+j23.038	18.434+j44.352	3.70	4.11	4.135+j19.293	2.098+j13.705
GENERAL MOTORS DE MÉXICO	GMC-115	115	7.64	5.49	2.118+j8.426	5.131+j18.273	8.44	6.15	2.073+j8.399	5.054+j17.645
GUARAPO	GRP-115	115	6.47	4.17	2.461+j9.968	7.931+j26.067	7.16	4.59	2.412+j9.913	7.955+j26.247
GKN	GKN-115	115	9.17	7.76	1.466+j7.090	2.707+j10.895	10.05	8.46	1.438+j7.123	2.726+j11.059
GÓMEZ PORTUGAL	GOP-115	115	9.29	6.29	1.385+j7.014	3.809+j16.971	10.43	6.96	1.290+j6.882	3.819+j17.087
GRAHAM PACKAGING PLASTIC	GRH-115	115	10.75	7.60	1.392+j6.020	4.507+j13.182	11.99	8.39	1.335+j5.945	4.515+j13.269
GRÁN JARDÍN	GJA-115	115	11.27	8.52	1.251+j5.759	2.270+j11.394	12.48	9.34	1.195+j5.731	2.291+j11.533
GUADALAJARA DOS	GUD-69	69	25.21	28.66	0.292+j1.553	0.093+j1.023	29.17	32.03	0.235+j1.484	0.102+j1.097
GUADALAJARA DOS	GUD-161	161	6.17	8.44	1.485+j15.002	0.110+j2.977	6.57	8.92	1.192+j15.518	0.120+j3.258
GUADALAJARA DOS	GUD-230	230	15.10	16.89	1.995+j8.564	0.864+j6.131	19.46	20.39	1.290+j7.393	0.915+j6.424
GUADALAJARA INDUSTRIAL	GUI-69	69	21.77	25.14	0.422+j1.781	0.077+j1.116	24.71	27.71	0.363+j1.736	0.084+j1.203
GUADALAJARA INDUSTRIAL	GUI-230	230	12.04	12.01	2.508+j10.742	1.720+j11.141	15.06	14.08	1.727+j9.542	1.815+j11.580



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
GUADALAJARA NORTE	GUN-69	69	20.77	24.19	0.356+j1.885	0.088+j1.124	24.96	28.46	0.252+j1.737	0.074+j1.099
GUADALAJARA NORTE	GUN-230	230	11.10	10.74	2.609+j11.676	2.072+j13.198	16.05	15.77	1.344+j9.003	1.153+j9.396
GUADALAJARA ORIENTE	GDO-69	69	23.52	26.07	0.287+j1.669	0.089+j1.213	27.84	29.79	0.205+j1.561	0.095+j1.248
GUADALAJARA ORIENTE	GDO-230	230	14.08	15.00	2.063+j9.200	1.182+j7.797	18.98	18.75	1.188+j7.606	1.224+j7.842
GUADALAJARA UNO	GDU-69	69	29.18	31.80	0.306+j1.330	0.097+j1.044	34.23	35.74	0.238+j1.258	0.104+j1.117
GUADALAJARA UNO	GDU-230	230	13.83	14.56	2.282+j9.328	1.271+j8.236	17.81	17.46	1.484+j8.066	1.347+j8.587
GUADALCAZAR	GDL-115	115	1.41	1.07	19.613+j42.945	28.867+j87.240	1.59	1.19	18.672+j42.112	28.921+j87.823
GUADALUPE	GPE-110	115	6.87	6.59	3.239+j9.109	3.096+j10.471	7.85	7.37	3.005+j8.807	3.121+j10.664
GUANAJUATO	GTO-115	115	8.45	5.43	1.677+j7.672	5.267+j20.375	9.41	5.99	1.628+j7.589	5.281+j20.406
GUANAJUATO SUR	GSU-115	115	9.82	6.48	1.440+j6.605	4.126+j16.748	10.95	7.19	1.388+j6.523	4.125+j16.672
GUARDIÁN INDUSTRIE VP	GDI-115	115	5.75	3.98	3.468+j11.008	7.918+j25.744	6.52	4.43	3.312+j10.700	7.922+j25.794
GUASCARO	GSO-115	115	5.69	3.80	3.144+j11.233	7.905+j28.000	6.41	4.21	2.976+j10.999	7.920+j28.091
GUAYABITOS	GYS-115	115	2.69	2.10	9.221+j22.911	18.491+j41.707	3.11	2.36	8.534+j21.895	18.494+j41.797
GUEVARA	GVA-115	115	0.89	0.56	24.553+j70.675	52.375+j202.676	1.21	0.92	14.918+j58.518	23.853+j113.526
HACIENDA	HDA-115	115	12.84	9.77	1.270+j5.014	2.757+j9.697	14.14	10.69	1.233+j5.016	2.771+j9.812
HACIENDA NUEVA	HNV-115	115	4.59	4.27	4.101+j13.883	5.507+j16.791	5.20	4.77	3.830+j13.511	5.532+j17.001
HENKEL CAPITAL S.A. DE C.V.	RSS-115	115	15.49	14.93	0.907+j4.189	1.021+j4.721	18.12	16.88	0.808+j3.948	1.030+j4.845
HERDEZ	HER-115	115	18.91	14.91	0.745+j3.432	1.079+j6.266	20.50	16.13	0.740+j3.484	1.091+j6.386
HIGUERILLAS	HIG-69	69	15.62	9.92	0.916+j2.380	1.277+j6.900	17.69	10.85	0.852+j2.326	1.324+j7.084
HILASAL MEXICANA S.A.B. DE C.V.	HYL-69	69	14.39	13.22	0.750+j2.665	0.921+j3.391	16.53	14.83	0.688+j2.560	0.927+j3.438
HIROTEC MÉXICO S.A. DE C.V.	AVT-115	115	7.44	7.07	2.244+j8.632	3.869+j9.681	8.29	7.95	2.211+j8.530	3.828+j9.277
HITCHINER	HIT-115	115	16.07	13.28	0.896+j4.033	1.370+j6.618	17.43	14.37	0.895+j4.093	1.383+j6.741
HITACHI	HIT-115	115	9.65	7.09	1.781+j6.643	3.773+j13.890	10.77	7.82	1.723+j6.560	3.778+j13.967
HONDA DE MÉXICO S.A. DE C.V. EL SALTO	HON-69	69	14.98	14.54	0.708+j2.564	0.691+j2.834	17.21	16.31	0.646+j2.463	0.697+j2.887
HORUS	HRS-230	230	8.54	8.05	2.813+j15.288	4.033+j18.041	10.10	9.11	2.299+j14.281	4.279+j18.713
HUACANA	HUC-69	69	1.41	0.93	13.259+j25.025	24.815+j67.507	1.85	1.19	10.749+j21.140	21.774+j59.370
HUANACAXTLE	HUA-115	115	4.01	3.76	4.788+j15.871	4.404+j19.426	4.75	4.31	4.057+j14.827	4.425+j19.628
HUANIMARO	HNM-115	115	4.00	3.01	4.399+j16.003	12.044+j30.760	4.42	3.31	4.351+j15.923	12.098+j31.052
HUENTITÁN	HUN-69	69	10.42	7.08	1.009+j3.687	2.438+j8.924	12.71	10.55	0.836+j3.346	1.522+j5.273
HUICHAPAN	HCH-115	115	1.55	0.83	13.279+j40.618	45.817+j147.497	1.73	0.92	13.026+j40.138	45.823+j147.560
HUNTSMAN INTERNATIONAL DE MÉXICO	HMA-115	115	1.37	0.02	8.211+j47.727	8.167-j11089.022	4.93	2.84	3.244+j14.450	11.137+j46.178
IBÍDEM	IBD-115	115	11.54	8.76	1.457+j5.566	3.364+j10.750	12.51	9.51	1.464+j5.651	3.373+j10.878
IBM DE MÉXICO S.A. DE C.V.	IBM-69	69	22.39	22.68	0.333+j1.748	0.281+j1.702	25.75	25.27	0.277+j1.679	0.290+j1.776
IBM-ALKA	IBA-69	69	23.62	25.09	0.314+j1.657	0.195+j1.391	27.23	27.99	0.258+j1.588	0.204+j1.465
IMMSA	IMM-115	115	4.95	4.96	3.144+j13.039	4.555+j12.637	5.39	5.38	3.156+j13.166	4.587+j12.945
IND MINERA MÉXICO	MNR-230	230	11.04	9.03	2.121+j11.835	4.778+j19.553	12.25	9.92	2.019+j11.757	4.819+j19.819
INDEPENDENCIA	INE-115	115	8.26	7.34	2.044+j7.777	2.334+j10.908	9.13	8.03	1.963+j7.752	2.367+j11.148
INDUSTRIAL SAN FRANCISCO	ISF-115	115	11.24	8.15	1.147+j5.795	2.157+j12.464	12.65	9.00	1.063+j5.677	2.173+j12.623
INGUARAN	ING-69	69	0.91	0.61	22.772+j37.508	41.367+j102.245	1.12	0.73	20.255+j33.665	38.315+j94.098
INNOPACK	INN-115	115	10.20	7.40	1.462+j6.341	3.573+j13.489	11.27	8.10	1.403+j6.327	3.601+j13.653
INVISTA	INV-115	115	18.04	20.10	0.933+j3.560	0.488+j2.539	20.12	22.13	0.893+j3.518	0.494+j2.618
IRAPUATO II	IRA-115	115	27.58	30.70	0.436+j2.368	0.176+j1.722	31.55	34.07	0.377+j2.284	0.187+j1.828



Subestación eléctrica	Acónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
IRAPUATO II	IRA-230	230	21.41	21.59	1.175+j6.090	1.098+j6.196	26.47	25.30	0.888+j5.446	1.136+j6.341
IRAPUATO INDUSTRIAL	IRI-115	115	13.21	10.01	1.129+j4.897	3.100+j9.423	14.79	11.05	1.071+j4.822	3.108+j9.510
IRAPUATO PONIENTE	IPP-115	115	15.76	11.30	0.818+j4.133	1.844+j9.057	17.65	12.47	0.763+j4.067	1.858+j9.141
IRAPUATO UNO	IRP-110	115	22.26	18.44	0.602+j2.922	1.000+j4.783	25.26	20.49	0.545+j2.840	1.011+j4.836
IRAPUATO VILLAS	IRV-115	115	17.41	12.91	0.753+j3.739	1.591+j7.688	19.58	14.28	0.697+j3.664	1.603+j7.754
ITALAISE	ITA-115	115	8.78	8.26	1.934+j7.312	1.505+j8.931	9.96	9.19	1.805+j7.106	1.531+j9.101
IXTLAHUACAN	ITC-400	400	9.54	7.49	4.318+j23.812	8.667+j43.647	15.90	12.33	1.522+j15.908	5.911+j29.140
IXTLAN	ITL-115	115	6.50	4.86	2.784+j9.830	7.237+j19.281	7.32	5.39	2.640+j9.618	7.253+j19.403
JABIL CIRCUIT DE MÉXICO	JBL-69	69	11.99	7.01	0.784+j3.228	2.499+j10.117	13.64	7.78	0.704+j3.135	2.506+j10.164
JACONA	JCN-115	115	9.90	7.97	1.579+j6.518	2.742+j11.269	11.22	8.84	1.442+j6.346	2.767+j11.430
JAGUAR	CBO-69	69	15.80	11.24	0.580+j2.454	1.165+j5.481	18.12	12.49	0.507+j2.364	1.186+j5.566
JALOSTOTITLAN	JLT-115	115	5.98	4.64	2.448+j10.832	5.315+j20.070	6.62	5.09	2.363+j10.781	5.351+j20.330
JALPA	JAP-115	115	2.28	1.36	9.204+j27.573	9.631+j88.438	2.52	1.50	9.101+j27.490	9.649+j88.674
JARAL DEL PROGRESO	JDP-115	115	4.89	3.02	3.544+j13.121	11.360+j37.032	5.40	3.32	3.495+j13.065	11.384+j37.212
JARRETADERAS	JDA-115	115	4.90	5.25	3.722+j13.023	2.585+j10.568	5.92	6.12	3.000+j11.975	2.608+j10.771
JATCO	JAT-115	115	11.42	8.23	1.150+j5.698	2.030+j12.433	12.96	9.14	1.042+j5.537	2.040+j12.561
JATCO II	JTC-115	115	12.26	10.01	0.995+j5.324	1.408+j8.982	13.94	11.10	0.887+j5.163	1.424+j9.163
JEREZ	JRZ-115	115	2.10	1.48	10.829+j29.658	22.896+j67.949	2.34	1.63	10.587+j29.363	22.909+j68.081
JESÚS DEL MONTE	JEM-110	115	11.25	8.57	1.232+j5.771	2.734+j11.159	12.42	9.36	1.174+j5.760	2.772+j11.349
JESÚS MARÍA	JMA-115	115	3.26	2.73	6.150+j19.403	10.199+j30.674	3.65	3.02	5.970+j19.119	10.235+j30.876
JIQUILPAN	JIQ-115	115	7.88	5.46	1.977+j8.196	4.838+j19.028	8.90	6.06	1.845+j7.993	4.858+j19.159
JOCOTEPEC	JCT-69	69	3.84	2.25	3.153+j9.872	9.052+j31.215	4.25	2.47	3.083+j9.829	9.058+j31.307
JOYUELAS	JYU-110	115	5.52	3.75	3.341+j11.552	8.721+j27.818	6.11	4.12	3.286+j11.495	8.739+j27.947
JUAN JOSÉ ARREOLA	JUJ-115	115	5.02	4.92	3.204+j12.837	2.415+j13.891	6.80	6.34	2.442+j10.453	2.453+j12.823
JUAN RULFO	JRU-115	115	1.71	1.09	12.291+j36.717	26.690+j101.779	2.37	1.47	9.383+j29.295	24.967+j84.134
JULIÁN CARRILLO	JCR-115	115	5.00	3.31	3.998+j12.665	10.098+j32.074	5.48	3.63	3.978+j12.711	10.121+j32.253
JURICA	JUR-110	115	11.93	8.78	1.705+j5.298	0.700+j11.749	13.30	9.69	1.656+j5.234	0.707+j11.811
KELLOGG'S DE MÉXICO S.R.L. DE C.V.	KEL-115	115	12.74	12.18	1.330+j5.040	1.079+j5.873	14.22	13.43	1.274+j4.976	1.094+j5.967
KIMBERLY CLARK DE MÉXICO	KIM-115	115	14.20	13.78	0.924+j4.584	0.807+j5.069	17.52	15.96	0.742+j4.102	0.849+j5.267
KITAGAWA	KIT-115	115	8.03	5.35	1.755+j8.075	4.800+j20.137	9.04	5.92	1.644+j7.913	4.817+j20.284
KODAK DE MÉXICO S.A. DE C.V.	KDK-69	69	13.09	8.69	0.789+j2.940	1.816+j7.458	14.85	9.64	0.717+j2.862	1.824+j7.523
KRUPP	KRP-115	115	20.51	19.94	0.664+j3.168	0.587+j3.492	22.21	21.45	0.660+j3.222	0.599+j3.610
LA BARCA	BRC-115	115	8.04	6.73	2.422+j7.899	4.000+j12.481	9.37	7.57	2.219+j7.470	4.041+j12.727
LA BUFA MANIOBRAS	BFM-230	230	5.33	5.37	5.076+j24.392	4.111+j24.017	6.12	5.99	4.469+j23.465	4.306+j25.022
LA CALIFORNIA	CLF-115	115	11.61	8.62	1.270+j5.576	2.662+j11.458	12.78	9.43	1.251+j5.578	2.671+j11.560
LA CUEVA	CUV-115	115	5.39	4.05	3.361+j11.843	8.293+j23.227	5.99	4.45	3.265+j11.754	8.314+j23.430
LA ESPERANZA	LAE-115	115	6.21	5.82	3.220+j10.203	2.651+j12.639	7.85	6.88	2.366+j9.000	2.711+j12.830
LA ESTRELLA	ELA-115	115	3.52	2.53	5.116+j18.136	10.756+j39.764	4.16	3.25	4.487+j16.976	7.575+j31.345
LA FRAGUA	FRA-115	115	9.73	10.53	1.728+j6.601	0.793+j5.294	11.05	11.75	1.608+j6.411	0.806+j5.426
LA GRIEGA	GRI-115	115	5.85	4.15	3.515+j10.800	7.964+j23.968	6.58	4.61	3.387+j10.568	7.967+j24.019
LA HUERTA	LHT-115	115	2.11	1.69	8.698+j30.183	14.026+j52.892	2.38	1.88	8.388+j29.522	14.045+j53.054
LA JOYA	LJY-115	115	17.49	16.06	0.823+j3.707	0.959+j4.748	19.49	17.61	0.764+j3.669	0.975+j4.868



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
LA LOMA	LLM-115	115	11.84	8.85	1.229+j5.470	1.802+j11.180	13.12	9.72	1.192+j5.439	1.823+j11.282
LA MANGA	MAN-230	230	7.63	5.60	2.912+j17.160	8.277+j35.606	8.95	6.31	2.475+j16.129	8.313+j35.989
LA MANSIÓN	MNS-115	115	11.72	9.63	1.086+j5.558	1.870+j9.205	14.74	11.26	0.828+j4.884	1.875+j9.286
LA PIEDAD	LPI-115	115	6.98	5.04	2.747+j9.109	6.993+j19.279	7.89	5.61	2.636+j8.876	7.004+j19.349
LA PIEDAD PONIENTE	LPP-115	115	5.63	3.91	3.422+j11.293	9.335+j25.710	6.34	4.34	3.351+j11.027	9.346+j25.783
LA PILA	SPI-115	115	22.47	23.36	0.577+j2.898	0.340+j2.619	24.16	24.85	0.579+j2.968	0.358+j2.767
LA PILA	SPI-230	230	14.91	15.26	1.456+j8.787	1.380+j8.235	16.33	16.50	1.400+j8.833	1.435+j8.602
LA PRIMAVERA (BAJÍO)	PRI-230	230	9.70	8.42	2.816+j13.399	4.552+j19.573	12.37	10.00	1.829+j11.670	4.596+j19.669
LA RESOLANA	LRE-115	115	8.63	8.41	1.310+j7.583	2.521+j7.991	10.09	9.53	1.136+j7.150	2.542+j8.176
LA SOLEDAD	SDD-115	115	9.62	8.01	1.545+j6.725	3.858+j10.527	10.77	8.93	1.477+j6.621	3.839+j10.393
LA VEGA	LVG-69	69	1.87	1.37	6.830+j20.150	10.130+j43.739	2.52	1.65	4.778+j16.753	10.250+j43.708
LA VENTA	LVT-69	69	4.88	2.96	2.394+j7.801	6.026+j23.374	6.31	3.92	1.760+j6.720	4.713+j18.981
LA VENTILLA	VLT-115	115	5.39	4.38	3.102+j11.920	5.566+j20.147	5.75	4.69	3.193+j12.296	5.610+j20.563
LA VIRGEN	LVR-115	115	4.96	3.09	3.183+j12.990	8.013+j36.981	5.48	3.39	3.124+j12.965	8.034+j37.121
LABORATORIOS PISA	LBP-69	69	6.78	4.25	1.440+j5.698	3.613+j15.978	7.56	4.69	1.367+j5.631	3.615+j16.025
LAGOS DE MORENO	LGS-110	115	5.21	3.26	3.011+j12.371	7.456+j34.859	5.75	3.58	2.952+j12.345	7.478+j34.999
LAGOS GALERA	LGG-115	115	5.16	3.22	3.041+j12.503	7.564+j35.327	5.69	3.54	2.982+j12.477	7.585+j35.467
LAGOS TECNOLÓGICO	LGT-115	115	7.04	4.68	2.035+j9.206	4.868+j23.257	7.78	5.14	1.978+j9.178	4.890+j23.396
LAGUNA LARGA	LGL-115	115	3.75	2.42	5.476+j16.857	16.106+j44.231	4.16	2.66	5.379+j16.693	16.126+j44.327
LAGUNA SAN VICENTE	LSV-230	230	11.15	9.01	2.083+j11.725	4.708+j19.942	12.32	9.86	2.008+j11.681	4.759+j20.231
LAGUNA SECA	LAS-110	115	4.72	3.65	4.566+j13.300	8.373+j25.054	5.40	4.09	4.226+j12.847	8.388+j25.185
LAGUNILLAS	LAG-115	115	3.84	2.84	4.977+j16.575	13.002+j33.097	4.31	3.15	4.718+j16.290	13.024+j33.263
LALA DERIVADOS LÁCTEOS S.A. DE C.V.	LAL-115	115	11.04	7.89	1.318+j5.867	4.285+j12.590	12.32	8.71	1.261+j5.793	4.293+j12.676
LAMOSA	LAM-115	115	16.62	13.84	0.857+j3.901	1.232+j6.302	18.02	14.97	0.857+j3.961	1.244+j6.426
LAMPOTAL	LPL-115	115	5.21	4.02	3.341+j12.301	6.142+j23.217	5.92	4.49	3.078+j11.937	6.167+j23.369
LAPEM	LPM-115	115	10.80	8.06	1.577+j5.945	3.935+j11.842	12.04	8.89	1.520+j5.870	3.943+j11.929
LAS BRISAS	BRI-115	115	7.77	6.76	1.837+j8.340	2.611+j12.106	9.80	8.09	1.313+j7.335	2.596+j11.877
LAS COLINAS	LCN-115	115	8.93	6.65	1.854+j7.200	3.680+j14.691	9.90	7.57	1.821+j7.149	3.437+j13.803
LAS DELICIAS	LDE-230	230	21.09	24.82	0.735+j6.254	0.305+j3.903	23.37	26.90	0.690+j6.213	0.332+j4.180
LAS FAJAS	FAJ-110	115	0.98	0.61	27.971+j61.994	69.395+j177.912	1.08	0.67	27.752+j61.814	69.424+j178.134
LAS FRESAS	LFR-115	115	25.64	24.30	0.427+j2.554	0.369+j3.041	28.65	26.37	0.380+j2.521	0.394+j3.213
LAS FRESAS	LFR-400	400	17.06	16.49	2.382+j13.327	2.696+j15.185	20.84	19.05	1.643+j12.076	2.783+j15.675
LAS PALMAS	LAP-115	115	4.36	4.57	4.363+j14.582	4.228+j12.429	5.24	5.31	3.583+j13.479	4.247+j12.633
LAS PINTAS	LPS-69	69	15.67	10.80	0.703+j2.443	1.118+j5.907	17.64	11.89	0.644+j2.399	1.124+j5.995
LAS TORRES	LTL-115	115	14.21	10.70	0.989+j4.568	4.319+j8.424	15.78	11.76	0.935+j4.533	4.341+j8.519
LAS VARAS	VRS-115	115	2.64	1.93	9.697+j23.210	20.073+j49.110	3.05	2.17	9.044+j22.208	20.071+j49.121
LEAR CORP (SELVA)	LCO-115	115	16.52	13.74	0.864+j3.926	1.256+j6.359	17.91	14.86	0.864+j3.986	1.269+j6.482
LECHERA GUADALAJARA S.A. DE C.V.	LEC-69	69	7.40	6.00	1.038+j5.283	1.654+j9.013	8.32	6.62	0.972+j5.176	1.668+j9.172
LECHERA MANIOBRAS	LEM-69	69	11.60	10.29	0.841+j3.329	0.949+j4.669	13.30	11.44	0.777+j3.202	0.979+j4.801
LEÓN ALFARO	LNA-115	115	11.34	8.79	1.368+j5.691	2.382+j10.719	12.58	9.66	1.314+j5.654	2.395+j10.823
LEÓN CUATRO	LNC-115	115	17.37	18.52	0.800+j3.739	0.461+j3.114	19.27	20.16	0.751+j3.716	0.492+j3.272
LEÓN CUATRO	LNC-230	230	11.19	10.59	2.422+j11.622	2.391+j13.839	12.75	11.77	2.146+j11.252	2.508+j14.207



Subestación eléctrica	Acónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
LEÓN MALECÓN	LNM-115	115	12.02	9.72	1.446+j5.331	2.031+j9.264	13.35	10.68	1.390+j5.291	2.043+j9.369
LEÓN NORTE	LNN-115	115	15.20	12.46	0.933+j4.267	2.488+j6.886	16.91	13.69	0.877+j4.230	2.508+j6.990
LEÓN ORIENTE	LNO-110	115	12.76	11.03	1.193+j5.065	1.700+j7.507	14.19	12.12	1.146+j5.020	1.720+j7.614
LEÓN PONIENTE	LNP-110	115	14.28	10.68	0.994+j4.541	2.108+j9.150	15.88	11.73	0.934+j4.503	2.122+j9.257
LEÓN TRES	LNT-115	115	20.90	23.48	0.688+j3.101	0.258+j2.153	23.31	25.62	0.632+j3.069	0.279+j2.292
LEÓN TRES	LNT-230	230	12.92	12.54	2.077+j10.064	1.758+j11.208	14.79	13.89	1.785+j9.710	1.876+j11.724
LEÓN UNO	LNU-115	115	21.11	23.42	0.597+j3.087	0.207+j2.249	23.37	25.39	0.539+j3.078	0.221+j2.395
LEÓN UNO	LNU-230	230	15.61	16.00	1.758+j8.323	1.204+j7.951	18.08	17.99	1.485+j7.941	1.258+j8.191
LINDAVISTA	LVA-115	115	8.15	7.20	1.971+j7.901	3.528+j10.854	9.16	7.94	1.843+j7.757	3.567+j11.085
LOGISTIK	LOG-115	115	11.81	9.04	1.432+j5.437	3.270+j10.315	12.80	9.81	1.439+j5.522	3.278+j10.443
LOMBARDÍA	LMB-69	69	2.92	2.28	4.944+j12.725	7.093+j24.242	6.00	5.14	1.746+j7.091	1.814+j10.477
LORETO	LOR-115	115	4.27	2.81	4.844+j14.767	10.936+j38.401	4.75	3.09	4.728+j14.641	10.953+j38.597
LOS HERNÁNDEZ	HDZ-110	115	1.40	0.96	18.269+j43.948	44.264+j104.358	1.57	1.06	17.557+j43.183	44.280+j104.490
LOS REYES	RYS-115	115	4.13	2.71	4.537+j15.416	12.444+j39.342	4.64	3.01	4.326+j15.126	12.455+j39.409
LOS SAUCES	LSA-115	115	9.41	6.34	2.055+j6.751	4.747+j16.687	10.50	7.08	2.020+j6.659	4.693+j16.386
LUIS MOYA	LMY-110	115	5.16	4.23	4.734+j11.970	3.828+j21.286	5.98	4.76	4.364+j11.407	3.856+j21.530
MABE LEISER (SLP)	MBL-115	115	19.36	17.82	0.693+j3.359	0.825+j4.262	20.96	19.21	0.690+j3.415	0.836+j4.377
MABE MÉXICO S. DE R.L. DE C.V. (MABE SANYO SLP)	MAB-115	115	17.49	14.04	0.814+j3.708	1.109+j6.532	18.99	15.20	0.809+j3.761	1.121+j6.651
MABE MÉXICO S. DE R.L. DE C.V. (CELAYA)	MAB-115	115	10.53	7.17	1.411+j6.145	4.337+j14.612	11.60	7.85	1.377+j6.146	4.350+j14.724
MABE MÉXICO S. DE R.L. DE C.V. (QUERETARO)	MBE-115	115	14.51	14.01	1.099+j4.443	0.923+j5.016	16.18	15.45	1.052+j4.389	0.930+j5.090
MAHLE	MAH-115	115	11.58	9.57	1.326+j5.576	3.174+j8.849	13.09	10.61	1.227+j5.444	3.186+j8.983
MALPASO	MPO-115	115	3.17	2.31	7.533+j19.519	11.795+j42.931	3.55	2.56	7.295+j19.218	11.808+j43.062
MANIOBRAS AISIN TAKAOKA	MTK-115	115	9.70	6.23	1.435+j6.693	3.896+j17.922	10.83	6.89	1.385+j6.600	3.905+j17.939
MANIOBRAS BMW	MBM-230	230	11.25	8.86	2.096+j11.617	5.144+j20.796	12.41	9.71	2.034+j11.593	5.180+j21.047
MANIOBRAS GENERAL MOTORS	MGM-230	230	10.68	8.38	2.411+j12.197	5.124+j22.305	12.31	9.59	2.122+j11.672	4.868+j21.544
MANIOBRAS GETRAG	MGT-115	115	7.86	5.19	1.724+j8.272	4.283+j21.130	8.74	5.67	1.691+j8.186	4.418+j21.516
MANIOBRAS GKN	MGK-115	115	9.29	7.89	1.450+j6.998	2.649+j10.681	10.18	8.60	1.421+j7.031	2.668+j10.845
MANIOBRAS HONDA	MHN-115	115	14.42	10.49	0.835+j4.528	2.266+j9.547	15.80	11.43	0.809+j4.552	2.281+j9.682
MANIOBRAS IBERDROLA	MIB-115	115	13.98	13.61	0.944+j4.655	0.788+j5.109	17.21	15.73	0.764+j4.174	0.837+j5.322
MANIOBRAS KASAI	MKI-115	115	18.02	18.17	0.694+j3.619	0.662+j3.568	19.93	19.76	0.636+j3.609	0.676+j3.714
MANIOBRAS MEXSOLAR	MMX-115	115	7.28	7.32	2.046+j8.884	1.314+j8.977	8.54	8.62	1.784+j8.360	1.354+j8.285
MANIOBRAS PLANTA FLOTACIÓN DE MINERAL	MPM-115	115	4.73	4.05	4.158+j13.399	5.933+j20.308	5.30	4.48	3.965+j13.186	5.955+j20.525
MANIOBRAS SOLEM	MSL-230	230	8.58	9.39	2.815+j15.214	1.560+j11.451	10.52	10.98	2.194+j13.707	1.656+j12.065
MANIOBRAS TOYOTA	TOM-230	230	12.43	9.14	1.711+j10.546	3.760+j21.988	13.96	10.10	1.572+j10.347	3.789+j22.198
MANIOBRAS WORLD TRADE CENTER DOS	MWD-230	230	10.55	8.29	2.069+j12.420	5.504+j22.305	11.62	9.07	2.014+j12.412	5.538+j22.550
MANUFACTURAS KALTEX S.A. DE C.V.	KAL-115	115	10.75	7.23	1.493+j5.994	3.936+j14.723	13.28	8.29	1.247+j5.358	3.951+j14.844
MANUFACTURAS VITROMEX I	VTM-115	115	6.57	5.10	2.726+j9.737	4.890+j18.230	7.56	6.16	2.511+j9.328	4.353+j15.689
MANUFACTURAS VITROMEX II	VT2-115	115	6.71	5.77	2.591+j9.553	4.032+j14.210	7.73	7.06	2.377+j9.144	3.496+j11.669
MANZANILLO	MNZ-230	230	10.42	12.75	1.605+j12.649	0.433+j5.735	15.48	17.26	0.731+j9.407	0.481+j6.182
MANZANILLO	MNZ-400	400	10.49	14.33	3.020+j21.816	0.152+j4.261	24.56	28.89	0.597+j10.325	0.170+j4.657
MARABIS COMMONFORT	MRC-115	115	8.41	6.04	2.051+j7.622	6.010+j16.180	9.29	6.64	2.023+j7.600	6.018+j16.265
MARAVATIO	MAV-115	115	2.26	1.45	8.261+j28.137	27.891+j74.244	2.52	1.60	8.029+j27.887	27.907+j74.345



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
MARGARITAS	MRS-115	115	16.60	14.67	0.744+j3.930	0.772+j5.558	18.95	16.29	0.647+j3.800	0.784+j5.699
MATEHUALA SUBESTACIÓN	MHS-110	115	2.44	2.13	8.356+j25.931	8.049+j38.509	2.65	2.29	8.489+j26.206	8.474+j40.027
MATEHUALA SUR	MHR-115	115	2.41	1.99	8.202+j26.328	10.364+j43.925	2.62	2.15	8.315+j26.577	10.701+j45.176
MATEHUALA SUR	MHR-230	230	8.64	8.18	2.777+j15.119	3.394+j17.681	10.21	9.27	2.266+j14.119	3.551+j18.346
MAZAMITLA	MTA-400	400	10.53	8.34	3.612+j21.622	8.394+j38.528	14.08	10.07	1.983+j17.929	8.534+j38.662
MAZDA MANIOBRAS	MMZ-115	115	14.14	10.00	0.860+j4.617	2.386+j10.307	16.05	11.08	0.793+j4.480	2.400+j10.441
MEADWEST VACO (SAINT GO BAIN)	MEA-115	115	15.22	12.41	0.962+j4.254	1.614+j7.172	16.52	13.44	0.962+j4.314	1.627+j7.295
MELAUQUE	MLQ-115	115	3.65	4.21	4.279+j17.671	2.605+j10.690	4.18	4.75	3.990+j16.990	2.622+j10.851
METAL FOAMING	SMF-115	115	9.69	6.94	1.663+j6.649	4.162+j14.423	10.53	7.56	1.670+j6.733	4.171+j14.551
METALSA	MTL-115	115	17.13	14.65	0.814+j3.790	1.152+j5.752	18.58	15.85	0.812+j3.846	1.163+j5.868
MINA LAS TORRES	MTL-115	115	6.80	4.32	2.500+j9.431	7.270+j25.581	7.56	4.77	2.451+j9.348	7.284+j25.613
MEXICHEM DERIVADOS	MCH-69	69	14.30	13.34	0.787+j2.672	1.077+j3.227	16.56	15.06	0.720+j2.546	1.079+j3.270
MEXICHEM DERIVADOS	MCH-115	115	9.09	7.94	2.071+j7.005	3.317+j10.008	10.21	8.80	1.987+j6.875	3.321+j10.102
MÉXICO	MXJ-69	69	13.42	8.80	0.820+j2.852	1.590+j7.506	15.25	9.73	0.746+j2.775	1.608+j7.606
MEXTICACAN	MXT-115	115	1.89	1.19	10.333+j33.505	28.618+j93.483	2.13	1.31	10.028+j32.839	28.652+j93.677
MEZQUITÁN	MZI-110	115	1.13	0.78	17.073+j56.041	55.360+j127.106	1.40	0.90	13.436+j50.429	55.385+j127.296
MICHELIN	MIC-115	115	18.50	16.31	0.689+j3.522	0.925+j4.978	20.63	17.95	0.649+j3.480	0.931+j5.057
MICHELÍN MANIOBRAS	MMH-115	115	9.35	6.37	1.949+j6.830	4.429+j16.526	10.43	7.10	1.923+j6.732	4.392+j16.316
MICROPARQUE	MPQ-115	115	20.06	20.08	0.796+j3.212	0.739+j3.251	22.41	22.11	0.756+j3.170	0.745+j3.330
MIGUEL AUZA	MGU-115	115	0.81	0.51	34.167+j73.995	84.021+j215.452	0.90	0.56	33.947+j73.818	84.050+j215.675
MINA FRESNILLO	CMF-115	115	6.30	5.68	2.980+j10.112	2.679+j13.752	7.13	6.33	2.773+j9.862	2.696+j13.905
MINA LA PAZ	MLP-115	115	2.20	1.99	9.447+j28.634	7.071+j39.473	2.39	2.13	9.618+j28.951	7.654+j41.418
MINA PEÑOLES	PNO-115	115	3.66	2.77	4.732+j17.526	11.018+j33.867	4.10	3.07	4.498+j17.220	11.030+j33.996
MINA SAN JAVIER	MSJ-115	115	7.26	5.12	2.114+j8.903	5.514+j19.877	7.93	5.59	2.106+j8.972	5.534+j20.062
MINA SAUCITO	SUM-115	115	4.97	3.97	3.792+j12.815	5.266+j22.887	5.59	4.40	3.584+j12.570	5.284+j23.040
MINATITLÁN	MTC-115	115	6.48	4.66	2.379+j9.965	6.077+j21.453	7.69	5.29	2.102+j9.258	6.082+j21.542
MINERA PEÑASQUITO	PNQ-400	400	4.52	3.08	7.189+j50.535	28.937+j119.969	5.20	3.45	6.357+j48.431	28.951+j120.420
MINERA REAL DE ÁNGELES SA DE CV	MRA-115	115	2.40	1.59	9.333+j26.011	21.523+j66.897	2.67	1.75	9.160+j25.808	21.537+j67.119
LA MORA	MRA-115	115	10.22	7.35	1.335+j6.357	3.600+j13.694	11.28	8.06	1.276+j6.345	3.614+j13.818
MINERALES Y MINAS MEXICANAS BOLAÑOS	BOL-115	115	0.91	0.58	34.432+j63.983	61.587+j192.485	1.01	0.63	34.325+j63.906	61.607+j192.726
MINSA, S.A. DE C.V.	MIN-69	69	9.94	6.18	1.559+j3.691	3.054+j10.968	11.14	6.77	1.495+j3.637	3.100+j11.152
MIRAMAR	MRM-115	115	8.95	7.50	1.613+j7.243	3.982+j11.056	10.93	8.67	1.360+j6.541	3.992+j11.206
MIRAVALLE	MIL-69	69	16.37	8.99	0.850+j2.280	1.815+j8.274	18.56	9.94	0.785+j2.227	1.820+j8.328
MISIÓN HILLS	MHI-115	115	8.50	10.03	1.875+j7.580	0.273+j4.350	9.61	11.09	1.756+j7.394	0.315+j4.629
MOCTEZUMA	MZM-115	115	5.90	4.99	2.568+j10.957	4.677+j16.803	6.62	5.53	2.429+j10.764	4.683+j16.955
MOJONERA	MOJ-69	69	16.55	12.03	0.546+j2.344	1.047+j5.032	19.03	13.37	0.472+j2.254	1.069+j5.117
MONARCA	MNC-115	115	6.14	4.07	3.199+j10.325	8.037+j26.178	6.84	4.50	3.138+j10.204	8.050+j26.204
MORALETE	MTE-115	115	6.64	6.13	2.446+j9.691	3.302+j12.092	7.83	6.97	2.146+j9.073	3.331+j12.267
MORELIA	MEL-115	115	9.87	10.13	1.721+j6.505	1.303+j6.189	10.93	11.04	1.638+j6.476	1.334+j6.439
MORELIA DOS	MRD-115	115	8.66	8.01	1.944+j7.416	1.918+j9.459	9.59	8.74	1.861+j7.389	1.952+j9.709
MORELIA INDUSTRIAL	MOI-115	115	9.20	7.54	1.837+j6.978	2.796+j11.824	10.14	8.25	1.785+j6.978	2.815+j11.981
MORELIA NORTE	MOR-115	115	9.14	7.64	1.868+j7.020	2.577+j11.393	10.10	8.36	1.804+j7.006	2.601+j11.569



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
MORELIA POTENCIA	MRP-115	115	10.73	12.40	1.458+j6.014	0.344+j3.801	11.90	13.47	1.369+j5.983	0.382+j4.072
MORELIA POTENCIA	MRP-230	230	6.11	6.04	4.410+j21.275	2.564+j22.608	6.92	6.62	3.880+j20.734	2.831+j23.977
MORELOS	MRE-115	115	14.25	10.79	0.908+j4.571	1.444+j9.045	16.25	12.01	0.802+j4.421	1.452+j9.152
MORELOS (LEÓN)	MRL-115	115	13.64	11.73	1.050+j4.752	1.414+j7.151	15.13	12.85	0.998+j4.722	1.436+j7.282
MOROLEÓN	MLO-110	115	5.11	3.12	3.695+j12.466	11.830+j36.078	5.65	3.43	3.637+j12.412	11.842+j36.179
MUELLE	MLE-115	115	4.16	4.20	4.642+j15.290	4.999+j14.687	4.97	4.86	3.845+j14.174	5.018+j14.891
NAL DE CONDOC ELEC S.A DE C.V	CDT-115	115	14.68	15.89	0.838+j4.444	0.491+j3.488	17.82	18.43	0.673+j4.043	0.511+j3.621
NESTLÉ (LA CIÉNEGA)	NES-115	115	3.55	2.55	5.314+j17.925	14.587+j38.263	4.13	2.86	4.932+j16.977	14.644+j38.512
NESTLÉ (LEÓN)	NES-115	115	5.02	3.13	3.143+j12.859	7.872+j36.425	5.53	3.44	3.084+j12.833	7.893+j36.564
NESTLÉ MÉXICO S.A. DE C.V.	NST-115	115	14.51	10.52	1.099+j4.443	2.135+j9.583	16.18	11.59	1.052+j4.389	2.142+j9.656
NIÑOS HÉROES	NHE-230	230	9.27	7.95	2.964+j14.014	4.682+j21.084	11.69	9.36	1.976+j12.341	4.760+j21.278
NISSAN	NIS-115	115	11.54	8.55	1.106+j5.644	1.893+j11.670	13.10	9.49	0.998+j5.487	1.901+j11.781
NISSAN MANIOBRAS	NSS-115	115	11.83	8.69	1.078+j5.506	1.877+j11.582	13.43	9.65	0.970+j5.349	1.885+j11.693
NITROPISO	NTP-115	115	13.71	9.72	0.956+j4.748	1.975+j10.634	14.89	10.56	0.957+j4.810	1.994+j10.774
NOGALES	NGA-115	115	8.55	7.02	1.824+j7.552	2.648+j12.651	9.87	8.47	1.640+j7.218	2.166+j10.889
NOGALITO	NGT-115	115	3.93	3.68	4.888+j16.173	5.216+j19.704	4.72	4.25	4.021+j14.952	5.235+j19.908
NUCOR MANIOBRAS	NUM-115	115	7.74	7.39	2.157+j8.300	3.703+j9.201	8.62	8.31	2.124+j8.198	3.662+j8.796
NUEVA ITALIA	NVI-69	69	3.22	2.75	4.210+j11.626	4.915+j18.146	5.23	4.36	2.433+j8.021	3.215+j12.740
NUEVA JAUJA	JAU-115	115	6.75	5.66	2.327+j9.563	4.230+j14.913	8.31	6.66	1.810+j8.603	4.214+j14.717
NUEVA PEDREGAL	NPD-115	115	7.70	5.20	2.095+j8.369	3.362+j20.843	8.53	5.73	2.049+j8.314	3.369+j20.913
NUEVO VALLARTA POTENCIA	NVT-115	115	5.75	7.46	3.111+j11.123	0.358+j3.644	7.04	8.88	2.403+j10.088	0.389+j3.891
NUEVO VALLARTA POTENCIA	NVT-230	230	3.23	3.95	10.757+j39.622	2.287+j18.808	4.07	4.76	7.921+j35.044	2.465+j19.895
NYPRO KANAAK SA CV	NKA-69	69	13.15	9.76	0.680+j2.953	1.607+j5.994	15.23	11.00	0.582+j2.818	1.601+j5.984
OBLATOS	OBL-69	69	11.66	7.89	0.803+j3.320	1.930+j8.102	14.51	12.64	0.617+j2.956	0.850+j4.193
OCOTLÁN	OCN-115	115	13.06	14.26	1.251+j4.928	0.451+j3.818	15.82	16.46	1.049+j4.496	0.493+j4.064
OCOTLÁN	OCN-230	230	7.46	6.84	3.650+j17.422	3.206+j22.577	8.73	7.63	2.953+j16.463	3.487+j23.758
OJO CALIENTE	OCL-110	115	5.67	5.96	4.154+j10.944	2.196+j9.875	6.79	6.86	3.522+j10.157	2.246+j10.233
OJO SECO	OJO-110	115	10.63	7.26	1.391+j6.087	4.270+j14.397	11.71	7.95	1.357+j6.088	4.283+j14.509
OJUELOS	OJU-115	115	1.73	1.89	13.379+j35.861	5.031+j29.035	2.11	2.19	10.988+j32.843	5.131+j30.508
OJUELOS DOS	OJD-115	115	5.19	3.86	3.807+j12.204	6.109+j25.398	5.97	4.32	3.484+j11.721	6.126+j25.601
OMEGA	OMG-115	115	8.11	5.39	1.723+j8.006	4.655+j20.082	9.12	5.96	1.612+j7.844	4.671+j20.229
OMYA MÉXICO S.A. DE C.V.	OMY-115	115	12.88	6.59	1.058+j5.045	8.912+j18.071	15.55	7.45	0.879+j4.614	8.917+j18.140
P. H. TROJES	TJS-115	115	1.82	1.21	12.800+j34.204	30.814+j85.575	2.19	1.92	10.771+j31.511	9.026+j47.186
PABELLÓN	PAB-115	115	7.44	5.62	2.100+j8.674	3.039+j17.411	8.48	6.25	1.934+j8.393	3.056+j17.645
PACHAMAMA MANIOBRAS	MPM-400	400	13.36	13.63	2.839+j17.056	2.335+j16.311	16.91	16.19	1.768+j14.919	2.451+j16.916
PALO ALTO	PAO-115	115	5.38	3.70	3.922+j11.692	6.517+j28.551	6.11	4.11	3.699+j11.364	6.529+j28.695
PÁNFILO NATERA	PFN-115	115	2.83	2.15	5.736+j22.739	21.861+j41.186	3.24	2.40	5.094+j21.964	21.913+j41.545
PAPEL POTOSÍ	PAP-115	115	21.20	20.34	0.650+j3.064	0.580+j3.507	22.94	21.86	0.646+j3.117	0.592+j3.627
PARQUE PIEL	PAP-115	115	11.52	8.86	1.226+j5.631	2.771+j10.649	12.73	9.71	1.167+j5.616	2.781+j10.770
PARACHO II	POD-115	115	6.63	5.12	3.069+j9.525	6.587+j17.757	7.77	5.79	2.696+j9.000	6.595+j17.816
PARQUE DE TECNOLOGÍA	PTE-69	69	11.23	7.98	0.879+j3.435	1.519+j7.763	12.71	8.76	0.809+j3.352	1.580+j7.955
PARQUE INDUSTRIAL	PQI-69	69	16.28	13.19	0.639+j2.362	0.999+j4.058	18.65	14.71	0.578+j2.278	1.005+j4.114



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
PARQUE INDUSTRIAL COLINAS DE APASEO	API-115	115	5.93	4.04	3.366+j10.672	8.489+j25.631	6.51	4.42	3.351+j10.711	8.497+j25.751
PARQUE INDUSTRIAL COLINAS DE LEÓN	ICL-115	115	15.01	11.28	0.941+j4.321	1.785+j8.662	16.72	12.41	0.880+j4.278	1.796+j8.755
PARQUE INDUSTRIAL FINSA QUERETARO	PFQ-115	115	11.58	6.21	1.729+j5.469	4.923+j20.068	12.91	6.85	1.680+j5.402	4.927+j20.123
PARQUE INDUSTRIAL GUANAJUATO CENTRAL	IGC-115	115	13.53	10.40	1.108+j4.782	2.982+j8.931	15.15	11.48	1.050+j4.706	2.989+j9.018
PARQUE INNOVACIÓN	PQN-115	115	10.37	6.82	1.691+j6.173	3.652+j16.017	11.96	7.63	1.575+j5.902	3.658+j16.093
PARQUE SOLAR SANTIAGO MANIOBRAS	MSG-230	230	6.22	6.31	3.790+j21.016	3.290+j20.226	7.37	7.19	3.230+j19.547	3.423+j21.092
PARQUE VIDANTA VALLARTA MANIOBRAS	MPV-115	115	5.03	5.70	3.687+j12.688	2.218+j8.269	6.09	6.68	2.957+j11.626	2.247+j8.494
PÁTZCUARO NORTE	PTN-115	115	3.38	2.41	5.830+j18.766	15.063+j40.590	3.85	2.69	5.383+j18.206	15.091+j40.719
PÁTZCUARO SUR	PCS-115	115	3.40	2.41	5.785+j18.666	14.911+j40.893	3.85	2.69	5.395+j18.193	14.937+j41.025
PEDREGAL	PDG-115	115	7.15	6.46	2.417+j8.962	3.921+j11.735	7.96	7.09	2.300+j8.885	3.953+j11.979
PELETIZADORA ALZADA	PAL-115	115	3.31	2.35	5.737+j19.244	12.271+j43.006	3.85	2.86	5.215+j18.247	10.427+j37.275
PEMSA	PEM-115	115	10.77	7.99	1.928+j5.854	3.741+j12.071	11.83	8.72	1.897+j5.874	3.759+j12.224
PENAL	PNL-69	69	9.41	6.23	0.949+j4.127	2.587+j10.399	10.66	6.93	0.864+j4.020	2.592+j10.430
PEÑJAMO	PNJ-115	115	5.89	4.12	3.292+j10.787	7.617+j24.635	6.55	4.54	3.203+j10.673	7.652+j24.808
PEÑA COLORADA	PEC-115	115	6.20	4.41	2.525+j10.403	6.464+j22.898	7.34	5.00	2.247+j9.697	6.469+j22.987
PEÑASCO	PNS-115	115	10.60	7.44	1.251+j6.140	2.794+j13.982	11.58	8.11	1.234+j6.186	2.811+j14.136
PEÑITAS	PEN-115	115	3.23	2.19	6.490+j19.524	14.816+j47.386	3.75	2.48	5.912+j18.559	14.798+j47.133
PEÑUELAS	PEN-115	115	6.74	4.39	2.165+j9.607	6.238+j24.933	7.55	4.85	2.053+j9.448	6.253+j25.069
PERFORMANCE FIBERS MÉXICO	PER-115	115	14.32	17.14	1.139+j4.495	0.446+j2.338	15.92	18.87	1.098+j4.453	0.452+j2.417
PERIBAN	PBN-115	115	3.89	2.60	4.874+j16.375	13.906+j40.291	4.37	2.88	4.637+j16.048	13.915+j40.349
PETROQUÍMICA	INP-69	69	13.26	11.64	0.888+j2.870	1.420+j4.032	15.27	13.08	0.822+j2.750	1.421+j4.072
PINAR	PNR-69	69	16.41	11.36	0.504+j2.375	1.384+j5.514	18.92	12.69	0.428+j2.277	1.390+j5.562
PINZÁNDARO	PIZ-115	115	2.08	1.59	9.575+j30.526	14.427+j59.539	2.79	2.26	6.538+j25.317	11.099+j42.906
PIRELLI NEUMÁTICOS S.A. DE C.V.	PIR-115	115	6.48	4.83	2.532+j9.923	4.998+j20.215	7.16	5.42	2.491+j9.887	4.867+j19.499
PITILLAL	PTL-115	115	4.97	5.48	3.627+j12.861	1.769+j9.500	6.02	6.41	2.876+j11.789	1.788+j9.704
PM CIGATAM PS S. DE R.L. DE C.V.	CIG-69	69	13.02	8.64	0.797+j2.954	1.830+j7.511	14.78	9.58	0.724+j2.876	1.837+j7.576
PONCITLAN	PNC-115	115	1.19	0.02	11.124+j54.846	5.208-j11094.982	5.79	3.64	3.283+j12.189	8.882+j33.870
PORCELANITE SJI	POR-115	115	13.78	13.72	1.181+j4.671	0.864+j4.842	15.37	15.14	1.131+j4.614	0.871+j4.917
POTOSÍ SOLAR MANIOBRAS	MFP-400	400	6.42	6.09	4.069+j35.767	7.062+j41.423	7.96	7.11	2.868+j31.786	7.303+j42.921
POTRERILLOS	POS-115	115	22.10	21.69	0.477+j2.966	0.332+j3.193	24.31	23.30	0.423+j2.974	0.358+j3.394
POTRERILLOS	POS-230	230	15.94	17.63	1.553+j8.184	0.630+j6.050	18.32	19.63	1.290+j7.867	0.681+j6.423
POTRERILLOS	POS-400	400	14.79	14.88	2.821+j15.360	2.330+j15.555	18.07	17.19	1.956+j13.919	2.466+j16.224
POTRERO SOLAR MANIOBRAS	PTM-400	400	10.17	10.15	3.345+j22.453	3.022+j22.938	12.44	11.72	2.297+j20.292	3.281+j24.118
PPG	PPG-115	115	13.71	13.08	0.954+j4.747	1.181+j5.447	16.54	15.06	0.788+j4.344	1.193+j5.553
PRADERA	PAD-115	115	3.03	2.75	6.359+j20.957	5.689+j28.078	4.13	3.64	4.067+j17.215	4.838+j23.955
PRAXAIR MÉXICO S.A. DE C.V. (GUADALAJARA)	PRA-69	69	10.86	7.43	1.139+j3.487	2.279+j8.461	12.26	8.23	1.066+j3.411	2.287+j8.528
PRIMERO DE MAYO	PMY-400	400	8.44	9.07	3.198+j27.161	2.537+j21.662	10.92	10.97	2.113+j23.162	2.666+j22.843
PROCTER & GAMBLE MANIOBRAS (IRAPUATO)	PGM-115	115	12.19	5.04	1.307+j5.286	7.648+j27.619	13.55	5.54	1.256+j5.241	7.663+j27.749
PROCTER & GAMBLE QUERETARO	P&G-115	115	5.46	3.68	3.551+j11.625	9.080+j28.354	5.99	4.04	3.536+j11.664	9.089+j28.474
PROD FARMACÉUTICOS COLLINS	CNS-69	69	16.30	11.89	0.631+j2.362	1.147+j5.048	18.59	13.19	0.562+j2.289	1.155+j5.120
PROD MET MEX DE POSTES SA CV	AMX-69	69	12.97	8.56	1.068+j2.881	1.348+j7.777	14.59	9.31	1.006+j2.830	1.420+j8.035
PRODUCTORA NACIONAL DE PAPEL	PRO-115	115	5.99	5.72	2.823+j10.711	2.311+j12.523	6.36	6.04	2.928+j11.102	2.450+j13.137



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
PROTEINOL	PRO-115	115	8.20	5.58	2.744+j7.622	6.284+j18.522	9.01	6.10	2.714+j7.638	6.306+j18.680
PRODUCTOS GATORADE	GAT-69	69	5.59	3.13	1.811+j6.899	5.939+j23.140	6.17	3.44	1.792+j6.867	5.953+j23.226
POLIVIN	PLV-115	115	7.43	4.97	3.088+j8.384	7.233+j21.056	8.17	5.44	3.058+j8.400	7.255+j21.213
PUEBLO NUEVO	PNV-115	115	6.47	4.39	2.696+j9.894	8.446+j23.426	7.18	4.83	2.634+j9.824	8.471+j23.620
PUENTE GRANDE	PGN-69	69	6.71	6.60	1.462+j5.757	0.776+j6.226	8.99	8.65	1.134+j4.740	0.628+j5.440
PUENTE GRANDE DOS	PTD-69	69	6.75	6.65	1.451+j5.719	0.760+j6.177	9.06	8.71	1.124+j4.704	0.619+j5.407
PUENTE GRANDE DOS	PTD-115	115	1.49	0.00	5.970+j44.276	4.316-j156497.08	2.80	1.06	6.595+j25.236	51.922+j145.895
PUERTA GRANDE	PGE-115	115	7.93	6.16	2.148+j8.092	4.518+j14.967	8.94	6.82	2.010+j7.917	4.543+j15.128
PUERTO INTERIOR	PTI-115	115	7.09	5.30	2.284+j9.089	4.338+j18.393	7.83	5.96	2.243+j9.050	4.193+j17.654
PUERTO INTERIOR (FONDEPORT)	FDP-115	115	9.79	8.12	1.449+j6.626	3.736+j10.363	12.09	9.42	1.198+j5.923	3.746+j10.512
PUNTA DE MITA	PMI-115	115	3.51	2.86	5.273+j18.182	6.246+j31.240	4.12	3.25	4.531+j17.136	6.265+j31.430
PURÉPECHA POTENCIA	PRH-115	115	17.51	17.46	0.588+j3.745	0.411+j3.821	20.02	19.26	0.472+j3.618	0.441+j4.049
PURÉPECHA POTENCIA	PRH-400	400	9.29	8.19	4.083+j24.525	5.415+j34.592	11.76	9.59	2.532+j21.448	5.755+j35.738
PURUANDIRO	PUR-115	115	3.08	2.07	7.085+j20.341	15.406+j50.696	3.58	2.72	6.399+j19.393	9.923+j38.405
PURUARÁN	PUU-69	69	1.39	0.88	12.621+j25.679	25.543+j74.485	1.87	1.15	9.642+j21.421	21.379+j64.173
QUERÉTARO I	QRO-115	115	27.54	34.04	0.469+j2.365	0.075+j1.066	30.93	37.48	0.428+j2.322	0.081+j1.145
QUERÉTARO I	QRO-230	230	19.97	21.28	1.266+j6.527	0.669+j5.525	23.40	24.02	1.064+j6.151	0.715+j5.807
QUERÉTARO INDUSTRIAL	QRI-110	115	13.73	13.95	1.142+j4.699	0.703+j4.588	15.26	15.35	1.100+j4.659	0.712+j4.671
QUERÉTARO MANIOBRAS	QMR-110	115	14.14	15.19	1.030+j4.582	0.475+j3.731	15.66	16.66	0.998+j4.557	0.483+j3.820
QUERÉTARO NORTE	QRN-115	115	14.74	14.17	1.262+j4.325	0.153+j5.180	16.50	15.67	1.211+j4.257	0.158+j5.245
QUERÉTARO ORIENTE	QRE-115	115	11.97	10.37	1.510+j5.339	0.233+j8.289	13.40	11.47	1.451+j5.253	0.238+j8.355
QUERÉTARO PONIENTE	QPE-115	115	11.58	9.46	1.384+j5.566	1.482+j9.528	12.76	10.32	1.357+j5.562	1.514+j9.709
QUERÉTARO POTENCIA	QRP-115	115	22.54	27.14	0.446+j2.912	0.083+j1.477	24.48	29.04	0.430+j2.952	0.091+j1.596
QUERÉTARO POTENCIA	QRP-230	230	24.85	27.46	0.822+j5.280	0.390+j3.905	28.25	30.35	0.697+j5.123	0.419+j4.143
QUERÉTARO POTENCIA	QRP-400	400	19.96	17.53	1.506+j11.475	2.139+j16.443	23.18	19.50	1.119+j10.902	2.288+j17.125
QUERÉTARO POTENCIA MANIOBRAS	QPM-400	400	21.15	16.73	1.345+j10.836	3.636+j19.417	24.58	18.79	0.989+j10.289	3.697+j19.650
QUERÉTARO SUR	QRS-115	115	16.06	13.97	0.745+j4.068	1.010+j5.928	17.58	15.19	0.727+j4.091	1.019+j6.040
QUINCEO	QNC-115	115	9.22	8.35	1.813+j6.971	2.010+j9.352	10.20	9.13	1.738+j6.948	2.038+j9.568
RANCHO GRANDE	RAG-115	115	2.60	1.81	8.044+j24.189	17.338+j56.469	2.89	2.00	7.842+j23.984	17.363+j56.684
REXAM BEVERAGE CAN AM S.A.	RXM-115	115	15.39	14.66	0.993+j4.199	0.931+j4.900	17.17	16.18	0.948+j4.147	0.937+j4.970
REXEL	RES-115	115	6.69	4.45	2.766+j9.524	7.313+j23.912	7.45	4.92	2.712+j9.414	7.325+j23.940
REYMA	RYM-115	115	14.73	11.92	0.947+j4.407	1.795+j7.525	16.29	13.02	0.889+j4.394	1.814+j7.672
RÍO GRANDE	RGR-110	115	1.42	0.91	17.472+j43.195	44.919+j116.405	1.58	1.01	17.259+j43.007	44.947+j116.625
RIO GRANDE II	RIG-115	115	1.50	0.97	15.724+j41.223	41.630+j109.928	1.66	1.07	15.511+j41.033	41.657+j110.148
ROMITA	RTA-115	115	9.00	7.32	1.740+j7.170	3.719+j11.957	9.95	8.26	1.695+j7.143	3.642+j11.328
S.I.A.P.A. (TOLUQUILLA)	SPB-69	69	16.94	11.80	0.634+j2.264	1.235+j5.303	19.37	13.11	0.566+j2.190	1.241+j5.361
S.I.A.P.A. PLANTA 2	STO-69	69	4.90	3.49	1.994+j7.886	4.728+j17.393	5.46	3.84	1.933+j7.789	4.741+j17.557
S.I.A.P.A. PTA BOMBEO STA CRUZ	SCH-69	69	3.64	1.67	2.425+j10.666	12.536+j48.247	3.94	1.82	2.506+j10.842	12.550+j48.332
SAHUAYO	SHY-115	115	7.59	5.26	1.938+j8.531	4.517+j19.916	8.63	5.84	1.792+j8.273	4.536+j20.066
SALAHUA	SLH-115	115	9.46	7.37	1.525+j6.852	4.356+j12.274	11.63	8.51	1.273+j6.150	4.366+j12.423
SALAMANCA	SLM-115	115	24.91	29.51	0.406+j2.635	0.105+j1.477	30.27	34.26	0.307+j2.394	0.114+j1.601
SALAMANCA	SLM-230	230	29.29	37.50	0.717+j4.477	0.097+j1.853	39.36	47.45	0.429+j3.686	0.108+j2.010



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
SALAMANCA	SLM-400	400	21.96	24.65	1.657+j10.386	0.626+j7.655	27.07	28.63	1.058+j9.326	0.694+j8.196
SALAMANCA COGENERACIÓN	SCG-230	230	29.25	36.48	0.728+j4.481	0.183+j2.126	38.99	45.73	0.445+j3.720	0.194+j2.277
SALAMANCA DOS	SMD-115	115	21.91	21.95	0.444+j2.997	0.320+j3.049	24.60	23.87	0.399+j2.942	0.348+j3.250
SALAMANCA DOS	SMD-230	230	12.77	9.90	1.790+j10.246	4.870+j19.126	15.14	11.24	1.501+j9.533	4.890+j19.291
SALAMANCA DOS	SMD-400	400	21.07	22.18	1.826+j10.806	1.339+j9.770	26.15	25.90	1.165+j9.645	1.397+j10.226
SALAMANCA NORTE	SLN-115	115	16.17	10.85	0.891+j4.007	2.730+j9.835	18.77	12.13	0.808+j3.806	2.738+j9.947
SALAMANCA PONIENTE	SPO-115	115	18.01	15.34	0.583+j3.641	1.047+j5.565	20.26	16.82	0.532+j3.565	1.070+j5.746
SALAMANCA SUR	SSU-110	115	18.82	22.19	0.663+j3.465	0.149+j1.979	21.83	25.02	0.584+j3.295	0.158+j2.098
SALERO	SLR-400	400	6.65	4.74	4.546+j34.407	17.162+j75.215	7.82	5.36	3.773+j32.255	17.176+j75.665
SALINAS	SNA-115	115	1.56	0.97	11.211+j41.081	61.670+j104.465	1.75	1.08	10.563+j40.313	61.723+j104.826
SALITRE	STE-115	115	3.69	2.23	4.186+j17.493	7.079+j53.144	4.08	2.45	4.086+j17.406	7.097+j53.377
SALVATIERRA	SVT-110	115	5.61	3.66	3.103+j11.419	10.326+j29.194	6.23	4.03	3.011+j11.331	10.335+j29.283
SAMSUNG	SAM-115	115	8.23	6.89	2.244+j7.747	3.667+j12.306	9.15	7.60	2.191+j7.674	3.673+j12.380
SAN AGUSTÍN	SAG-69	69	11.96	7.75	0.907+j3.205	2.021+j8.544	13.50	8.59	0.835+j3.137	2.023+j8.586
SAN ANDRÉS	ADE-115	115	9.11	7.90	1.862+j7.043	2.163+j10.452	11.25	9.15	1.558+j6.304	2.224+j10.737
SAN ANTONIO	SAN-115	115	7.90	7.87	2.356+j8.063	1.186+j8.550	9.33	8.90	2.041+j7.558	1.229+j8.966
SAN CARLOS	SCA-115	115	10.37	7.68	1.557+j6.213	3.058+j12.820	11.54	8.49	1.516+j6.144	3.060+j12.820
SAN CLEMENTE	SCM-69	69	1.22	0.60	6.405+j31.910	40.018+j128.626	1.48	0.67	4.679+j29.181	40.081+j130.886
SAN CLEMENTE	SCM-115	115	1.57	1.09	12.559+j40.368	38.794+j89.787	2.04	1.29	8.934+j34.756	38.818+j89.976
SAN DIEGO PEÑUELAS	SDP-115	115	4.66	2.93	3.549+j13.810	10.105+j38.241	5.12	3.22	3.533+j13.827	10.118+j38.369
SAN FELIPE	SFL-115	115	1.87	1.26	10.224+j33.949	32.110+j81.745	2.06	1.38	10.196+j33.927	32.112+j81.818
SAN FRANCISCO	SFR-115	115	10.66	7.58	1.226+j6.107	2.435+j13.624	11.98	8.37	1.141+j5.986	2.451+j13.776
SAN FRANCISCO DEL RINCÓN	SFQ-110	115	10.07	7.02	1.271+j6.470	3.221+j14.874	11.08	7.66	1.217+j6.478	3.247+j15.077
SAN GASPAR	GPR-69	69	22.30	23.29	0.316+j1.758	0.182+j1.567	26.30	26.51	0.234+j1.650	0.188+j1.601
SAN ILDEFONSO	SFS-115	115	12.53	9.46	1.481+j5.087	2.160+j10.286	15.66	10.97	1.253+j4.491	2.169+j10.367
SAN JERÓNIMO	SJE-115	115	2.50	1.76	8.635+j25.142	18.139+j57.122	2.77	1.94	8.439+j24.933	18.162+j57.340
SAN JORGE	SAJ-69	69	7.90	5.33	1.419+j4.837	3.019+j11.997	10.96	6.44	0.975+j3.876	3.023+j12.052
SAN JORGE	SAJ-115	115	1.66	0.02	5.744+j39.594	2.612-j11104.203	5.23	2.77	3.001+j13.638	12.816+j49.436
SAN JOSÉ DE GRACIA	JOG-115	115	3.11	1.99	7.638+j19.952	18.429+j54.299	3.46	2.20	7.504+j19.752	18.448+j54.431
SAN JOSÉ ITURBIDE	SJI-115	115	9.11	7.95	1.682+j7.091	2.219+j10.334	10.72	10.61	1.457+j6.657	1.277+j6.961
SAN JUAN ZITÁCUARO	SJZ-115	115	6.05	3.98	3.285+j10.478	8.145+j26.964	6.74	4.40	3.220+j10.349	8.160+j26.988
SAN JUAN DE LOS LAGOS	JDL-115	115	6.48	5.20	2.583+j9.920	5.552+j16.925	7.19	5.71	2.493+j9.852	5.581+j17.160
SAN JUAN DE LOS LAGOS II	SJD-115	115	10.63	11.82	1.091+j6.153	0.421+j4.359	11.77	12.83	1.010+j6.120	0.461+j4.658
SAN JUAN DE LOS LAGOS II	SJD-230	230	7.55	7.12	3.193+j17.307	2.709+j20.702	8.68	7.88	2.768+j16.609	2.948+j21.759
SAN JUAN DEL RÍO	SJR-110	115	14.51	14.24	0.891+j4.488	0.769+j4.811	17.96	16.58	0.706+j4.004	0.791+j4.966
SAN JUAN DEL RÍO MANIOBRAS	SJM-110	115	14.30	13.49	0.881+j4.559	1.134+j5.385	17.61	15.74	0.691+j4.090	1.141+j5.458
SAN JUAN DEL RIO ORIENTE	SJO-115	115	11.68	9.99	1.287+j5.535	2.237+j8.302	14.32	11.50	1.079+j4.984	2.275+j8.491
SAN JUAN POTENCIA	SJP-115	115	17.14	22.20	0.696+j3.811	0.103+j1.253	21.24	26.53	0.526+j3.399	0.111+j1.341
SAN JUAN POTENCIA	SJP-230	230	10.53	10.44	2.300+j12.405	1.548+j12.969	13.26	12.25	1.647+j10.889	1.678+j13.610
SAN LUIS DE LA PAZ	SAP-110	115	17.55	17.29	0.603+j3.735	0.652+j3.996	19.33	18.82	0.578+j3.735	0.664+j4.108
SAN LUIS DE LA PAZ II	SPA-115	115	22.54	25.60	0.352+j2.925	0.171+j1.979	24.66	27.54	0.336+j2.942	0.185+j2.107
SAN LUIS DE LA PAZ II	SPA-230	230	19.73	22.35	0.850+j6.676	0.534+j4.753	22.05	24.45	0.787+j6.577	0.560+j5.012



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
SAN LUIS DOS	SLD-115	115	19.32	20.63	0.554+j3.392	0.276+j2.788	20.84	21.96	0.545+j3.461	0.296+j2.973
SAN LUIS DOS	SLD-230	230	14.98	15.02	1.460+j8.741	1.511+j8.728	16.55	16.34	1.371+j8.719	1.579+j9.070
SAN LUIS I	SLP-115	115	24.26	26.68	0.563+j2.678	0.230+j2.009	26.21	28.47	0.559+j2.730	0.243+j2.133
SAN LUIS I	SLP-230	230	15.19	14.73	1.718+j8.569	1.567+j9.497	16.90	16.07	1.620+j8.488	1.651+j9.890
SAN LUIS INDUSTRIAL	SLI-110	115	17.69	15.45	0.798+j3.667	0.871+j5.340	19.17	16.69	0.797+j3.725	0.882+j5.456
SAN LUIS NORTE	SNE-115	115	8.73	5.88	1.506+j7.456	4.347+j18.177	9.57	6.43	1.496+j7.486	4.363+j18.313
SAN LUIS ORIENTE	SLO-110	115	15.05	11.93	0.911+j4.317	1.914+j7.662	16.43	12.99	0.901+j4.353	1.922+j7.762
SAN LUIS PONIENTE	SLW-110	115	11.33	7.93	1.336+j5.704	3.074+j13.075	12.42	8.67	1.322+j5.729	3.086+j13.172
SAN LUIS PROGRESO	SPR-110	115	12.01	9.13	1.234+j5.390	2.705+j10.439	13.12	9.96	1.224+j5.429	2.713+j10.550
SAN MARTIN	SMR-230	230	10.35	9.42	2.632+j12.560	3.268+j16.500	12.83	10.95	1.829+j11.237	3.392+j16.918
SAN MIGUEL	MIG-115	115	3.17	2.12	5.256+j20.285	13.398+j50.190	3.50	2.33	5.170+j20.236	13.434+j50.450
SAN MIGUEL ALLENDE SUR	SMS-115	115	9.09	6.26	1.919+j7.047	4.868+j16.551	10.06	6.89	1.886+j7.013	4.876+j16.621
SAN MIGUEL DE ALLENDE	MAL-115	115	11.00	8.08	1.399+j5.870	2.750+j12.314	12.19	8.89	1.365+j5.836	2.761+j12.393
SAN NICOLÁS	SNS-69	69	5.14	3.06	2.036+j7.476	5.880+j22.776	5.72	3.38	1.992+j7.395	5.887+j22.842
SAN PEDRO	PDR-115	115	13.41	10.53	0.923+j4.865	2.063+j8.795	14.62	11.45	0.912+j4.913	2.076+j8.929
SAN RAFAEL MANIOBRAS	SRM-115	115	2.82	2.11	5.942+j22.823	18.210+j43.842	3.73	4.12	4.103+j19.132	2.265+j13.894
SAN ROQUE	SRQ-115	115	12.15	8.85	1.002+j5.371	2.248+j11.390	13.37	9.64	0.948+j5.380	2.274+j11.592
SAN VICENTE	SVI-115	115	5.42	6.56	3.335+j11.783	0.998+j5.846	6.60	7.73	2.624+j10.749	1.027+j6.088
SANMINA-SCI SYSTEMS DE MEXICO	SCI-69	69	10.48	6.96	0.989+j3.669	2.272+j9.325	11.78	7.68	0.932+j3.601	2.281+j9.399
SANMINA-SCISYSTEMS MÉXICO	SCR-69	69	14.12	10.61	0.752+j2.720	1.370+j5.469	16.08	11.80	0.691+j2.637	1.375+j5.525
SANMINA-SCISYSTEMS MÉXICO	SCR-115	115	10.92	8.73	1.317+j5.938	2.381+j10.418	12.06	9.51	1.258+j5.922	2.450+j10.665
SANTA CRUZ	SCU-69	69	14.72	10.82	0.708+j2.612	1.331+j5.483	16.71	12.02	0.636+j2.544	1.333+j5.529
SANTA CRUZ	SCZ-115	115	6.05	4.04	3.531+j10.382	8.422+j26.065	6.66	4.43	3.501+j10.398	8.444+j26.222
SANTA FE	STF-115	115	16.78	19.87	0.752+j3.884	0.196+j2.161	18.61	21.64	0.715+j3.859	0.214+j2.313
SANTA FE	STF-230	230	11.23	10.69	2.047+j11.643	1.869+j13.740	12.62	11.67	1.884+j11.418	2.030+j14.442
SANTA FE II	SFD-115	115	7.17	5.52	2.250+j8.980	4.038+j17.140	7.93	6.21	2.208+j8.943	3.907+j16.424
SANTA FE TRES	SFT-115	115	7.10	5.22	2.259+j9.070	4.449+j19.003	7.85	5.87	2.220+j9.029	4.289+j18.242
SANTA MARÍA	STM-115	115	26.21	24.39	0.367+j2.507	0.386+j3.107	28.41	25.98	0.347+j2.547	0.411+j3.286
SANTA MARÍA	SNM-115	115	8.27	7.19	2.070+j7.759	2.525+j11.492	9.14	7.86	1.992+j7.737	2.555+j11.719
SANTA MARÍA	STM-400	400	19.85	17.52	1.592+j11.526	2.826+j16.349	23.34	19.70	1.150+j10.822	2.932+j16.862
SANTIAGO	SNG-115	115	8.84	5.90	1.601+j7.336	4.362+j18.250	9.70	6.46	1.588+j7.362	4.376+j18.358
SANTIAGO IXCUINTLA	SNI-115	115	4.01	2.87	5.197+j15.700	11.302+j34.559	4.73	3.27	4.627+j14.725	11.285+j34.308
SANTIAGO UNDAMEO	SUN-115	115	5.54	4.54	3.251+j11.533	7.014+j18.727	6.18	5.01	3.101+j11.406	7.042+j18.947
SANTIAGUITO	STG-115	115	9.47	7.80	1.797+j6.777	2.641+j11.352	10.45	8.54	1.740+j6.767	2.661+j11.512
SAPAL PROC AGUAS RESID	SPL-115	115	10.12	7.52	1.427+j6.402	3.695+j12.913	11.18	8.24	1.368+j6.387	3.704+j13.031
SATÉLITE	SEI-115	115	11.66	8.43	1.124+j5.582	2.171+j12.060	12.68	9.16	1.127+j5.651	2.189+j12.208
SATÉLITE	SAT-115	115	13.92	10.56	0.982+j4.666	1.672+j9.207	15.48	11.62	0.941+j4.623	1.682+j9.284
SAYULA	SYL-115	115	2.87	2.08	6.822+j22.068	10.783+j48.682	4.87	3.51	4.115+j14.428	9.084+j31.096
SENDERO	MTS-115	115	12.15	10.29	1.109+j5.352	2.244+j8.144	13.24	11.18	1.099+j5.406	2.258+j8.296
SERVICIOS AGUAMILPA	SEA-110	115	2.18	1.60	7.875+j29.422	25.061+j58.880	2.76	2.64	6.032+j25.735	9.100+j28.919
SERVICIOS EL CAJÓN	SCJ-115	115	2.50	1.92	6.410+j25.739	14.103+j48.627	2.79	2.12	6.205+j25.403	14.096+j49.216
SERVICIOS LA YESCA	SLY-115	115	0.79	0.62	21.850+j81.275	54.602+j142.218	0.86	0.68	22.175+j82.043	54.902+j144.259



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
SHULMANN	SHU-115	115	19.21	17.48	0.686+j3.388	0.839+j4.421	20.77	18.82	0.686+j3.449	0.852+j4.544
SIBASA	SIB-230	230	13.69	11.90	1.904+j9.510	2.811+j13.968	15.78	13.26	1.684+j9.104	2.908+j14.352
SIDERÚRGICA GUADALAJARA	SGG-161	161	3.22	2.63	6.569+j28.107	12.082+j47.000	3.49	2.86	6.297+j28.621	12.091+j47.282
SIEMENS	SIE-69	69	9.83	6.17	1.051+j3.915	2.493+j11.011	11.04	6.82	0.981+j3.848	2.496+j11.055
SILAO	SIL-115	115	14.45	13.51	1.095+j4.461	1.452+j5.406	16.08	16.08	1.052+j4.418	1.137+j4.422
SILAO POTENCIA	SIP-115	115	18.01	19.77	0.759+j3.608	0.281+j2.741	20.00	23.33	0.715+j3.581	0.204+j2.113
SILAO POTENCIA	SIP-230	230	13.83	12.89	2.052+j9.377	2.051+j11.711	16.12	15.30	1.765+j8.887	1.651+j10.506
SIPOSA (GASA)	GAS-115	115	15.14	12.21	0.934+j4.284	1.236+j7.466	16.46	13.25	0.930+j4.337	1.248+j7.585
SISTEMAS JUÁREZ	SIS-69	69	20.24	15.80	0.511+j1.901	0.778+j3.561	23.31	17.60	0.443+j1.827	0.785+j3.625
SOLEDAD DE GRACIANO SÁNCHEZ	SGS-110	115	11.88	8.94	0.982+j5.504	1.763+j10.979	12.96	9.73	0.967+j5.552	1.776+j11.112
URUAPAN	STI-115	115	3.89	2.93	5.043+j16.320	11.555+j31.756	4.55	3.31	4.397+j15.453	11.594+j31.899
TABACALERA	TBK-110	115	7.15	6.00	2.170+j9.033	3.547+j14.215	8.88	7.08	1.650+j8.061	3.531+j14.004
TACUBAYA	TYA-115	115	5.60	3.94	3.406+j11.354	9.315+j25.214	6.26	4.36	3.294+j11.186	9.334+j25.306
TALA	TLA-69	69	3.46	3.82	3.842+j10.869	0.841+j8.382	5.73	5.54	1.814+j7.428	0.961+j8.351
TALPA	TPA-69	69	0.54	0.71	28.134+j67.954	0.561+j22.414	0.76	0.95	17.625+j54.837	0.618+j24.660
TAMARINDOS	TMI-115	115	5.84	7.81	3.111+j10.938	0.305+j2.788	7.19	9.39	2.381+j9.872	0.323+j2.990
TAMAZULA	TAZ-115	115	2.71	2.02	6.368+j23.659	11.900+j48.375	3.20	2.29	5.848+j22.089	11.993+j48.547
TANGAMANGA	TMG-115	115	11.58	8.18	1.351+j5.570	3.133+j12.506	12.69	8.95	1.337+j5.596	3.142+j12.598
TANGANCÍCUARO	TGR-115	115	8.64	8.10	1.967+j7.428	2.864+j8.788	9.76	8.98	1.827+j7.255	2.897+j8.987
TANQUE TENORIO (DEGREMONT)	TQT-115	115	18.40	15.32	0.767+j3.526	0.969+j5.726	19.96	16.57	0.763+j3.578	0.981+j5.846
TAPEIXTLÉS	TAP-69	69	4.32	5.76	0.735+j9.195	0.082+j2.286	4.51	5.99	0.696+j9.685	0.088+j2.505
TAPEIXTLÉS	TAP-115	115	13.46	14.15	0.866+j4.856	0.715+j4.151	17.42	17.07	0.621+j4.145	0.734+j4.314
TAPEIXTLÉS POTENCIA	TPX-115	115	17.69	20.52	0.503+j3.719	0.174+j2.198	24.28	25.90	0.270+j2.996	0.189+j2.359
TAPEIXTLÉS POTENCIA	TPX-230	230	11.89	15.28	1.488+j11.071	0.270+j3.726	18.58	21.85	0.596+j7.839	0.290+j4.018
TAPEIXTLÉS POTENCIA	TPX-400	400	10.02	12.82	3.237+j22.826	0.911+j7.843	21.63	23.23	0.783+j11.721	0.945+j8.269
TARANDACUAO	TDC-115	115	2.89	1.83	6.398+j22.051	21.403+j59.522	3.22	2.02	6.168+j21.799	21.418+j59.622
TARETAN	TAR-69	69	2.36	1.93	5.450+j15.984	9.430+j26.420	2.83	2.23	4.898+j14.671	9.365+j26.238
TARIMBARO	TRB-115	115	6.96	5.25	2.597+j9.186	5.728+j18.121	7.68	5.76	2.538+j9.165	5.745+j18.263
TECHNICOLOR MEXICANA S. DE R.L. DE C.V.	TNI-69	69	13.37	8.94	0.773+j2.878	1.754+j7.221	15.19	9.91	0.700+j2.800	1.761+j7.286
TECNOLÓGICO	TAG-115	115	15.42	12.15	0.835+j4.225	1.209+j7.715	17.62	13.53	0.730+j4.080	1.217+j7.825
TECOLAPA	TOA-115	115	5.94	4.47	3.164+j10.721	8.077+j20.777	7.00	5.06	2.867+j10.037	8.087+j20.874
TECOTLÁN	TCT-115	115	2.44	1.77	7.539+j26.101	22.810+j54.075	3.00	2.04	6.019+j23.631	22.833+j54.263
TECOMÁN	TEC-115	115	5.10	3.67	3.627+j12.497	10.204+j26.459	5.95	4.13	3.333+j11.812	10.215+j26.560
TECOMATES	TCS-115	115	1.70	1.26	11.355+j37.334	20.720+j77.518	1.91	1.39	11.033+j36.683	20.738+j77.682
TECOZAUTLA	TCZ-115	115	2.07	1.16	10.058+j30.397	35.511+j102.076	2.32	1.28	9.809+j29.913	35.516+j102.138
TECUALA	TEL-115	115	1.08	0.72	24.311+j56.649	61.317+j141.542	1.21	0.80	23.693+j55.753	61.298+j141.285
TECUAN	TCN-115	115	6.66	4.58	2.642+j9.611	4.934+j23.074	7.56	5.09	2.463+j9.338	4.943+j23.232
TEJEDA	TJD-115	115	13.39	16.60	1.038+j4.848	0.359+j2.079	14.80	18.14	1.009+j4.831	0.365+j2.191
TEOCALTICHE	TEO-115	115	4.50	3.08	3.751+j14.271	9.253+j33.950	4.97	3.38	3.669+j14.239	9.293+j34.249
TEPALCATEPEC DOS	TPD-115	115	1.50	1.10	13.124+j42.173	26.746+j89.205	2.17	1.97	7.746+j32.813	9.289+j42.560
TEPATITLÁN	TPT-115	115	4.67	3.15	4.198+j13.582	10.666+j33.222	6.04	3.69	3.518+j11.574	10.752+j33.471
TEPETONGO	TGO-115	115	1.32	0.94	15.424+j47.997	38.834+j103.973	1.46	1.04	15.178+j47.704	38.847+j104.105



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
TEPEYAC	TPY-115	115	6.56	4.19	2.978+j9.676	7.213+j26.352	7.55	4.69	2.784+j9.265	7.218+j26.403
TEPIC DOS	TED-115	115	11.55	13.75	1.017+j5.656	0.185+j3.018	15.74	18.11	0.492+j4.615	0.171+j2.772
TEPIC DOS	TED-230	230	8.24	10.16	3.149+j15.795	0.655+j7.077	13.19	15.76	1.119+j11.018	0.439+j5.476
TEPIC DOS	TED-400	400	7.07	7.40	6.777+j31.945	3.702+j28.429	16.37	16.66	1.367+j15.463	2.071+j13.999
TEPIC INDUSTRIAL	TID-110	115	7.85	6.83	1.954+j8.234	2.827+j11.946	9.84	8.13	1.439+j7.280	2.811+j11.757
TECOMÁN SUR	TES-115	115	4.16	2.95	4.460+j15.333	13.191+j33.245	4.80	3.30	4.165+j14.649	13.201+j33.346
TEPIC UNO	TES-115	115	8.95	8.38	1.596+j7.243	1.818+j8.777	11.50	10.20	1.080+j6.259	1.803+j8.557
TEQUILA	TQA-69	69	1.97	1.15	7.490+j18.789	16.813+j61.367	3.05	2.23	4.065+j13.794	6.571+j28.867
TEQUILA	TQA-115	115	0.96	0.60	22.575+j65.579	47.502+j184.832	1.33	1.05	12.996+j53.308	19.070+j95.822
TEQUISQUIAPAN	TEQ-115	115	7.10	4.14	2.369+j9.053	11.611+j27.202	8.25	4.64	2.164+j8.584	11.615+j27.263
TERMINAL DE GAS MANZANILLO	TGM-115	115	11.89	9.75	0.873+j5.517	1.741+j9.093	15.10	11.46	0.633+j4.795	1.748+j9.219
TERMOENVASES EXPANDIBLES	TER-115	115	16.34	14.78	0.865+j3.971	1.168+j5.254	18.07	16.13	0.807+j3.959	1.182+j5.394
TERRAPLENA	TRP-115	115	6.75	7.85	1.604+j9.707	1.102+j5.585	8.02	9.08	1.349+j9.002	1.121+j5.747
TESISTAN	TSN-69B	69	20.99	23.75	0.227+j1.884	0.055+j1.251	25.53	27.49	0.127+j1.712	0.062+j1.338
TESISTAN	TSN-69	69	31.66	32.10	0.212+j1.240	0.098+j1.221	38.29	36.89	0.133+j1.137	0.103+j1.270
TESISTAN	TSN-230	230	16.18	19.42	1.872+j7.993	0.406+j4.264	23.39	26.01	0.900+j6.180	0.430+j4.292
TESISTAN	TSN-400	400	13.32	14.42	4.096+j16.843	1.929+j13.733	23.30	22.16	1.403+j10.812	1.939+j12.341
TETRAPAK	TTK-115	115	13.35	9.88	0.976+j4.876	6.368+j8.637	14.63	10.79	0.958+j4.900	6.377+j8.750
TISAMATIC	TIS-115	115	19.74	18.46	0.716+j3.286	0.619+j4.046	21.40	19.88	0.711+j3.339	0.632+j4.167
TLAJOMULCO POTENCIA	TLJ-230	230	15.47	17.67	1.875+j8.374	0.607+j5.537	19.96	21.36	1.161+j7.224	0.650+j5.858
TLAJOMULCO POTENCIA	TLJ-400	400	13.71	14.33	3.635+j16.442	2.271+j15.054	20.11	18.62	1.655+j12.521	2.379+j15.529
TLALTENANGO	TLO-110	115	1.89	1.12	9.707+j33.859	19.592+j105.821	2.08	1.23	9.602+j33.777	19.611+j106.059
TOTOTLAN	TTO-115	115	4.81	3.54	3.953+j13.230	9.656+j27.063	5.71	4.02	3.572+j12.280	9.713+j27.311
TREJO	TRJ-115	115	8.49	6.92	2.065+j7.544	5.077+j12.220	9.47	7.71	2.015+j7.447	5.071+j12.056
TREMEC	TRE-115	115	17.97	15.90	0.728+j3.622	0.959+j5.078	20.04	17.50	0.687+j3.580	0.965+j5.157
TRES MARÍAS	TSM-115	115	7.59	5.66	2.046+j8.501	3.908+j17.448	8.36	6.20	1.997+j8.502	3.926+j17.595
TRES NACIONES	TEN-115	115	17.87	15.15	0.778+j3.632	0.949+j5.660	19.35	16.36	0.778+j3.692	0.962+j5.783
TRIARA	TTR-115	115	12.77	11.47	1.481+j4.984	0.202+j7.134	14.30	12.69	1.426+j4.905	0.207+j7.196
TRIGUILLOS	TGS-115	115	2.83	1.90	8.340+j21.933	19.828+j54.931	3.11	2.08	8.303+j21.951	19.843+j55.073
TURBORREACTORES S.A. DE C.V.	REA-115	115	18.30	19.90	0.911+j3.513	0.522+j2.738	20.41	21.91	0.871+j3.470	0.528+j2.816
TUXPAN	TUX-115	115	3.17	2.59	6.889+j19.746	11.084+j33.348	3.79	2.97	6.375+j18.176	11.177+j33.520
TUXPAN	TXP-115	115	5.75	3.89	3.155+j11.106	9.078+j26.699	6.37	4.29	3.117+j11.042	9.083+j26.755
TUZANIA	TUZ-230	230	13.73	14.24	2.160+j9.424	1.463+j8.674	19.36	18.58	1.129+j7.460	1.420+j8.315
UNIVERSIDAD AUTÓNOMA DE GUADALAJARA	UAG-69	69	17.71	12.91	0.545+j2.182	0.906+j4.698	20.36	14.33	0.469+j2.100	0.922+j4.785
UNIVERSIDAD DEL VALLE DE MÉXICO	UVM-69	69	20.24	15.80	0.511+j1.901	0.778+j3.561	23.31	17.60	0.443+j1.827	0.785+j3.625
UNIVEX	UVX-115	115	4.48	3.35	4.809+j14.034	8.963+j28.446	5.01	3.71	4.707+j13.797	8.972+j28.570
URIANGATO	URG-115	115	5.15	3.41	3.666+j12.351	10.214+j31.097	5.70	3.75	3.608+j12.297	10.230+j31.215
URUAPAN POTENCIA	UPP-115	115	7.64	9.10	2.426+j8.347	0.418+j4.563	9.99	11.33	1.591+j7.137	0.419+j4.581
URUAPAN POTENCIA	UPP-161	161	4.09	4.51	4.020+j22.367	1.235+j16.505	6.20	6.68	1.979+j16.362	1.037+j11.811
URUAPAN POTENCIA	UPP-230	230	4.33	4.52	6.605+j29.948	2.651+j26.876	5.93	5.94	3.729+j24.362	2.333+j23.559
URUAPAN TRES	UPT-69	69	4.92	6.58	1.469+j7.961	0.098+j1.997	6.42	8.33	1.019+j6.753	0.102+j2.017
URUAPAN TRES	UPT-115	115	7.75	8.43	2.560+j8.173	1.105+j6.468	10.08	10.30	1.752+j7.029	1.136+j6.565



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
USI	USI-69	69	7.65	4.82	1.416+j5.011	3.740+j13.883	9.07	6.46	1.243+j4.671	2.823+j10.232
USM	USM-115	115	7.21	6.67	2.320+j8.916	4.239+j10.751	8.02	7.48	2.287+j8.814	4.197+j10.347
VALLARTA POTENCIA	VTP-115	115	5.90	7.99	3.073+j10.825	0.165+j2.488	7.28	9.62	2.343+j9.759	0.184+j2.691
VALLARTA POTENCIA	VTP-230	230	3.25	4.14	10.872+j39.376	1.165+j14.736	4.09	5.02	7.997+j34.771	1.301+j15.831
VALLARTA UNO	VRT-115	115	4.75	5.03	4.006+j13.406	2.498+j11.394	5.74	5.87	3.228+j12.314	2.517+j11.598
VALLE DE GUADALUPE	VGP-115	115	4.23	2.97	4.500+j15.056	12.449+j33.556	4.88	3.33	4.213+j14.371	12.482+j33.749
VALLE DE LAS DELICIAS	VDL-115	115	3.85	2.95	5.099+j16.486	11.086+j31.038	4.35	3.28	4.815+j16.071	11.116+j31.391
VALLE DE SANTIAGO	VAS-115	115	12.38	9.24	1.202+j5.228	3.055+j10.455	13.78	10.13	1.155+j5.172	3.080+j10.635
VALEO TÉRMICO	VAT-115	115	19.38	17.81	0.690+j3.356	0.837+j4.270	20.98	19.20	0.687+j3.413	0.848+j4.386
VALLE DE TECOMAN	VAT-115	115	2.80	1.86	6.918+j22.653	19.303+j56.709	3.18	2.07	6.608+j21.985	19.313+j56.806
VILLA DE ARRIAGA MANIOBRAS	VDM-230	230	6.78	7.11	2.834+j19.379	2.264+j16.774	7.85	7.97	2.509+j18.426	2.426+j17.675
VALLE VERDE	VAV-115	115	3.33	3.22	5.696+j19.078	3.963+j21.733	4.54	4.21	3.639+j15.653	3.700+j19.190
VALPARAISO	VPS-110	115	1.26	0.82	18.597+j49.111	43.937+j131.988	1.40	0.90	18.396+j48.906	43.961+j132.207
VAQUERÍAS MANIOBRAS	VQM-230	230	7.23	7.93	2.631+j18.169	1.492+j13.487	8.40	8.90	2.303+j17.246	1.621+j14.344
VELCON	VEL-115	115	12.77	10.23	1.176+j5.065	2.230+j8.836	13.98	11.11	1.147+j5.098	2.251+j9.011
VENUSTIANO CARRANZA	VNC-115	115	5.49	3.65	2.978+j11.716	7.230+j29.485	6.21	4.05	2.822+j11.426	7.249+j29.642
VIDRIERA	VRA-115	115	17.46	15.14	0.811+j3.715	0.902+j5.504	18.93	16.36	0.810+j3.773	0.913+j5.619
VIDRIERA GUADALAJARA	VID-69	69	21.28	17.89	0.452+j1.817	0.508+j2.914	24.64	19.88	0.378+j1.738	0.526+j3.013
VIDRIERA QUERÉTARO	VRR-115	115	14.77	14.33	1.069+j4.367	0.876+j4.860	16.47	15.81	1.023+j4.314	0.883+j4.933
VILLA DE ÁLVAREZ	VDA-115	115	7.72	7.60	1.934+j8.378	1.813+j8.833	9.21	8.73	1.636+j7.756	1.842+j9.008
VILLA DE ARISTA	VAR-115	115	2.73	3.02	9.241+j22.449	4.658+j16.764	3.17	3.42	8.315+j21.505	4.709+j17.342
VILLA DE REYES	VDR-115	115	10.09	11.24	0.934+j6.511	0.325+j4.571	10.49	11.61	1.019+j6.885	0.365+j4.966
VILLA DE REYES	VDR-230	230	21.40	24.72	0.838+j6.147	0.277+j3.759	23.19	26.39	0.828+j6.243	0.310+j4.046
VILLA HIDALGO	VHO-115	115	2.76	1.81	8.293+j22.571	18.046+j59.657	3.07	1.99	8.132+j22.392	18.059+j59.868
VILLA JIMÉNEZ	VJ-115	115	5.60	4.29	3.513+j11.332	6.019+j21.969	6.61	5.84	3.028+j10.628	3.155+j15.142
VILLA JUÁREZ	VJU-115	115	8.71	6.23	1.492+j7.471	2.793+j16.535	9.74	6.86	1.398+j7.368	2.813+j16.737
VILLAGRÁN	VIG-110	115	8.12	6.92	1.803+j7.977	3.096+j12.060	8.91	7.56	1.774+j8.007	3.112+j12.208
VINITECK S.A. DE C.V.	VIN-69	69	6.35	4.80	1.245+j6.152	2.498+j12.104	7.11	5.29	1.179+j6.045	2.511+j12.263
VISTA HERMOSA	VIH-115	115	8.62	6.47	2.199+j7.381	4.906+j14.582	9.85	7.23	2.051+j7.126	4.920+j14.693
VIZARRÓN	VIZ-110	115	2.35	1.16	9.036+j26.709	32.275+j110.019	2.64	1.29	8.792+j26.221	32.280+j110.081
VOLCANES	VCS-69	69	0.74	0.69	17.960+j50.429	19.638+j62.496	0.97	0.83	12.698+j43.316	19.699+j64.750
VOLKSWAGEN	VWS-115	115	6.95	5.29	2.332+j9.266	4.326+j18.062	7.68	5.95	2.291+j9.229	4.195+j17.346
VYNMSA	VYN-115	115	7.78	5.32	1.791+j8.343	3.965+j20.031	8.65	5.78	1.749+j8.259	4.178+j20.601
XALISCO	XLS-115	115	7.10	5.85	2.007+j9.139	3.253+j14.996	8.81	6.90	1.485+j8.157	3.238+j14.784
INGENIO TALA	ELT-69	69	3.33	3.82	3.921+j11.292	0.510+j7.586	5.58	5.60	1.801+j7.641	0.651+j7.732
YERBABUENA	YER-115	115	4.54	2.96	3.469+j14.216	8.836+j36.981	5.38	3.35	3.090+j13.209	8.887+j37.200
YURÉCUARO	YUR-115	115	6.59	5.07	2.912+j9.650	5.492+j18.349	7.46	5.64	2.759+j9.395	5.509+j18.455
ZACAPU	ZCP-110	115	5.53	4.39	4.056+j11.300	5.978+j20.590	6.35	5.21	3.730+j10.880	5.283+j18.316
ZACATECAS	ZCT-115	115	6.53	5.52	2.830+j9.759	4.299+j15.173	7.45	6.17	2.598+j9.451	4.312+j15.311
ZACATECAS II	ZCD-115	115	9.60	11.47	1.694+j6.704	0.428+j3.547	11.09	12.92	1.480+j6.419	0.460+j3.775
ZACATECAS II	ZCD-230	230	6.67	7.09	4.735+j19.327	2.560+j16.277	7.85	8.05	3.958+j18.192	2.716+j17.020
ZACATECAS SUR	ZCS-115	115	6.65	5.69	2.811+j9.579	4.066+j14.496	7.59	6.36	2.580+j9.273	4.083+j14.643



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
ZALATITAN	ZLT-69	69	12.74	9.23	0.681+j3.053	1.398+j6.559	14.60	10.31	0.599+j2.941	1.405+j6.593
ZAMORA	ZMA-110	115	8.07	6.41	2.143+j7.943	4.564+j13.934	9.11	7.10	2.005+j7.767	4.589+j14.097
ZAMORA POTENCIA	ZRP-115	115	11.13	12.13	1.252+j5.833	0.584+j4.478	12.55	13.33	1.132+j5.710	0.633+j4.757
ZAMORA POTENCIA	ZRP-230	230	8.07	7.18	3.080+j16.160	4.071+j22.281	9.42	8.04	2.480+j15.302	4.295+j23.078
ZAPOPAN	ZPA-69	69	23.10	20.40	0.421+j1.672	0.367+j2.404	26.88	22.71	0.347+j1.593	0.385+j2.503
ZAPOPAN	ZPA-230	230	9.52	8.35	2.892+j13.642	4.166+j19.548	12.03	9.84	1.909+j11.988	4.261+j19.794
ZAPOTILTIC	ZTI-115	115	4.54	4.31	3.838+j14.126	4.767+j16.258	5.63	5.08	3.332+j12.545	4.859+j16.430
ZAPOTLANEJO	ZPO-230	230	15.31	17.33	1.858+j8.472	0.686+j5.803	20.47	21.52	1.059+j7.058	0.738+j6.031
ZAPOTLANEJO	ZPO-400	400	12.54	12.75	3.699+j18.042	2.968+j17.944	17.91	16.27	1.707+j14.084	3.114+j18.357
ZAPOTLANEJO DISTRIBUCIÓN	ZAD-115	115	1.11	0.00	15.094+j57.806	4.316-j156497.08	3.04	1.43	7.874+j22.736	34.633+j98.674
ZARAGOZA	ZAG-115	115	5.47	3.52	2.278+j11.919	8.186+j31.286	5.98	3.85	2.281+j11.989	8.204+j31.435
ZIMAPAN	ZIM-115	115	2.30	1.81	6.919+j28.007	10.479+j51.331	2.78	2.12	5.708+j25.602	10.100+j49.674
ZINÁPARO	ZID-115	115	9.29	7.20	1.977+j6.867	4.641+j12.600	10.57	8.02	1.853+j6.658	4.653+j12.678
ZINAPÉCUARO	ZIN-115	115	8.63	7.12	1.476+j7.550	2.600+j12.721	9.39	7.74	1.477+j7.634	2.614+j12.875
ZITÁCUARO	ZIT-115	115	6.78	4.49	2.726+j9.405	7.261+j23.748	7.55	4.96	2.672+j9.296	7.273+j23.775
ZITÁCUARO DOS	ZTD-115	115	6.48	4.21	2.747+j9.866	7.450+j25.808	7.23	4.66	2.688+j9.739	7.466+j25.827
ZOLTECH	CYD-69	69	16.70	17.69	0.531+j2.326	0.385+j1.963	19.60	20.14	0.462+j2.188	0.389+j2.019
ZOQUIPAN	ZQP-69	69	14.26	10.74	0.620+j2.724	1.336+j5.391	16.60	12.14	0.521+j2.588	1.329+j5.379
ZUMPIMITO	ZMP-69	69	4.57	5.34	1.845+j8.511	0.940+j4.868	6.14	7.07	1.232+j7.028	0.678+j4.150

Gerencia de Control Regional Noroeste



[Regresar a mapa del SEN](#)



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
ACUÍCOLA	ACU-115	115	2.04	1.40	8.870+j31.369	26.136+j72.426	2.32	1.56	8.327+j30.308	26.199+j72.838
AGRÍCOLA SONOYTA	AGS-115	115	0.62	0.42	33.510+j101.523	69.057+j253.175	0.73	0.47	28.872+j95.979	69.240+j254.565
AGUA PRIETA	AGI-115	115	4.76	3.19	2.660+j13.685	5.963+j34.161	5.54	3.54	2.281+j12.982	6.031+j34.966
AGUA PRIETA DOS	AGD-230	230	8.29	8.75	2.277+j15.857	2.303+j13.909	15.55	16.90	0.705+j9.366	0.524+j6.401
AHOME	AHO-115	115	4.84	3.49	3.022+j13.380	8.484+j28.173	5.51	3.90	2.887+j12.945	8.490+j28.278
ALAMOS	AAM-115	115	1.79	1.19	17.587+j32.640	33.473+j86.905	2.10	1.50	16.250+j30.785	25.577+j72.430
ALTAR	ALT-115	115	2.57	1.88	7.729+j24.622	14.661+j52.254	3.45	2.32	5.290+j20.509	14.289+j50.236
ANGOSTURA	ANG-115	115	4.76	3.41	4.090+j13.330	8.097+j29.346	5.76	3.94	3.630+j12.146	8.200+j28.776
ANTIMONIO	ANT-115	115	2.55	2.18	7.925+j24.846	9.998+j37.806	3.86	2.83	4.383+j18.428	10.032+j38.065
ARROYO SECO	ASE-115	115	1.80	1.32	10.847+j35.261	25.739+j73.198	2.40	1.65	7.532+j29.432	24.756+j68.207
BACHIGUALATO	BCH-115	115	4.51	2.39	2.994+j14.404	15.823+j51.552	5.23	2.68	2.675+j13.700	15.867+j51.603
BACUM	BAC-115	115	18.18	17.92	0.503+j3.616	0.330+j3.817	22.24	20.52	0.377+j3.263	0.371+j4.061
BACUM	BAC-230	230	12.49	13.56	1.451+j10.531	0.627+j8.155	15.90	16.11	0.985+j9.135	0.700+j8.722
BACUM	BAC-400	400	8.78	9.02	3.128+j26.129	2.760+j23.969	10.89	10.53	2.019+j23.244	2.989+j25.320
BACURATO	BRT-115	115	3.44	1.78	3.532+j18.951	17.976+j70.894	6.16	6.53	1.332+j11.790	0.310+j7.315
BAGOTES	BGT-115	115	11.88	11.19	1.776+j5.299	2.838+j6.068	16.64	14.49	1.322+j4.187	2.894+j5.725
BAMOA	BMO-115	115	2.79	1.81	8.669+j22.150	19.639+j59.044	3.21	2.03	8.269+j21.201	19.711+j58.687
BANDERAS	BND-115	115	13.30	11.45	0.915+j4.909	1.270+j7.318	16.33	13.23	0.736+j4.412	1.306+j7.446
BIZANI	BZI-115	115	3.53	3.39	5.837+j17.898	5.713+j20.330	6.11	4.97	2.435+j11.693	5.470+j19.389
BLUMEX MANIOBRAS	BLM-MAN	115	7.56	7.35	2.136+j8.523	1.572+j9.579	9.03	8.38	1.832+j7.876	1.619+j9.965
BUENA VISTA	BNV-230	230	7.53	6.88	5.002+j16.912	4.122+j22.701	10.61	8.62	2.972+j13.437	4.373+j22.758
CABORCA	CBA-115	115	3.88	3.39	5.003+j16.375	4.186+j24.384	6.89	5.36	1.783+j10.443	3.217+j19.414
CAJEME	CAJ-115	115	13.52	12.59	0.826+j4.841	0.870+j5.956	16.46	14.47	0.663+j4.387	0.910+j6.162
CARDONAL	CRD-115	115	2.05	1.45	8.851+j31.215	26.137+j67.955	2.34	1.62	8.308+j30.155	26.200+j68.367
CARRIZO	CRZ-115	115	2.97	1.64	7.038+j21.217	22.679+j73.051	3.79	2.36	5.689+j18.418	15.673+j52.009
CENTENARIO	CNT-115	115	12.04	10.51	1.066+j5.410	1.697+j7.565	14.53	12.18	0.919+j4.941	1.697+j7.621
CENTINELA	CLA-115	115	7.61	6.32	1.874+j8.525	4.205+j13.620	8.69	7.02	1.752+j8.220	4.242+j13.938
CERRO CAÑEDO	CCA-115	115	3.43	2.87	5.677+j18.486	6.502+j30.183	5.58	4.17	2.549+j12.844	5.645+j25.750
CHINITOS	CHI-115	115	2.21	1.48	9.039+j28.686	25.017+j69.873	2.50	1.65	8.680+j27.871	25.060+j69.733
CHOACAHUI	CHO-230	230	20.45	22.07	0.530+j6.472	0.206+j4.246	25.49	26.37	0.337+j5.722	0.249+j4.501
CHOACAHUI	CHO-400	400	12.82	15.12	1.506+j17.946	0.478+j8.794	15.44	17.60	0.920+j16.428	0.527+j9.559
CIP TEACAPAN	CIP-115	115	1.44	0.86	18.356+j42.138	40.090+j133.126	1.64	0.96	17.668+j40.778	40.048+j132.848
CIUDAD OBREGÓN CUATRO	COC-115	115	15.71	14.48	0.729+j4.163	0.744+j5.268	19.50	16.75	0.566+j3.702	0.799+j5.487
CIUDAD OBREGÓN CUATRO	COC-230	230	10.30	10.52	2.025+j12.735	1.729+j12.005	13.67	12.87	1.350+j10.601	1.825+j12.385
CIUDAD OBREGÓN DOS	COD-115	115	16.48	15.96	0.654+j3.974	0.632+j4.401	20.43	18.56	0.501+j3.540	0.659+j4.568
CIUDAD OBREGÓN TRES	COT-115	115	16.09	15.45	0.661+j4.074	0.529+j4.632	20.18	18.24	0.489+j3.586	0.565+j4.682
CIUDAD OBREGÓN TRES	COT-230	230	8.90	8.97	2.355+j14.734	1.868+j14.557	11.52	10.76	1.651+j12.572	2.002+j15.084
CIUDAD OBREGÓN UNO	OBU-115	115	14.57	12.95	0.882+j4.470	1.158+j6.173	18.11	15.04	0.700+j3.971	1.199+j6.341
COCORIT	CCI-115	115	11.62	8.31	0.958+j5.632	2.595+j12.301	13.97	9.45	0.794+j5.169	2.624+j12.401
COMEDERO	CMR-115	115	3.52	1.64	3.826+j18.447	20.730+j81.005	5.95	6.67	1.622+j12.161	0.289+j7.254
COMPUERTAS	CMP-115	115	11.85	10.43	1.062+j5.503	1.676+j7.539	14.32	12.10	0.908+j5.020	1.675+j7.594
COSTA RICA	CSA-115	115	6.27	4.82	2.465+j10.290	4.673+j19.584	7.58	5.53	2.056+j9.418	4.696+j19.635



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
CRUZ DE PIEDRA	CDP-115	115	6.73	6.26	2.564+j9.528	2.755+j11.942	7.97	7.10	2.258+j8.883	2.802+j12.328
CULIACÁN CENTRO	CCC-115	115	11.16	10.21	1.278+j5.813	1.685+j7.357	15.33	13.03	0.819+j4.695	1.671+j6.920
CULIACÁN CINCO	CUI-115	115	11.95	10.88	1.168+j5.433	1.662+j6.940	16.35	13.56	0.737+j4.404	1.699+j6.884
CULIACÁN CUATRO	CUC-115	115	12.56	12.23	1.115+j5.166	1.245+j5.524	17.07	15.22	0.707+j4.219	1.273+j5.571
CULIACÁN DOS	CUD-115	115	12.10	12.04	1.181+j5.358	1.174+j5.388	16.88	15.60	0.730+j4.265	1.179+j5.099
CULIACÁN LIBRAMIENTO	CLI-115	115	10.55	9.83	1.351+j6.147	1.932+j7.370	14.15	12.22	0.906+j5.081	1.956+j7.205
CULIACÁN MILENIUM	CMI-115	115	10.64	11.05	1.327+j6.097	1.681+j5.244	14.14	14.73	0.899+j5.087	1.461+j4.203
CULIACÁN NORTE	CUN-115	115	11.33	10.98	1.257+j5.723	1.400+j6.218	15.54	14.46	0.805+j4.630	1.266+j5.457
CULIACÁN ORIENTE	CUO-115	115	11.55	11.86	1.269+j5.605	1.218+j5.110	16.02	15.55	0.811+j4.487	1.211+j4.655
CULIACÁN PONIENTE	CPO-115	115	14.46	13.01	0.803+j4.520	0.851+j6.024	19.03	15.74	0.495+j3.806	0.895+j6.075
CULIACÁN PONIENTE	CPO-400	400	6.34	6.72	6.526+j35.850	3.524+j29.386	8.95	8.59	3.304+j28.198	3.737+j30.826
CULIACÁN SUR	CUS-115	115	10.86	9.87	1.264+j5.979	1.746+j7.713	14.38	12.03	0.848+j5.009	1.776+j7.725
CULIACÁN TRES	CUT-115	115	13.32	14.02	1.028+j4.876	0.605+j4.149	19.32	19.43	0.566+j3.738	0.538+j3.495
CULIACÁN TRES	CUT-230	230	8.16	9.76	3.342+j15.929	0.933+j8.027	11.82	13.08	1.776+j12.225	0.975+j8.246
CULIACÁN UNO	CUU-115	115	13.00	13.15	1.084+j4.989	0.978+j4.792	18.30	18.53	0.645+j3.939	0.608+j3.656
DEL MAR	DMA-115	115	11.50	10.68	1.244+j5.635	1.359+j6.960	17.27	14.32	0.662+j4.177	1.331+j6.696
DERIVACIÓN	DER-115	115	8.73	6.86	1.866+j7.373	3.804+j13.355	11.40	8.23	1.374+j6.260	3.834+j13.288
DESEO	DSE-115	115	2.29	1.92	9.141+j27.579	16.916+j42.688	3.30	2.46	5.720+j21.396	16.672+j41.745
DYNATECH	DYN-115	115	12.46	12.95	1.715+j5.043	2.026+j4.352	18.32	18.09	1.159+j3.814	1.832+j3.789
EL FUERTE PENAL	FPE-115	115	3.47	2.06	5.852+j18.213	16.043+j56.330	5.37	4.88	3.140+j13.230	3.409+j17.389
EL DORADO	EDR-115	115	1.76	1.15	10.847+j36.221	18.533+j95.611	1.98	1.28	10.407+j35.381	18.557+j95.663
EL FRESNAL	EFR-115	115	7.67	6.09	0.943+j8.606	0.740+j15.527	9.18	6.71	0.611+j7.934	0.826+j16.635
EL FRESNAL	EFR-230	230	9.31	11.13	2.182+j14.090	0.492+j7.935	15.59	17.29	0.850+j9.333	0.533+j6.200
EL FUERTE	EFU-115	115	2.89	1.70	7.290+j21.804	19.862+j68.133	4.80	5.23	3.311+j14.846	0.899+j11.545
EL HABAL	HBL-115	115	11.45	10.76	1.113+j5.693	0.945+j6.837	17.31	14.50	0.533+j4.185	0.956+j6.590
EL HABAL	HBL-230	230	7.19	7.50	3.468+j18.153	1.725+j16.043	13.04	12.79	1.211+j11.136	1.694+j11.676
EL LLANO	LNO-115	115	3.71	2.68	6.086+j16.828	11.060+j36.904	4.70	3.14	4.819+j14.789	11.085+j37.088
EL MAYO	EMY-115	115	9.33	10.43	1.310+j6.996	0.529+j4.819	12.54	12.99	0.859+j5.761	0.562+j5.090
EL MAYO	EMY-230	230	5.96	6.21	4.201+j21.871	2.299+j19.318	8.42	7.93	2.598+j17.158	2.523+j19.976
EMPALME	EPM-115	115	9.68	8.76	1.441+j6.704	1.621+j9.043	11.51	9.93	1.238+j6.226	1.646+j9.341
EMPALME CICLO COMBINADO	ECC-230	230	13.08	15.75	1.124+j10.092	0.277+j5.920	15.44	17.81	0.880+j9.419	0.313+j6.410
EMPALME CICLO COMBINADO	ECC-400	400	9.32	10.61	2.446+j24.657	1.065+j15.825	11.27	12.25	1.459+j22.492	1.177+j17.060
ESCUINAPA	EPA-115	115	1.71	1.01	16.864+j34.946	35.636+j113.745	1.96	1.14	16.181+j33.587	35.595+j113.469
ESPERANZA	ESP-115	115	8.96	8.65	1.620+j7.234	0.913+j8.240	11.69	10.35	1.100+j6.149	0.974+j8.650
ESPERANZA	ESP-230	230	5.49	5.46	5.072+j23.647	3.321+j24.631	7.67	6.99	2.971+j18.803	3.416+j24.441
ESTACIÓN TORRES	ETO-115	115	3.67	2.35	5.902+j17.098	14.752+j46.469	4.31	2.70	5.471+j16.028	14.482+j45.169
ÉVORA	EVO-115	115	8.79	7.55	1.445+j7.415	1.451+j11.110	11.62	9.30	0.990+j6.204	1.561+j10.513
FÁTIMA	FMA-115	115	10.13	9.44	1.263+j6.430	1.261+j8.058	11.78	10.55	1.138+j6.096	1.311+j8.391
FISTERRA SAN FERNANDO MANIOBRAS	FIS-MAN	230	3.91	3.25	8.451+j32.911	13.296+j53.325	6.02	7.60	3.837+j23.946	0.521+j9.140
FUNDICIÓN	FUC-115	115	5.77	4.67	3.951+j10.818	4.246+j19.286	6.92	5.29	3.516+j9.948	4.503+j19.841
GRUPO MÉXICO (SE MINA)	SMI-230	230	5.38	4.03	6.694+j23.770	11.430+j48.432	6.88	4.74	4.618+j20.714	11.681+j48.489
GUAMÚCHIL	GML-115	115	7.90	6.38	1.658+j8.241	2.255+j14.164	10.21	7.70	1.201+j7.051	2.358+j13.595



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
GUAMÚCHIL DOS	GMD-115	115	9.34	8.38	1.320+j6.986	0.968+j9.435	12.55	10.48	0.865+j5.755	1.084+j8.814
GUAMÚCHIL DOS	GMD-230	230	6.51	6.22	3.981+j20.001	3.509+j22.627	8.71	7.63	2.584+j16.575	3.674+j22.870
GUASAVE	GSV-115	115	6.16	4.44	2.521+j10.482	6.737+j22.171	7.35	5.08	2.208+j9.690	6.792+j21.998
GUAYMAS CERESO	GYC-115	115	15.65	15.00	0.592+j4.200	0.438+j4.960	18.50	16.73	0.482+j3.919	0.477+j5.302
GUAYMAS CERESO	GYC-230	230	10.51	10.90	1.783+j12.504	1.406+j11.975	12.85	12.57	1.350+j11.290	1.517+j12.571
HERMOSILLO AEROPUERTO	HAE-230	230	9.43	9.89	3.110+j13.728	2.722+j12.066	16.88	17.80	1.093+j8.587	1.034+j7.311
HERMOSILLO CERESO	HCE-115	115	12.75	12.58	1.519+j4.980	1.726+j5.196	18.85	17.38	0.978+j3.749	1.569+j4.638
HERMOSILLO CINCO	HLI-115	115	16.29	16.76	0.912+j3.973	0.554+j3.757	28.26	31.82	0.355+j2.560	0.140+j1.757
HERMOSILLO CINCO	HLI-230	230	11.55	12.78	2.393+j11.247	1.388+j8.281	18.78	18.61	0.944+j7.720	1.338+j7.972
HERMOSILLO CUATRO	HLC-115	115	17.38	18.75	0.876+j3.718	0.376+j3.026	27.70	27.51	0.425+j2.602	0.432+j2.682
HERMOSILLO CUATRO	HLC-230	230	10.24	11.62	2.786+j12.664	1.251+j8.499	17.13	17.57	1.112+j8.455	1.237+j7.879
HERMOSILLO DOS	HLD-115	115	13.12	11.39	1.149+j4.927	1.312+j7.309	18.75	14.50	0.673+j3.838	1.351+j7.213
HERMOSILLO LA MANGA	HMA-115	115	8.68	7.52	2.272+j7.300	3.890+j10.572	11.38	9.16	1.793+j6.165	3.975+j10.391
HERMOSILLO LOMAS	HLM-115	115	14.27	14.62	0.987+j4.545	0.590+j4.344	20.70	19.27	0.523+j3.488	0.651+j4.289
HERMOSILLO LOMAS	HLM-230	230	9.57	10.39	3.070+j13.530	1.794+j10.661	16.08	15.77	1.210+j9.005	1.717+j9.550
HERMOSILLO MANIOBRAS	HMB-115	115	8.95	8.68	1.735+j7.213	0.960+j8.143	12.77	11.42	1.097+j5.614	1.020+j7.728
HERMOSILLO MISIÓN	HMI-115	115	11.57	11.30	1.356+j5.576	1.501+j6.026	15.98	14.48	0.887+j4.484	1.558+j5.815
HERMOSILLO NUEVE	HLN-115	115	15.97	17.17	1.197+j3.982	0.751+j3.260	24.99	25.15	0.693+j2.839	0.690+j2.814
HERMOSILLO OCHO	HLO-115	115	13.48	12.55	1.137+j4.794	1.308+j5.930	20.62	17.98	0.598+j3.491	1.141+j5.015
HERMOSILLO SEIS	HLS-115	115	12.74	12.12	1.200+j5.071	1.354+j5.909	18.10	15.77	0.736+j3.967	1.403+j5.686
HERMOSILLO SIETE	HLE-115	115	12.13	9.34	1.159+j5.349	2.020+j10.234	17.00	11.61	0.679+j4.241	2.060+j10.109
HERMOSILLO TRES	HLT-115	115	14.64	12.61	0.931+j4.438	0.838+j6.737	21.73	16.29	0.458+j3.329	0.902+j6.695
HERMOSILLO TRES	HLT-230	230	10.29	11.20	2.867+j12.580	1.658+j9.863	17.06	16.58	1.141+j8.488	1.650+j9.232
HERMOSILLO UNO	HLU-115	115	16.27	17.44	1.106+j3.927	0.716+j3.240	25.89	25.88	0.595+j2.757	0.640+j2.782
HERNANDO DE VILLAFÑE	HVF-115	115	5.47	3.78	2.692+j11.825	7.717+j27.296	6.50	4.31	2.359+j10.991	7.781+j27.077
HIERRO DE SONORA	HDS-115	115	9.37	5.52	2.186+j6.744	6.083+j21.041	11.27	6.23	1.966+j6.173	6.154+j21.268
HORNILLOS	HRS-115	115	2.48	1.46	8.743+j25.277	23.483+j79.091	3.97	3.82	4.434+j17.867	3.933+j20.237
HUATABAMPO	HPO-115	115	6.15	4.52	2.321+j10.536	6.454+j21.501	7.68	5.26	1.855+j9.327	6.473+j21.617
HUITES	HTS-230	230	3.03	1.64	6.780+j43.264	37.209+j150.527	7.69	8.23	1.312+j18.945	0.465+j12.389
HUMAYA	HYA-115	115	5.53	2.91	2.249+j11.788	10.709+j43.176	8.53	8.82	1.120+j8.490	0.380+j6.912
IMURIS	IMR-115	115	3.39	2.84	5.821+j18.676	10.194+j29.253	4.33	3.37	4.240+j16.342	10.229+j29.577
INDUSTRIAL CABORCA	ICA-115	115	4.14	4.01	4.682+j15.343	2.106+j17.670	7.79	7.06	1.450+j9.258	1.071+j12.248
INDUSTRIAL CABORCA	ICA-230	230	2.54	2.73	15.881+j49.735	6.247+j41.461	5.06	4.38	4.612+j28.470	6.251+j41.742
INDUSTRIAL SAN CARLOS	ISC-115	115	3.86	3.61	4.631+j16.570	4.148+j20.444	4.98	4.31	3.376+j14.279	4.234+j21.096
ISLA MUSALA	ISM-115	115	12.98	14.10	1.116+j4.993	0.559+j3.815	18.67	19.46	0.655+j3.857	0.514+j3.212
JAIME SEVILLA POYASTRO	JSP-115	115	11.24	11.63	1.260+j5.773	1.426+j5.067	15.15	15.75	0.826+j4.749	1.148+j3.989
JOSÉ ÁNGEL ESPINOZA	JAE-115	115	1.62	0.94	12.956+j38.909	37.713+j123.911	2.47	2.10	7.092+j28.748	11.691+j43.650
JUAN JOSÉ RÍOS	JJR-115	115	7.47	5.56	1.597+j8.746	4.478+j17.318	8.79	6.32	1.400+j8.191	4.503+j17.389
LA CARIDAD	LCD-230	230	7.63	5.91	2.974+j17.141	8.408+j31.724	9.24	6.79	2.300+j15.641	8.446+j31.804
LA CARIDAD FUNDICIÓN	LCF-230	230	10.16	9.97	1.615+j12.964	2.127+j13.748	12.08	11.31	1.181+j12.033	2.209+j14.320
LA CARIDAD GENERACIÓN	LCG-230	230	12.04	13.42	1.345+j10.949	0.495+j7.717	14.53	15.37	0.914+j10.015	0.577+j8.289
LA CHOYA	LCH-115	115	1.92	2.02	10.830+j32.859	5.546+j28.914	2.63	2.52	6.644+j27.008	6.110+j30.618



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
LA CRUZ	LCZ-115	115	1.07	0.67	19.282+j59.220	54.832+j165.096	1.20	0.74	18.558+j57.828	54.839+j164.838
LA HIGUERA	HGA-115	115	15.03	19.08	0.868+j4.333	0.091+j1.565	20.86	25.08	0.497+j3.466	0.109+j1.617
LA HIGUERA	HGA-230	230	9.02	11.08	2.885+j14.444	0.476+j6.326	13.02	14.86	1.489+j11.122	0.534+j6.629
LA HIGUERA	HGA-400	400	6.25	6.91	6.871+j36.327	2.290+j25.803	9.02	9.00	3.339+j27.969	2.532+j27.398
LA MISA	LMA-115	115	3.76	3.02	5.557+j16.780	11.145+j28.699	4.30	3.37	5.245+j16.144	11.193+j29.085
LA PINTA	LPN-115	115	1.88	1.69	11.569+j33.387	12.217+j45.614	2.56	2.08	7.419+j27.503	12.357+j46.564
LADRILLERAS	LAD-115	115	12.44	10.96	1.147+j5.212	1.503+j7.397	17.42	13.84	0.673+j4.138	1.552+j7.314
LEYVA SOLANO	LVS-115	115	4.73	3.48	2.878+j13.728	8.762+j27.720	5.49	3.93	2.612+j13.053	8.800+j27.670
LLANO BLANCO	LLB-115	115	2.65	1.85	7.471+j23.902	15.375+j55.280	3.67	2.32	4.793+j19.296	14.867+j52.604
LOS MOCHIS COLINAS	LMC-115	115	14.26	10.99	0.813+j4.584	1.600+j8.496	17.77	12.88	0.643+j4.059	1.601+j8.520
LOS MOCHIS DOS	LMD-115	115	10.38	7.45	1.025+j6.315	1.447+j13.741	12.78	8.93	0.816+j5.656	1.582+j12.899
LOS MOCHIS DOS	LMD-230	230	10.04	8.84	2.157+j13.046	3.293+j17.824	13.53	10.95	1.402+j10.702	3.341+j17.658
LOS MOCHIS INDUSTRIAL	LMI-115	115	15.71	13.03	0.651+j4.175	0.853+j6.625	19.86	15.36	0.477+j3.646	0.873+j6.731
LOS MOCHIS INDUSTRIAL	LMI-230	230	10.32	9.57	1.861+j12.730	2.348+j15.033	14.44	12.90	1.143+j10.050	2.102+j13.098
LOS MOCHIS TRES	LMT-115	115	13.27	11.15	0.865+j4.929	1.596+j7.522	16.27	13.01	0.705+j4.433	1.594+j7.577
LOS MOCHIS UNO	LMU-115	115	14.72	11.82	0.792+j4.440	1.418+j7.527	18.35	13.90	0.626+j3.930	1.418+j7.545
LOUISIANA	LOU-115	115	18.58	17.94	0.450+j3.546	0.266+j3.773	23.38	21.31	0.319+j3.107	0.277+j3.896
LOUISIANA	LOU-230	230	13.32	13.67	1.268+j9.891	1.019+j8.405	18.32	18.12	0.776+j7.935	0.982+j7.638
LUIS DONALDO COLOSIO	LDO-115	115	4.13	3.25	4.864+j15.306	8.212+j28.076	5.45	3.89	3.336+j12.978	8.239+j28.290
MANIOBRA FRESNILLO	MFN-115	115	1.66	1.31	14.256+j37.328	22.272+j68.489	2.20	1.58	10.114+j31.628	22.301+j68.974
MANIOBRA MINA COBRE DEL MAYO	MCM-115	115	3.09	2.07	8.973+j19.552	17.353+j50.289	3.79	2.90	7.641+j17.674	9.484+j35.835
MANIOBRAS APASCO	MAP-115	115	6.69	4.50	2.018+j9.714	5.815+j23.794	9.09	6.01	1.334+j7.922	4.874+j19.808
MANIOBRAS AT SOLAR V	MNV-230	230	3.12	4.10	11.951+j40.900	0.943+j12.319	12.26	13.82	0.963+j11.879	0.726+j7.520
MANIOBRAS MUNISOL	MMU-115	115	5.81	5.38	3.532+j10.858	2.928+j14.031	7.24	6.27	2.968+j9.645	3.138+j14.501
MANIOBRAS OREJANA	MAO-230	230	3.67	4.24	6.970+j35.531	2.415+j21.736	5.78	5.97	2.954+j25.101	2.700+j22.660
MARINA	MRN-115	115	10.30	8.46	1.328+j6.311	1.591+j10.530	14.93	10.85	0.743+j4.834	1.580+j10.283
MAZATLÁN AEROPUERTO	MAE-115	115	11.26	11.13	1.808+j5.614	1.782+j5.828	16.58	14.93	1.267+j4.218	1.753+j5.580
MAZATLÁN CENTRO	MAC-115	115	11.40	10.47	1.225+j5.693	1.633+j7.182	17.01	13.96	0.650+j4.244	1.600+j6.914
MAZATLÁN DOS	MZD-115	115	14.72	14.34	0.827+j4.433	0.340+j4.873	23.97	20.39	0.295+j3.032	0.311+j4.624
MAZATLÁN DOS	MZD-230	230	7.91	8.60	3.047+j16.510	0.851+j12.745	16.24	18.76	0.748+j8.966	0.207+j5.311
MAZATLÁN DOS	MZD-400	400	6.26	6.52	7.254+j36.149	3.596+j32.375	10.88	9.76	2.249+j23.238	3.428+j30.918
MAZATLÁN NORTE	MZN-115	115	11.99	11.08	1.188+j5.409	1.123+j6.802	18.31	14.98	0.605+j3.943	1.100+j6.540
MAZATLÁN ORIENTE	MZO-115	115	10.51	8.59	1.435+j6.152	2.218+j10.297	15.27	11.04	0.864+j4.706	2.187+j10.018
MAZATLÁN TECNOLÓGICO	MTE-115	115	10.22	8.66	1.574+j6.301	2.065+j9.796	14.72	11.14	1.010+j4.859	2.033+j9.514
MAZATLÁN UNO	MZU-115	115	12.87	11.32	0.981+j5.064	1.144+j7.175	19.88	15.27	0.433+j3.648	1.110+j6.898
MOCHIS CENTRO	MCE-115	115	13.81	11.27	1.005+j4.701	1.695+j7.706	17.07	13.20	0.844+j4.195	1.695+j7.726
MOCHIS LAS VILLAS	MLV-115	115	12.93	10.07	0.821+j5.071	1.571+j9.199	15.74	11.68	0.670+j4.591	1.570+j9.225
MOCUZARI	MRI-115	115	2.11	1.41	13.782+j28.262	27.323+j73.766	2.62	2.22	11.279+j25.464	8.638+j42.535
MORELOS-LA ATRAVESADA	MLA-115	115	4.47	3.71	4.488+j14.162	8.126+j22.668	5.16	4.16	4.177+j13.523	8.173+j23.054
NACOZARI	NRI-230	230	12.70	12.03	1.620+j10.327	2.449+j12.132	16.51	14.49	0.974+j8.794	2.487+j12.213
NAINARI	NNR-115	115	14.20	12.53	0.760+j4.615	1.073+j6.472	17.43	14.52	0.595+j4.149	1.102+j6.569
NAVOJOA	NVJ-115	115	9.66	7.53	1.420+j6.727	2.469+j12.436	12.89	9.17	0.970+j5.583	2.474+j12.225



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
NAVOJOA INDUSTRIAL	NVI-115	115	4.52	3.44	3.266+j14.316	7.356+j27.496	5.55	4.04	2.726+j12.877	7.231+j26.935
NAVOJOA NORTE	NVN-115	115	8.40	6.46	1.785+j7.697	3.162+j14.667	10.87	7.73	1.329+j6.587	3.177+j14.480
NAVOJOA ORIENTE	NVO-115	115	9.00	6.38	1.447+j7.231	2.705+j16.228	11.81	7.68	1.005+j6.101	2.710+j15.847
NAVOLATO	NTO-115	115	4.35	3.02	3.595+j14.822	9.571+j34.158	5.08	3.41	3.218+j14.016	9.586+j34.162
NOGALES	NGS-115	115	3.85	3.61	4.736+j16.568	4.151+j20.447	4.97	4.30	3.400+j14.298	4.238+j21.100
NOGALES AEROPUERTO	NGA-115	115	5.09	5.75	3.787+j12.489	0.672+j8.727	7.01	7.26	2.182+j10.194	0.757+j9.350
NOGALES AEROPUERTO	NGA-230	230	2.80	3.30	13.718+j45.425	2.465+j26.402	4.02	4.36	7.394+j35.584	2.850+j27.792
NOGALES NORTE	NGN-115	115	3.93	3.94	4.807+j16.215	2.747+j16.604	5.09	4.74	3.309+j13.963	2.847+j17.304
NOVILLO	NVL-115	115	2.01	0.86	6.792+j32.355	46.341+j160.459	4.43	5.37	1.713+j16.404	0.387+j6.538
NUEVO NOGALES	NNG-115	115	3.84	3.85	5.185+j16.498	2.512+j17.188	4.97	4.60	3.568+j14.261	2.665+j18.056
NUEVO PROGRESO	NPO-115	115	4.54	3.10	3.293+j14.257	6.691+j34.595	5.27	3.43	2.913+j13.555	6.759+j35.399
OASIS	OAS-115	115	2.54	1.55	9.545+j24.353	23.910+j72.810	2.97	1.74	8.779+j23.012	23.917+j72.795
OBSERVATORIO	OBS-230	230	5.91	5.06	5.906+j21.676	6.829+j33.558	8.14	6.24	3.519+j17.596	7.055+j33.505
OCUCA	OCU-115	115	3.26	2.41	5.948+j19.484	10.758+j40.751	4.31	2.89	4.107+j16.453	10.728+j40.422
ORIENTE	ORI-115	115	1.95	1.76	10.985+j32.220	10.803+j43.858	2.68	2.17	6.773+j26.369	10.974+j45.217
OVIACHIC	OVI-115	115	2.26	1.58	13.952+j25.841	24.594+j62.654	2.95	2.86	10.159+j22.622	3.867+j25.333
PARQUE INDUSTRIAL HERMOSILLO NORTE	PIH-115	115	12.76	12.02	1.095+j5.085	1.169+j6.109	17.93	15.33	0.629+j4.025	1.227+j6.047
PARTICULAR MINA ALAMO DORADO	PAD-115	115	1.53	0.91	16.184+j40.297	41.323+j125.094	2.06	1.53	12.188+j33.327	22.161+j68.261
PARTICULAR MINA PIEDRAS VERDES	PVD-115	115	2.27	1.37	12.547+j26.454	29.260+j82.258	2.70	1.82	11.207+j24.597	19.332+j63.876
PARTICULAR SAUZAL	PSZ-115	115	0.85	0.49	23.911+j74.699	74.487+j240.874	1.42	1.91	10.415+j50.413	0.451+j12.221
PIAXTLA	PXT-115	115	1.63	1.00	12.295+j38.803	32.183+j114.187	1.87	1.11	11.600+j37.383	32.190+j113.929
PLANTA GUAYMAS DOS	PGD-115	115	13.10	11.57	0.776+j5.010	0.985+j7.181	15.36	12.89	0.660+j4.708	1.044+j7.542
PLANTA GUAYMAS DOS	PGD-230	230	10.96	11.00	1.697+j11.994	1.814+j12.623	13.42	12.71	1.271+j10.810	1.901+j13.112
PLAYA ENCANTO	PYE-115	115	1.93	1.79	11.193+j32.518	10.805+j41.184	2.65	2.22	7.025+j26.639	10.954+j42.260
PORTALES	PRT-115	115	13.70	12.22	1.078+j4.726	1.149+j6.572	19.91	15.96	0.616+j3.616	1.193+j6.306
PROGRESO	PRG-115	115	5.48	3.85	2.827+j11.790	7.759+j26.386	6.22	4.27	2.699+j11.437	7.800+j26.631
PROVIDENCIA	PRO-115	115	15.84	14.92	0.623+j4.144	0.769+j4.928	19.24	17.08	0.488+j3.765	0.805+j5.142
PUEBLITOS	PUE-115	115	12.63	11.59	1.111+j5.139	1.299+j6.607	17.70	14.70	0.643+j4.077	1.357+j6.543
PUEBLO NUEVO	PNO-115	115	10.62	7.88	1.160+j6.145	1.801+j12.644	14.44	9.73	0.724+j5.006	1.807+j12.178
PUEBLO NUEVO	PNO-230	230	7.59	8.09	3.297+j17.185	1.803+j14.058	12.10	11.52	1.667+j11.960	1.832+j13.298
PUERTO LIBERTAD	PLD-230	230	3.13	4.07	11.944+j40.695	1.306+j13.326	13.35	15.95	0.767+j10.912	0.259+j5.276
PUERTO PEÑASCO	PPA-115	115	2.05	2.11	10.426+j30.595	7.396+j28.731	2.86	2.67	6.239+j24.722	7.564+j30.084
QUILA	QLA-115	115	2.58	1.68	7.243+j24.644	6.156+j67.522	2.95	1.87	6.811+j23.797	6.179+j67.574
QUIROGA	QRG-115	115	8.01	6.16	2.283+j7.966	4.796+j15.083	10.29	7.38	1.827+j6.855	4.852+j14.740
RIO SONORA	RIS-115	115	16.08	17.34	1.118+j3.975	0.685+j3.215	25.09	25.17	0.644+j2.839	0.693+j2.827
ROCA FUERTE	RFT-115	115	11.57	9.16	0.953+j5.658	1.923+j10.273	13.46	10.19	0.836+j5.361	1.957+j10.592
ROLANDO GARCIA URREA	RGU-115	115	13.80	14.64	1.517+j4.568	1.392+j3.789	20.81	20.88	0.985+j3.369	1.262+j3.279
ROSARIO	ROS-115	115	2.19	1.42	12.903+j27.431	26.325+j75.616	2.54	1.60	12.237+j26.066	26.287+j75.348
RUIZ CORINEZ	RUC-115	115	5.41	3.74	2.434+j12.027	7.684+j27.596	6.29	4.22	2.193+j11.398	7.714+j27.584
SAHUARO	SHO-115	115	2.22	1.86	10.189+j28.161	11.780+j45.862	3.17	2.34	6.248+j22.144	11.799+j46.285
SALVADOR ALVARADO	SAA-115	115	7.28	5.86	2.025+j8.889	3.262+j15.295	9.26	7.01	1.581+j7.727	3.365+j14.740
SAN CARLOS	SCR-115	115	5.43	3.56	2.768+j11.908	7.959+j30.629	6.14	3.94	2.645+j11.604	7.996+j30.948



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
SAN NICOLÁS	SNC-115	115	1.78	1.38	14.388+j34.441	25.377+j64.935	2.02	1.54	13.847+j33.375	25.437+j65.325
SAN RAFAEL	SRF-115	115	6.63	4.94	2.330+j9.735	5.403+j19.487	8.14	5.75	1.945+j8.764	5.475+j19.131
SAN RAFAEL AMPLIACIÓN	SRA-115	115	6.63	4.94	2.330+j9.735	5.403+j19.487	8.14	5.75	1.945+j8.764	5.475+j19.131
SANALONA	SLA-115	115	2.56	1.86	11.903+j23.099	17.929+j52.333	3.11	3.20	10.250+j21.106	3.149+j21.782
SANTA ANA	STA-115	115	7.30	7.44	2.524+j8.740	0.791+j8.719	11.28	9.97	1.074+j6.385	0.829+j8.992
SANTA ANA	STA-230	230	4.76	5.46	8.818+j26.450	2.518+j17.513	8.86	9.06	3.163+j16.172	2.438+j15.144
SANTA FE	STF-115	115	9.79	7.96	1.297+j6.659	2.390+j11.165	12.53	9.64	0.916+j5.758	2.284+j10.712
SANTA MARÍA	STM-115	115	5.78	4.06	2.615+j11.195	7.210+j24.936	6.87	4.64	2.294+j10.386	7.268+j24.744
SEIS DE ABRIL	SSA-115	115	4.41	5.72	4.702+j14.297	0.530+j4.873	9.28	10.46	1.236+j7.773	0.565+j5.131
SEIS DE ABRIL	SSA-230	230	2.58	3.19	16.309+j48.811	2.119+j22.748	6.16	6.13	3.768+j23.414	2.370+j23.755
SELECTA	SEL-115	115	1.83	1.21	11.597+j34.446	28.665+j87.111	2.08	1.35	11.032+j33.409	28.801+j87.706
SERI	SER-230	230	11.67	14.02	2.126+j11.179	0.634+j5.822	18.43	20.13	0.869+j7.880	0.697+j5.939
SERI	SER-400	400	6.86	7.25	4.850+j33.336	2.679+j28.403	9.29	8.98	2.219+j27.247	2.912+j30.183
SIEMPRE VIVA	SVV-115	115	3.27	3.25	6.311+j19.280	6.730+j19.734	5.50	4.65	2.865+j12.965	6.663+j19.496
SONOYTA	SNY-115	115	0.81	0.57	26.059+j77.465	49.065+j180.771	0.97	0.65	21.468+j71.888	49.247+j182.158
SUBESTACIÓN BAHÍA DE KINO	SBK-115	115	1.77	1.38	16.543+j33.738	25.377+j64.935	2.01	1.54	16.002+j32.674	25.437+j65.325
SUBESTACIÓN CANANEA	SCN-115	115	7.27	6.29	1.530+j9.003	0.835+j13.520	8.50	6.89	1.050+j8.529	0.921+j14.578
SUBESTACIÓN CANANEA	SCN-230	230	7.42	6.98	5.008+j17.172	3.612+j21.407	10.57	8.82	2.903+j13.514	3.884+j21.529
SUBESTACIÓN CANANEA SUR	CNS-230	230	6.65	5.37	5.885+j19.071	7.630+j33.803	8.89	6.47	3.833+j15.973	7.882+j33.860
SUBESTACIÓN CENTRO	SCE-230	230	5.93	4.59	6.353+j21.462	9.571+j41.266	7.73	5.45	4.281+j18.398	9.823+j41.323
SUBESTACIÓN CINCO	SBI-115	115	3.24	2.49	4.890+j19.893	14.958+j36.227	3.78	2.81	4.353+j18.824	15.020+j36.639
SUBESTACIÓN COLINAS	SCL-115	115	11.46	9.19	1.284+j5.649	1.986+j9.955	15.78	11.37	0.804+j4.557	2.022+j9.843
SUBESTACIÓN CONCENTRADORA	SCO-230	230	5.89	4.61	6.545+j21.559	9.541+j40.587	7.61	5.45	4.510+j18.657	9.793+j40.644
SUBESTACIÓN CUATRO	SBC-115	115	3.04	2.15	7.394+j20.538	13.064+j47.477	3.54	2.41	6.837+j19.490	13.199+j48.072
SUBESTACIÓN CULIACÁN POTENCIA	SCP-115	115	13.62	14.64	0.963+j4.778	0.376+j3.799	19.44	19.07	0.533+j3.718	0.428+j3.802
SUBESTACIÓN CULIACÁN POTENCIA	SCP-230	230	8.24	9.90	3.331+j15.765	0.921+j7.791	12.05	13.37	1.747+j11.990	0.974+j8.005
SUBESTACIÓN DIEZ	SBZ-115	115	2.93	1.94	6.735+j21.663	14.763+j55.720	3.40	2.17	6.200+j20.591	14.822+j56.109
SUBESTACIÓN DOS	SBD-115	115	5.86	5.10	3.157+j10.874	3.059+j16.252	7.20	5.86	2.621+j9.795	3.192+j16.843
SUBESTACIÓN ESDE	SES-230	230	6.27	4.95	6.078+j20.275	8.615+j37.592	8.28	5.91	4.023+j17.185	8.866+j37.649
SUBESTACIÓN GUAYMAS UNO	SGU-115	115	10.37	7.78	1.159+j6.299	2.652+j12.697	12.01	8.65	1.037+j5.994	2.688+j13.015
SUBESTACIÓN NUEVE	SBN-115	115	1.79	1.16	13.398+j34.671	28.031+j92.864	2.03	1.29	12.827+j33.645	28.167+j93.459
SUBESTACIÓN OCHO	SBO-115	115	1.74	1.18	13.355+j35.649	26.726+j88.827	1.98	1.31	12.804+j34.601	26.786+j89.217
SUBESTACIÓN PERICOS	SPE-115	115	4.33	2.88	4.276+j14.741	10.818+j36.774	5.03	3.25	3.944+j13.963	10.857+j36.699
SUBESTACIÓN PONIENTE	SPO-230	230	5.89	4.60	6.551+j21.580	9.563+j40.661	7.60	5.45	4.516+j18.678	9.814+j40.718
SUBESTACIÓN PUNTO P	SPP-115	115	8.68	8.12	1.743+j7.445	1.284+j9.233	11.28	9.68	1.220+j6.356	1.342+j9.621
SUBESTACIÓN SANTA INÉS	STI-115	115	3.67	2.75	5.781+j17.143	9.546+j35.088	4.32	3.11	5.241+j16.077	9.605+j35.477
SUBESTACIÓN SEIS	SBS-115	115	2.54	1.83	7.080+j25.200	19.991+j52.878	2.92	2.05	6.538+j24.137	20.053+j53.291
SUBESTACIÓN SIETE	SBE-115	115	4.33	3.08	4.647+j14.600	8.298+j33.013	5.17	3.50	4.115+j13.524	8.356+j33.401
SUBESTACIÓN TRES	SBT-115	115	4.44	3.24	4.484+j14.250	8.099+j30.532	5.31	3.69	3.953+j13.170	8.158+j30.921
SUBESTACIÓN UNO	SBU-115	115	2.37	1.69	9.607+j26.357	17.414+j59.680	2.72	1.89	9.059+j25.303	17.473+j60.069
SUBESTACIÓN VILLA UNIÓN	SVU-115	115	9.35	7.92	1.739+j6.887	2.550+j10.632	13.01	9.99	1.183+j5.489	2.520+j10.381
TAMAZULA	TZU-115	115	6.15	3.17	2.549+j10.495	13.874+j38.727	7.48	3.62	2.164+j9.524	13.946+j38.371



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
TASTIOTA	TST-115	115	2.12	1.46	10.159+j29.616	22.252+j70.545	2.42	1.62	9.595+j28.576	22.387+j71.140
TECNOLÓGICO HERMOSILLO	TCG-115	115	10.63	8.31	1.326+j6.105	2.421+j11.267	14.34	10.15	0.847+j5.022	2.465+j11.162
TERRAMARA	TER-115	115	2.98	1.81	7.999+j20.816	20.125+j62.214	3.49	2.04	7.348+j19.596	20.134+j62.163
TETABIATE	TTB-115	115	12.58	11.13	0.963+j5.191	1.540+j7.194	15.35	12.84	0.783+j4.694	1.575+j7.331
TOBARITO	TBR-115	115	6.58	4.58	2.420+j9.789	6.173+j22.463	7.61	5.12	2.253+j9.332	6.226+j22.676
TOPOLOBAMPO	TPO-115	115	6.85	3.57	2.280+j9.417	9.031+j35.151	7.98	4.00	2.109+j8.912	9.031+j35.170
TOPOLOBAMPO	TPO-230	230	7.78	6.64	2.309+j16.909	4.388+j24.823	12.85	12.97	1.012+j11.318	0.884+j10.549
TOPOLOBAMPO DOS	TPD-400	400	12.80	15.17	1.497+j17.985	0.401+j8.568	15.38	17.65	0.919+j16.493	0.451+j9.341
TOPOLOBAMPO TRES	TPT-230	230	20.42	22.06	0.520+j6.483	0.187+j4.213	25.30	26.24	0.334+j5.763	0.232+j4.480
TRES RÍOS	TSR-115	115	12.61	12.24	1.104+j5.149	1.085+j5.581	17.56	16.57	0.668+j4.104	0.833+j4.688
UNIÓN ENERGÉTICA DEL NOROESTE	UEN-230	230	7.81	8.29	2.412+j16.826	2.428+j14.443	14.04	15.35	0.850+j10.366	0.675+j6.992
URES	URE-115	115	1.96	1.18	9.485+j32.586	27.583+j97.150	2.23	1.32	8.983+j31.501	27.648+j97.108
VALLE DEL MAYO	VMY-115	115	4.55	3.09	3.372+j14.200	10.209+j33.709	5.47	3.54	2.905+j13.020	10.219+j33.691
VALLE DEL YAQUI	VDY-115	115	5.30	3.74	3.996+j11.879	7.794+j27.171	6.01	4.15	3.868+j11.527	7.836+j27.407
VALLE DEL YAQUI DOS	VYD-115	115	3.88	2.40	4.429+j16.525	14.237+j46.851	4.39	2.66	4.259+j16.071	14.290+j47.065
VENADILLO	VND-115	115	9.88	8.08	1.347+j6.581	1.619+j11.091	14.18	10.30	0.761+j5.092	1.615+j10.845
VICAM	VCM-115	115	4.07	2.80	5.274+j15.447	9.782+j37.450	4.59	3.10	5.109+j15.056	9.805+j37.614
VILLA JUÁREZ	VIJ-115	115	2.79	1.78	6.579+j22.842	18.125+j62.067	3.22	1.99	6.116+j21.818	18.177+j62.061
VILLAS DEL CEDRO	VCD-115	115	11.51	10.66	1.204+j5.643	1.515+j6.933	15.59	13.95	0.775+j4.622	1.246+j6.073
VILLAS DEL PITTIC	VPI-115	115	14.49	15.46	1.379+j4.369	1.150+j3.595	22.18	22.31	0.854+j3.180	1.035+j3.104
VIÑEDOS	VNO-115	115	4.87	3.10	4.492+j12.887	10.724+j35.453	5.89	3.55	3.952+j11.757	10.743+j35.383

Gerencia de Control Regional Norte



[Regresar a mapa del SEN](#)



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
ABASTOS	ABA-115	115	18.73	18.24	0.838+j3.444	0.906+j3.735	27.23	24.32	0.519+j2.632	0.898+j3.560
ABRAHAM GONZÁLEZ	ABG-115	115	4.39	3.69	3.343+j14.749	5.698+j23.052	6.81	5.72	2.144+j10.511	4.541+j16.255
AEROPUERTO	AEP-115	115	9.71	7.66	1.426+j6.687	4.191+j11.729	11.93	8.92	1.179+j6.008	4.194+j11.699
AGNICO EAGLE	AGE-115	115	2.09	2.33	8.588+j30.624	5.814+j21.377	2.36	2.59	7.865+j29.927	5.873+j22.128
ALAMOS	AMS-115	115	11.93	8.80	1.151+j5.445	2.701+j11.208	15.72	10.67	0.810+j4.574	2.679+j10.953
ALDAMA	AMA-115	115	4.03	3.06	4.432+j15.865	12.340+j29.965	4.81	3.49	3.816+j14.706	12.355+j30.054
ALLENDE	ALL-115	115	15.07	11.87	1.046+j4.279	2.398+j7.625	20.63	14.74	0.714+j3.467	2.394+j7.457
ALTARES	ATR-115	115	0.75	0.50	40.175+j79.090	101.836+j198.074	0.83	0.55	39.688+j78.674	101.962+j198.605
ALTAVISTA	ALV-115	115	2.17	2.05	11.414+j28.432	9.172+j34.983	2.51	2.31	10.140+j27.214	9.289+j35.880
ÁLVARO OBREGÓN	AVO-115	115	4.15	3.64	4.381+j15.405	7.852+j21.410	5.04	4.31	3.668+j14.007	7.634+j20.654
AMADO NERVO	AMN-115	115	1.70	1.26	14.851+j36.097	27.668+j75.216	2.94	2.12	9.344+j23.035	19.455+j49.955
AMÉRICAS	AMR-115	115	9.47	8.27	1.740+j6.795	2.614+j9.796	12.43	10.01	1.144+j5.761	2.628+j9.835
ANAPRA	APR-115	115	7.37	6.03	1.562+j8.867	5.454+j14.223	8.91	7.01	1.300+j8.094	5.422+j14.032
ANDALUCÍA	AND-115	115	13.70	15.05	0.998+j4.743	0.424+j3.537	18.02	18.94	0.670+j3.998	0.412+j3.470
ANDALUCÍA	AND-230	230	10.26	10.90	2.565+j12.691	1.712+j10.583	15.62	16.04	1.255+j9.269	1.510+j8.650
ARCADIO	ADI-115	115	6.37	5.23	3.036+j9.975	6.729+j15.951	7.55	6.00	2.731+j9.280	6.720+j15.912
ARENALES	ARE-115	115	7.87	10.12	2.054+j8.179	0.441+j2.888	10.03	12.44	1.432+j7.140	0.454+j3.048
ARMENDÁRIZ	ARM-115	115	2.85	2.03	6.222+j22.434	17.153+j48.892	3.45	2.37	5.288+j20.498	16.806+j47.332
ASCENSIÓN	AON-115	115	4.74	4.83	2.514+j13.787	2.406+j13.020	5.34	5.36	2.318+j13.473	2.439+j13.329
ASCENSIÓN DOS	AOD-115	115	5.04	6.41	2.145+j13.004	0.262+j4.792	5.68	7.09	1.954+j12.718	0.297+j5.181
ASCENSIÓN DOS	AOD-230	230	2.91	3.28	7.221+j45.047	2.181+j30.230	3.34	3.66	6.353+j43.241	2.475+j32.424
AUMA	AUM-115	115	10.45	9.61	1.416+j6.192	1.879+j7.908	14.35	11.92	0.806+j5.024	1.899+j8.013
AUTOMOTIVE LIGHTING	ALI-115	115	14.14	13.29	1.003+j4.588	1.490+j5.475	21.12	20.09	0.650+j3.397	1.055+j3.891
AVALOS	AVL-115	115	14.87	17.78	1.066+j4.336	0.274+j2.371	22.85	24.77	0.469+j3.161	0.292+j2.461
AVALOS	AVL-230	230	9.36	11.31	3.574+j13.726	1.126+j7.190	16.97	18.03	1.267+j8.512	1.191+j7.084
AZTECAS	AZT-115	115	12.71	11.10	1.197+j5.084	2.668+j7.125	16.28	13.32	0.949+j4.384	2.665+j7.071
BABISAS	BBS-115	115	2.86	2.22	6.423+j22.314	15.062+j40.757	5.44	5.38	3.557+j12.955	2.721+j13.605
BACIS	BAC-115	115	0.55	0.35	55.997+j106.802	139.619+j291.662	0.61	0.39	55.501+j106.404	139.749+j292.200
BASASEACHIC	BAS-115	115	2.39	2.89	7.382+j26.741	2.487+j13.245	2.72	3.23	6.657+j26.001	2.543+j13.949
BATOPILAS	BAT-115	115	4.42	3.06	5.392+j14.025	8.007+j34.256	5.38	4.24	4.670+j12.756	5.119+j24.170
BENITO JUÁREZ	BJZ-115	115	5.64	4.53	2.596+j11.482	7.803+j19.043	6.56	5.15	2.326+j10.881	7.806+j18.946
BERMEJILLO	BER-115	115	3.95	2.34	3.454+j16.468	12.720+j49.766	5.13	3.01	3.033+j13.902	11.454+j42.787
BIOPAPEL	BIO-115	115	4.34	4.24	3.649+j14.848	3.809+j16.024	6.49	6.00	2.700+j10.925	3.725+j13.522
BISMARCK	BSM-115	115	1.64	1.22	12.816+j38.281	30.322+j77.376	1.82	1.34	12.617+j38.011	30.360+j77.771
BOLÍVAR	BLV-115	115	1.65	1.46	13.285+j38.099	19.001+j52.788	1.88	1.63	11.982+j36.889	19.127+j53.700
BOQUILLA	BOQ-115	115	2.77	2.14	6.718+j23.011	15.957+j42.537	5.50	5.63	3.571+j12.791	1.812+j12.334
BUENA VISTA	BUV-115	115	2.52	2.07	5.991+j25.629	14.872+j41.324	2.81	2.28	5.793+j25.317	14.906+j41.634
BUENOS AIRES	BUA-115	115	2.42	1.83	6.455+j26.712	18.768+j50.585	2.70	2.03	6.250+j26.355	18.789+j50.794
BÚFALO	BUF-115	115	2.45	1.81	8.288+j25.859	19.767+j52.009	3.83	2.93	5.979+j18.091	11.837+j34.629
CAHUISORI POTENCIA	CPO-115	115	2.49	3.20	7.082+j25.715	0.474+j9.241	2.83	3.57	6.361+j25.007	0.533+j9.991
CAHUISORI POTENCIA	CPO-230	230	1.41	1.67	23.641+j90.858	2.289+j52.208	1.64	1.88	20.423+j86.790	2.548+j56.020
CALIFORNIA	CFN-115	115	18.00	15.94	0.886+j3.580	1.380+j4.943	25.76	20.72	0.568+j2.777	1.376+j4.741



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
CAMARGO DOS	CGD-115	115	7.45	9.21	1.831+j8.723	0.228+j3.888	11.95	14.24	0.905+j6.042	0.274+j3.176
CAMARGO DOS	CGD-230	230	5.42	5.97	6.422+j23.641	2.064+j18.042	9.15	9.22	2.734+j15.724	2.048+j15.524
CAMARGO UNO	CGU-115	115	4.90	4.23	2.790+j13.273	3.925+j19.670	7.53	6.34	1.727+j9.543	3.529+j14.761
CANATLAN DOS	CND-115	115	4.75	5.45	2.778+j13.688	2.264+j8.323	5.49	6.14	2.451+j13.074	2.332+j8.781
CANATLAN DOS POTENCIA	CAP-115	115	5.00	5.99	2.433+j13.058	0.719+j6.686	5.78	6.74	2.112+j12.469	0.801+j7.178
CANATLAN DOS POTENCIA	CAP-230	230	3.35	3.52	6.938+j39.069	5.214+j33.347	4.08	4.09	5.470+j35.364	5.729+j35.195
CARICHIC	CRC-115	115	1.83	1.38	8.987+j35.236	28.683+j66.652	2.08	1.54	8.297+j34.128	28.716+j66.812
CAROLINAS	CAS-115	115	9.74	9.22	1.738+j6.592	2.341+j7.728	12.79	11.20	1.151+j5.595	2.366+j7.828
CARTAGENA	CAR-115	115	12.27	10.98	1.247+j5.267	2.380+j7.024	16.92	14.26	0.909+j4.220	2.199+j6.429
CASAS GRANDES	CGR-115	115	7.47	6.86	1.517+j8.757	2.379+j11.038	8.59	7.70	1.320+j8.396	2.406+j11.211
CATEDRAL	CAT-115	115	0.83	0.60	31.588+j73.557	68.181+j159.586	0.93	0.66	30.223+j72.678	68.338+j160.545
CATERPILLAR	CTP-115	115	11.17	10.30	1.394+j5.778	1.971+j7.197	14.10	12.48	1.100+j5.061	2.041+j6.932
CEBALLOS	CEB-115	115	1.03	0.62	25.047+j59.442	58.627+j184.255	2.12	1.32	13.044+j31.854	31.324+j91.961
CEMENTOS	CEM-115	115	9.14	7.46	1.821+j7.032	3.920+j11.569	11.36	8.85	1.488+j6.256	3.902+j11.290
CEMENTOS SAMALAYUCA	CMS-115	115	4.94	3.89	3.353+j13.022	9.366+j22.693	5.82	4.42	3.016+j12.173	9.385+j22.764
CERESO	CER-115	115	7.71	6.82	2.021+j8.372	4.348+j11.298	9.48	7.97	1.693+j7.512	4.367+j11.369
CERESO JUÁREZ	CEJ-115	115	7.07	6.09	2.221+j9.123	5.144+j13.107	8.61	7.07	1.892+j8.264	5.163+j13.178
CERROS BLANCOS	CRB-115	115	1.47	1.02	11.771+j43.494	41.659+j96.147	1.64	1.13	11.522+j42.981	41.670+j96.154
CHALCHIHUITES	CHL-115	115	1.02	0.67	23.809+j60.671	71.009+j153.307	1.72	1.19	14.270+j40.064	38.935+j91.641
CHAMIZAL	CZL-115	115	14.32	13.78	0.977+j4.532	1.367+j5.086	20.48	19.30	0.655+j3.506	1.049+j4.128
CHARCOS	CHA-115	115	0.71	0.47	31.476+j88.265	99.594+j215.515	1.03	0.71	22.012+j67.228	66.802+j153.280
CHAVEÑA	CVA-115	115	13.17	12.14	1.100+j4.921	1.926+j6.126	17.88	15.55	0.804+j4.004	1.819+j5.698
CHÁVEZ UNO	CZU-115	115	9.60	8.92	1.596+j6.729	1.634+j8.367	12.86	11.19	1.053+j5.582	1.614+j8.089
CHIHUAHUA NORTE	CUN-115	115	12.08	13.66	1.379+j5.318	0.556+j3.660	16.60	17.40	0.800+j4.326	0.585+j3.774
CHIHUAHUA NORTE	CUN-230	230	8.39	8.46	3.950+j15.327	3.173+j15.514	13.32	11.65	1.803+j10.813	3.294+j15.433
CHIHUAHUA NORTE	CUN-230B	230	8.24	8.22	3.995+j15.620	3.355+j16.259	12.97	11.24	1.848+j11.108	3.481+j16.189
CHIHUAHUA PLANTA	CUP-115	115	11.80	11.35	1.498+j5.422	1.768+j6.145	16.39	14.31	0.886+j4.366	1.779+j6.186
CHIHUAHUA PONIENTE	CPN-115	115	9.69	8.63	1.813+j6.606	3.020+j8.990	12.82	10.51	1.230+j5.561	3.028+j9.011
CHUVISCAR	CHU-115	115	13.86	16.85	1.163+j4.645	0.201+j2.359	20.75	23.02	0.557+j3.476	0.230+j2.498
CHUVISCAR	CHU-230	230	8.56	10.96	3.721+j15.066	0.509+j5.748	15.03	17.28	1.357+j9.627	0.595+j5.980
CIÉNÉGA	CIE-115	115	0.58	0.36	56.762+j99.622	137.625+j286.978	0.64	0.40	56.241+j99.264	137.754+j287.515
CIÉNÉGA DOS	CID-115	115	0.59	0.37	55.896+j98.391	135.742+j282.099	0.65	0.41	55.377+j98.031	135.871+j282.636
CLID	CLI-115	115	6.69	5.55	2.344+j9.648	7.229+j14.561	8.60	9.01	1.743+j8.307	1.673+j7.164
COLEGIO	CLG-115	115	12.16	10.70	1.291+j5.304	2.618+j7.350	18.68	15.24	0.820+j3.824	2.190+j6.240
COLINA	CLN-115	115	2.67	1.98	7.550+j23.741	18.309+j47.276	4.84	4.45	4.631+j14.358	4.698+j18.486
COMPLEJO DE SEGURIDAD	CSG-115	115	9.04	8.03	1.827+j7.110	3.182+j9.710	12.04	9.79	1.216+j5.943	3.200+j9.803
COMPLEJO INDUSTRIAL	CIN-115	115	10.13	9.71	1.781+j6.306	2.228+j7.161	13.47	11.92	1.178+j5.294	2.247+j7.235
COMPLEJO LALA	CLA-115	115	12.77	9.76	1.251+j5.046	3.229+j9.513	16.86	11.85	0.919+j4.234	3.224+j9.345
COMPONENTES	COM-115	115	10.77	10.96	1.643+j5.941	1.502+j5.748	14.44	13.58	1.054+j4.947	1.527+j5.848
CONCHEÑO	CON-115	115	1.96	2.08	9.725+j32.532	8.199+j26.715	2.21	2.31	8.993+j31.858	8.261+j27.471
CONCORDIA	CCD-115	115	12.61	13.45	1.253+j5.115	0.861+j4.294	18.27	17.59	0.644+j3.945	0.882+j4.400
CONEJOS MÉDANOS	CJM-115	115	2.57	2.82	6.491+j25.016	3.782+j18.728	3.20	3.33	5.184+j22.240	4.004+j19.667



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
CORONEL	CRN-115	115	8.37	5.85	1.585+j7.770	4.464+j17.655	10.45	6.85	1.201+j6.887	4.458+j17.497
CREEL	CRL-115	115	1.23	0.96	16.524+j51.401	39.506+j92.457	1.38	1.06	15.772+j50.632	39.582+j92.959
CUADRO DE MANIOBRAS BISMARCK	CMB-115	115	2.42	2.04	6.640+j26.614	15.888+j40.002	2.69	2.25	6.442+j26.338	15.927+j40.396
CUADRO DE MANIOBRAS CEMENTOS	CMC-115	115	5.22	4.16	3.149+j12.313	8.600+j20.952	6.19	4.75	2.814+j11.462	8.619+j21.023
CERRO DEL MERCADO	CME-115	115	8.53	8.42	1.709+j7.598	2.681+j7.672	10.43	9.97	1.376+j6.864	2.714+j7.572
CUADRO DE MANIOBRAS ELECTROLUX	CME-115	115	15.97	17.27	0.820+j4.076	0.597+j3.241	21.13	21.41	0.579+j3.408	0.615+j3.298
CUADRO DE MANIOBRAS FOX	CMF-115	115	9.99	8.00	1.393+j6.496	4.067+j11.035	12.33	9.34	1.146+j5.812	4.069+j10.998
CUADRO DE MANIOBRAS SAN FRANCISCO	CMF-115	115	2.68	3.05	8.518+j23.242	2.543+j15.937	3.16	3.47	7.251+j21.983	2.658+j16.831
CUADRO DE MANIOBRAS INTERNACIONAL WIRE	CMI-115	115	7.90	7.60	1.912+j8.181	3.421+j8.849	10.35	10.42	1.358+j6.927	1.949+j6.646
CUADRO DE MANIOBRAS LA PARRILLA	CMP-115	115	1.45	1.04	17.961+j42.245	34.517+j92.656	2.81	2.01	9.755+j24.095	20.985+j52.797
CUADRO DE MANIOBRAS NAICA	NAC-115	115	1.55	1.01	18.476+j38.582	37.328+j105.909	3.48	2.51	9.438+j18.744	16.712+j42.372
CUADRO DE MANIOBRAS NAICA	CMN-115B	115	1.55	1.01	18.476+j38.582	37.328+j105.909	3.48	2.51	9.438+j18.744	16.712+j42.372
CUADRO DE MANIOBRAS VITROMEX	VIM-115	115	12.35	12.98	1.318+j5.210	1.151+j4.552	17.81	16.91	0.710+j4.038	1.166+j4.640
CUATRO SIGLOS	CSS-115	115	10.62	8.81	1.598+j6.043	3.562+j9.563	13.87	10.82	1.258+j5.114	3.405+j9.179
CUAUHTÉMOC	CHC-115	115	6.98	7.91	2.607+j9.155	1.778+j5.972	8.83	9.56	1.930+j8.041	1.820+j6.150
CUAUHTÉMOC DOS	CHD-115	115	8.20	11.05	1.966+j7.852	0.120+j1.969	10.52	13.72	1.346+j6.811	0.134+j2.128
CUAUHTÉMOC DOS	CHD-230	230	4.93	6.27	6.807+j26.069	0.841+j10.116	6.71	8.08	4.283+j21.359	0.943+j10.775
CUESTA	CUE-115	115	14.17	12.79	1.134+j4.546	2.071+j5.950	19.04	16.23	0.838+j3.744	1.905+j5.558
DELICIAS	DEL-115	115	6.93	6.49	2.389+j9.280	3.166+j11.158	10.05	9.17	1.300+j7.148	2.505+j9.060
DELICIAS DOS	DLD-115	115	2.43	1.54	7.506+j26.267	20.340+j71.882	10.06	8.68	1.299+j7.143	4.414+j9.972
DELPHI	DPH-115	115	12.60	10.64	1.293+j5.110	2.758+j7.726	16.36	13.10	0.987+j4.353	2.728+j7.369
DELPHI	DLP-115	115	14.04	13.09	1.003+j4.621	1.508+j5.640	21.26	20.39	0.646+j3.374	1.036+j3.778
DIAGONAL	DGN-115	115	10.67	8.66	1.365+j6.070	3.189+j10.103	13.52	10.38	1.041+j5.299	3.208+j9.863
DINAMITA	DIN-115	115	4.49	2.90	3.413+j14.382	11.280+j37.462	5.41	3.40	3.036+j13.164	11.087+j35.761
DISTRIBUCIÓN RIV	RIV-115	115	7.88	5.81	2.091+j8.166	4.536+j16.931	9.99	6.81	1.497+j7.154	4.556+j16.997
DIVISADERO	DIV-115	115	0.92	0.68	23.881+j68.011	59.979+j136.806	1.03	0.75	23.110+j67.290	60.060+j137.315
DIVISIÓN DEL NORTE	DDN-115	115	12.94	14.62	1.290+j4.967	0.560+j3.423	18.34	19.12	0.708+j3.920	0.575+j3.473
DIVISIÓN DEL NORTE	DDN-230	230	8.39	8.46	3.817+j15.352	3.235+j15.536	13.63	11.92	1.640+j10.587	3.281+j15.080
DUNAS	DUN-115	115	3.95	2.91	4.381+j16.233	13.579+j32.264	4.59	3.29	4.045+j15.384	13.598+j32.336
DURANGO DOS	DGD-115	115	11.16	13.75	1.127+j5.840	0.272+j2.600	14.30	17.29	0.787+j5.046	0.317+j2.444
DURANGO DOS	DGD-230	230	7.68	8.62	3.030+j17.032	1.706+j11.557	10.31	11.02	1.924+j14.034	1.788+j11.319
DURANGO UNO	DGU-115	115	9.61	9.98	1.440+j6.759	2.020+j5.849	11.87	11.89	1.130+j6.050	2.041+j5.822
DURAPLAY	DUR-115	115	2.15	2.03	11.484+j28.667	9.421+j35.549	2.49	2.28	10.209+j27.449	9.537+j36.446
EL CAPULIN	ECU-115	115	3.81	3.01	4.006+j16.946	10.977+j29.463	4.30	3.35	3.802+j16.571	10.997+j29.621
EL PILAR	ELP-115	115	2.91	1.96	7.685+j21.499	16.553+j53.642	3.50	3.08	6.636+j19.792	5.617+j29.009
EL SALTO	ESL-115	115	1.24	0.80	19.677+j49.736	63.740+j127.522	1.37	0.88	19.621+j49.665	63.763+j127.538
EL SAUCITO	SAU-115	115	8.43	6.63	2.020+j7.616	3.615+j13.909	10.84	7.87	1.421+j6.585	3.628+j13.942
EL SAUZ	ESZ-115	115	3.14	2.45	8.375+j19.422	14.814+j36.031	3.65	2.77	7.787+j18.454	14.843+j36.146
EL TRÉBOL	ETB-115	115	1.60	1.48	9.460+j40.356	10.044+j51.181	2.17	2.14	7.209+j32.908	5.641+j34.841
EL VERGEL	ELV-115	115	8.20	5.31	1.638+j7.933	4.708+j20.787	10.31	6.28	1.284+j6.970	4.654+j20.249
EMILIANO ZAPATA	EZT-115	115	3.87	3.00	5.364+j16.307	13.253+j29.281	4.41	3.36	5.129+j15.731	13.256+j29.339
ENCINO	ENO-230	230	11.60	14.96	2.761+j11.113	0.392+j4.152	24.36	30.08	0.706+j5.955	0.185+j2.678



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
ENCINO	ENO-400	400	5.89	6.78	7.650+j38.448	1.666+j24.982	9.68	10.34	2.308+j26.134	0.962+j21.536
ENCINO DOS	END-230	230	11.65	15.05	2.743+j11.061	0.384+j4.114	24.12	29.14	0.714+j6.015	0.284+j3.023
ESCALÓN	ESC-115	115	1.07	0.70	22.299+j57.715	58.177+j148.238	2.17	1.38	12.571+j31.253	30.961+j86.593
ESCUADRÓN 201	EDU-115	115	6.46	4.53	2.586+j9.948	8.161+j22.027	7.76	5.21	2.249+j9.142	8.157+j21.858
FELIPE PESCADOR	FPR-115	115	7.87	7.58	1.754+j8.248	3.344+j8.875	9.47	8.81	1.473+j7.574	3.361+j8.917
FLEXTRONICS	FLE-115	115	13.86	13.15	0.905+j4.704	1.744+j5.396	17.84	15.82	0.668+j4.039	1.763+j5.458
FORD	FRD-115	115	10.71	10.96	1.631+j5.979	1.496+j5.669	14.34	13.59	1.042+j4.985	1.522+j5.769
FORD MANIOBRAS	FOM-115	115	11.05	11.52	1.577+j5.796	1.298+j5.217	14.90	14.36	0.988+j4.801	1.323+j5.317
FOXCONN DOS	FXD-115	115	4.70	2.24	2.461+j13.899	24.073+j56.414	5.49	2.51	2.196+j13.130	24.040+j56.223
FRANCISCO VILLA	FVL-115	115	9.32	10.31	1.523+j6.955	0.524+j5.157	14.55	16.08	0.618+j4.982	0.180+j3.603
FRANCISCO VILLA	FVL-230	230	6.84	7.26	5.182+j18.720	2.718+j16.175	13.95	15.12	1.515+j10.359	0.810+j8.078
FRANCISCO ZARCO	FZA-115	115	7.50	4.77	1.827+j8.664	5.151+j23.540	9.64	5.84	1.459+j7.437	4.959+j21.840
FRANCKE	FRC-115	115	23.42	27.44	0.582+j2.775	0.197+j1.592	37.35	41.26	0.264+j1.938	0.184+j1.414
FUENTES	FTS-115	115	10.80	9.05	1.552+j5.947	3.444+j9.209	14.68	11.52	1.166+j4.837	3.194+j8.552
FUENTES MARES	FMR-115	115	13.05	13.26	1.212+j4.940	0.929+j4.859	19.09	17.33	0.612+j3.776	0.946+j4.929
FUNDILAG	FDL-115	115	10.14	8.98	1.564+j6.355	2.690+j8.712	12.64	10.75	1.268+j5.637	2.748+j8.425
GALEANA	GNA-115	115	3.18	2.34	5.072+j20.235	16.390+j40.287	3.59	2.61	4.842+j19.778	16.406+j40.356
GAMMON LAKE	GML-115	115	1.87	1.96	9.332+j34.279	9.338+j29.381	2.11	2.17	8.609+j33.576	9.397+j30.132
GASASEACHIC	GAS-115	115	1.98	2.12	9.602+j32.174	7.791+j25.789	2.23	2.35	8.871+j31.497	7.854+j26.545
GAVILÁN	GAV-115	115	1.45	1.01	12.842+j44.057	42.301+j97.039	1.62	1.12	12.530+j43.425	42.300+j96.862
GÉMINIS	GEM-115	115	13.02	11.50	1.232+j4.947	2.554+j6.759	16.69	13.79	0.993+j4.261	2.557+j6.735
GENERAL TRÍAS	GTR-115	115	4.58	3.58	3.529+j14.076	10.368+j24.810	5.47	4.10	2.904+j13.021	10.381+j24.854
GÓMEZ PALACIO	GPL-115	115	23.95	29.93	0.562+j2.715	0.078+j1.129	38.58	46.51	0.244+j1.877	0.065+j0.951
GÓMEZ PALACIO	GPL-230	230	11.02	12.43	2.396+j11.807	0.745+j8.007	18.97	20.88	0.896+j7.646	0.518+j5.736
GRANJERO	GJO-115	115	12.87	11.80	1.177+j5.025	2.833+j6.095	16.54	14.23	0.916+j4.319	2.813+j6.072
GRUPO ESSEX MÉXICO	GEX-115	115	9.32	8.13	1.770+j6.901	3.229+j9.743	11.56	9.79	1.453+j6.148	3.168+j9.266
GUACHOCHI	GCH-115	115	0.66	0.49	30.180+j95.457	82.072+j190.662	0.74	0.54	28.821+j94.319	82.228+j191.618
GUADALUPE VICTORIA	GVR-115	115	1.91	1.43	11.381+j32.787	8.419+j70.217	2.19	1.71	10.731+j31.516	2.829+j62.777
GUADIANA	GDN-115	115	7.50	6.73	2.101+j8.601	4.360+j11.125	8.99	7.79	1.791+j7.925	4.382+j11.142
GUANACEVI	GVI-115	115	0.57	0.40	43.546+j108.043	105.561+j239.184	0.63	0.44	42.099+j107.132	105.731+j240.162
HACIENDAS	HDS-115	115	8.85	7.44	1.970+j7.236	3.349+j11.377	11.51	8.93	1.385+j6.194	3.358+j11.400
HÉRCULES	HCL-230	230	1.03	0.90	30.923+j125.215	41.916+j181.799	1.36	1.09	23.063+j104.723	42.572+j181.463
HÉRCULES POTENCIA	HCP-400	400	3.16	2.06	7.999+j72.580	49.715+j185.250	3.86	2.39	5.345+j65.520	49.190+j182.098
IBERDROLA	IEL-115	115	23.87	29.46	0.552+j2.726	0.089+j1.216	38.21	45.36	0.240+j1.896	0.075+j1.032
INDUSTRIAL JUÁREZ	INJ-115	115	15.27	14.56	1.022+j4.226	1.657+j4.803	20.51	18.88	0.750+j3.480	1.325+j4.327
INDUSTRIAS SUPERIOR	ISP-115	115	10.69	10.93	1.633+j5.991	1.511+j5.703	14.31	13.54	1.043+j4.997	1.537+j5.803
INSURGENTES	IGS-115	115	16.02	17.52	0.829+j4.060	0.561+j3.116	21.91	22.81	0.570+j3.284	0.529+j2.925
INTERCERAMIC	ITC-115	115	9.99	9.50	1.808+j6.397	2.333+j7.399	13.23	11.63	1.205+j5.386	2.351+j7.472
INTERMEX ORIENTE	INO-115	115	12.53	12.99	1.131+j5.178	3.627+j3.874	15.99	15.74	0.876+j4.483	3.608+j3.909
INTERMEX SUR	INS-115	115	13.12	12.73	1.049+j4.952	1.542+j5.389	16.75	15.28	0.808+j4.284	1.560+j5.446
INTERNATIONAL WIRE	INW-115	115	7.78	7.50	1.952+j8.312	3.446+j8.906	10.15	10.26	1.398+j7.059	1.974+j6.703
JABIL	JAB-115	115	9.91	9.40	1.821+j6.450	2.382+j7.512	13.10	11.49	1.218+j5.439	2.401+j7.585



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
JANOS	JOS-115	115	4.61	3.98	2.803+j14.121	5.540+j20.568	5.21	4.43	2.599+j13.762	5.560+j20.777
JARDÍN	JAR-115	115	14.23	12.42	1.094+j4.536	1.830+j6.462	19.51	15.95	0.742+j3.668	1.730+j6.045
JERÓNIMO ORTIZ MARTÍNEZ	JOM-115	115	11.62	14.81	0.940+j5.634	0.174+j2.037	14.59	18.03	0.688+j4.960	0.198+j2.140
JERÓNIMO ORTIZ MARTÍNEZ	JOM-230	230	8.99	10.66	2.329+j14.578	0.824+j7.847	12.05	13.66	1.414+j12.040	0.925+j7.804
JERÓNIMO ORTIZ MARTÍNEZ	JOM-400	400	5.25	4.94	5.786+j43.585	5.408+j52.051	6.72	5.87	3.178+j37.641	5.910+j53.940
JIMÉNEZ	JEZ-115	115	3.07	2.45	6.015+j20.801	13.964+j35.366	4.80	3.91	4.236+j14.605	8.548+j24.143
JOHN DEREÉ	JND-115	115	9.76	8.74	1.682+j6.592	2.850+j8.756	12.18	10.59	1.365+j5.839	2.789+j8.280
JUÁREZ	JRZ-115	115	10.65	8.64	1.245+j6.108	3.158+j10.208	13.22	10.12	1.007+j5.430	3.165+j10.202
KILOMETRO OCHENTA Y OCHO	KOO-115	115	4.66	3.55	3.830+j13.711	7.377+j26.699	6.03	4.35	2.908+j11.760	7.031+j25.141
LA FLOR	LAF-115	115	1.60	1.16	9.575+j40.376	35.703+j82.209	1.79	1.28	9.318+j39.699	35.728+j82.312
LA LAGUNA	LGA-115	115	21.26	21.06	0.681+j3.048	0.679+j3.149	33.28	31.78	0.337+j2.169	0.462+j2.490
LA PARILLA	LPA-115	115	1.38	0.98	18.556+j44.372	37.202+j99.627	2.59	1.82	10.332+j26.249	23.668+j59.765
LA PERLA	LPL-115	115	1.04	0.76	20.744+j60.488	59.888+j120.896	3.62	3.73	4.975+j19.566	6.391+j17.280
LA ROSITA	LRT-115	115	7.75	6.26	3.214+j7.940	5.355+j13.695	9.45	7.29	2.884+j7.170	5.390+j13.593
LA SALADA	LSA-115	115	1.80	1.42	9.190+j35.696	25.678+j62.204	2.00	1.56	8.990+j35.422	25.716+j62.598
LA TRINIDAD	LTR-230	230	9.20	10.91	1.942+j14.296	0.665+j7.699	12.86	15.40	1.078+j11.303	0.402+j5.771
LA UNIÓN	LAU-115	115	16.73	12.99	0.888+j3.869	1.834+j7.171	23.59	16.35	0.559+j3.045	1.827+j7.007
LAGOS	LAG-115	115	13.53	12.17	1.216+j4.753	2.317+j6.238	17.76	14.95	0.937+j4.004	2.280+j6.075
LAGUNA DEL REY	LRE-115	115	1.06	1.23	19.517+j59.524	2.748+j37.861	1.16	1.32	19.918+j60.007	3.312+j40.435
LAGUNA DOS	LGD-115	115	21.12	20.78	0.691+j3.068	0.699+j3.232	32.96	31.14	0.347+j2.189	0.486+j2.585
LAGUNA ENCINILLAS	LEN-230	230	3.67	2.56	6.170+j35.692	21.812+j80.890	4.47	2.95	4.619+j32.337	21.850+j80.828
LAGUNA SECA	LSC-115	115	9.38	8.84	2.013+j6.790	2.281+j8.067	11.71	10.55	1.687+j6.006	2.393+j7.954
LAJAT	LJT-115	115	13.28	11.42	1.219+j4.848	2.459+j7.047	17.43	14.18	0.912+j4.091	2.429+j6.690
LALA	LAL-115	115	17.81	16.26	0.842+j3.632	1.311+j4.623	26.10	22.62	0.497+j2.754	1.098+j3.976
LAS CUATAS	CUA-115	115	2.21	1.58	4.926+j29.613	26.594+j61.843	2.49	1.76	4.627+j28.960	26.549+j61.590
LÁZARO CÁRDENAS	LCS-115	115	3.61	2.53	5.332+j17.601	11.523+j40.496	6.73	4.95	2.114+j10.638	6.198+j21.793
LEBARON	LEB-115	115	1.78	1.25	9.786+j36.066	33.193+j78.300	1.98	1.38	9.553+j35.613	33.210+j78.369
LEÓN GUZMÁN	LGM-115	115	5.50	3.52	2.280+j11.850	9.957+j31.035	6.53	4.01	1.896+j11.023	9.947+j30.867
LEONI CABLE	LEO-115	115	7.73	9.16	2.096+j8.330	1.157+j4.516	9.82	11.14	1.473+j7.291	1.170+j4.676
LERDO	LED-230	230	10.43	10.63	2.668+j12.455	2.174+j11.868	17.81	18.97	1.065+j8.131	0.943+j6.934
LEXMARK	LEX-115	115	10.42	8.55	1.452+j6.203	3.920+j9.938	12.88	9.98	1.209+j5.539	3.932+j9.968
LEXMARK DOS	LXD-115	115	10.42	9.05	1.100+j6.275	3.267+j8.857	12.86	10.57	0.861+j5.612	3.285+j8.919
LIBERTAD	LTD-115	115	13.33	11.49	1.247+j4.823	2.427+j7.049	17.52	14.27	0.961+j4.057	2.238+j6.695
LÓPEZ MATEOS	LZM-115	115	3.50	3.37	4.980+j18.310	7.435+j20.061	4.09	3.83	4.277+j17.333	7.469+j20.341
LUCERO	LCR-115	115	3.37	2.41	6.204+j18.675	14.857+j40.620	3.96	2.75	5.651+j17.545	14.837+j40.341
MANIOBRA BORDER SOLAR	MBS-230	230	9.58	9.72	2.184+j13.684	2.935+j13.316	13.58	15.52	1.317+j10.679	0.972+j6.801
MANIOBRAS CENTAURO	MAC-115	115	4.41	4.29	3.549+j14.637	3.896+j15.842	6.62	6.13	2.606+j10.713	3.740+j13.197
MANIOBRAS CERRO DEL MERCADO	MCM-115	115	8.10	7.41	1.839+j7.989	3.738+j9.883	9.84	8.67	1.511+j7.270	3.766+j9.821
MANIOBRAS CIENTO OCHO	MCO-115	115	4.47	3.85	3.899+j14.345	6.188+j21.191	5.70	4.83	3.136+j12.413	5.602+j19.000
MANIOBRAS FISTERRA	FIS-CM	230	4.97	3.84	4.365+j26.340	12.117+j49.167	6.39	6.10	3.054+j22.649	3.580+j25.983
MANIOBRAS HUERTRO SOLAR DURANGO	MHS-230	230	4.28	4.66	5.248+j30.565	3.583+j23.305	5.41	5.57	3.825+j26.704	3.919+j24.432
MANIOBRAS MIELERAS	MMI-115	115	12.78	12.02	1.186+j5.058	1.621+j5.971	16.51	14.93	0.889+j4.333	1.645+j5.624



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
MANIOBRAS MNP	MNP-230	230	4.54	5.16	5.551+j28.700	2.075+j18.796	6.18	6.51	3.372+j23.408	2.331+j19.956
MANIOBRAS MVC	MVC-115	115	8.90	10.62	1.422+j7.323	0.672+j3.799	10.97	12.62	1.121+j6.561	0.730+j3.994
MANIOBRAS PARQUE EÓLICO	MPE-115	115	1.46	1.75	12.004+j43.972	1.519+j23.055	1.57	1.86	12.571+j44.814	1.752+j25.018
MANIOBRAS SABINAS	MAS-115	115	1.01	0.64	27.775+j59.356	73.191+j164.956	1.69	1.11	18.194+j39.305	41.160+j103.292
MANIOBRAS SANTA ROSA	MSR-115	115	3.92	3.05	4.456+j16.324	12.429+j29.125	4.64	3.48	3.797+j15.264	12.447+j29.197
MANIOBRAS TREINTA Y CUATRO	MTC-115	115	5.32	5.12	3.413+j12.016	5.017+j13.103	6.50	5.99	2.727+j10.909	5.050+j13.262
MANIOBRAS VILLANUEVA	MVI-400	400	6.23	7.20	5.573+j36.670	2.569+j22.065	9.02	10.01	2.630+j28.052	2.118+j19.896
MANITOBA	MBA-115	115	4.58	3.60	3.534+j14.070	6.730+j25.555	6.81	5.60	2.189+j10.498	4.070+j17.250
MAPIMI	MPI-115	115	2.38	1.37	5.639+j27.321	20.792+j86.796	2.89	1.65	5.199+j24.768	19.521+j79.807
MASISA	MSS-115	115	6.56	5.87	2.271+j9.869	4.970+j12.873	7.82	6.79	1.938+j9.136	5.003+j12.774
MATAMOROS	MAT-115	115	10.64	9.90	1.445+j6.072	2.222+j7.324	13.44	11.91	1.111+j5.319	2.213+j7.245
MAYRAN	MAY-115	115	3.99	2.82	4.262+j16.081	12.376+j35.301	4.68	3.21	3.778+j15.133	12.358+j35.150
MÉDANOS	MED-115	115	11.04	8.87	1.227+j5.888	3.385+j9.977	13.84	10.45	0.966+j5.187	3.385+j9.933
MENONITAS	MEN-115	115	2.75	2.34	6.440+j23.311	13.894+j34.229	3.20	2.66	5.748+j22.074	13.874+j34.236
MEOQUI	MOQ-115	115	2.89	1.91	6.556+j22.016	15.019+j56.510	7.39	5.50	1.819+j9.716	6.387+j19.109
MESTEÑAS	MES-115	115	2.75	3.67	5.365+j23.515	0.185+j6.259	4.30	5.50	3.633+j16.592	0.331+j5.959
MESTEÑAS	MES-115B	115	2.74	3.64	5.379+j23.588	0.275+j6.438	4.29	5.46	3.646+j16.631	0.420+j6.122
MESTEÑAS	MES-230	230	1.65	2.01	19.557+j78.265	1.835+j38.095	2.49	2.83	12.645+j57.240	2.475+j37.774
MILENIO	MLN-115	115	9.13	9.29	1.442+j7.130	2.320+j6.547	11.14	10.93	1.161+j6.455	2.337+j6.590
MINA CERRO DEL MERCADO	CDM-115	115	7.96	6.69	1.893+j8.121	4.917+j12.239	9.65	7.78	1.564+j7.401	4.945+j12.177
MINERA AUTLÁN	MAU-115	115	13.33	9.77	1.064+j4.866	2.112+j10.229	17.84	11.88	0.724+j4.029	2.104+j10.071
MINERA AUTLÁN TAP	MAX-115	115	13.76	10.18	1.008+j4.717	2.003+j9.728	18.55	12.43	0.669+j3.880	1.996+j9.571
MINERA DEL TORO	MDT-115	115	1.00	0.66	24.051+j61.577	71.956+j155.455	1.68	1.16	14.508+j40.975	39.881+j93.789
MINERA DOLORES	MDO-115	115	0.82	0.64	25.048+j77.041	57.987+j137.786	0.91	0.71	24.291+j76.443	58.059+j138.560
MINERA ROBLE	MRO-115	115	1.52	0.90	18.150+j39.688	46.889+j124.869	1.71	1.00	17.722+j38.972	46.877+j124.699
MINERA SAN JUAN	SAJ-115	115	0.70	0.49	38.799+j86.115	86.064+j199.604	0.78	0.54	37.434+j85.331	86.222+j200.565
MIRAVALLE	MIR-115	115	15.31	12.78	0.852+j4.253	1.449+j6.765	21.19	16.12	0.525+j3.407	1.435+j6.571
MITLA	MLA-115	115	11.24	8.54	1.187+j5.788	2.746+j11.271	14.06	9.97	0.937+j5.109	2.751+j11.297
MOCTEZUMA	MCZ-115	115	13.25	17.03	0.674+j4.966	0.047+j1.738	16.89	21.48	0.389+j4.308	0.047+j1.565
MOCTEZUMA	MCZ-230	230	11.02	14.20	2.147+j11.859	0.295+j4.186	16.05	19.67	1.082+j9.034	0.306+j4.129
MOCTEZUMA	MCZ-400	400	5.21	6.00	6.787+j43.829	1.615+j27.470	7.07	7.60	3.362+j35.769	1.724+j28.547
MONTE VERDE	MTV-115	115	2.01	1.53	8.118+j31.944	5.750+j64.598	2.24	1.69	7.910+j31.591	5.771+j64.808
NAICA	NAI-115	115	1.57	1.02	18.365+j38.214	36.692+j104.617	3.48	2.50	9.425+j18.751	16.782+j42.613
NAMIQUIPA	NAM-115	115	1.88	1.48	9.376+j34.132	22.963+j59.760	2.14	1.65	8.697+j33.030	23.004+j60.116
NAZAS	NAZ-115	115	18.77	21.54	0.740+j3.460	0.243+j2.179	27.77	30.22	0.385+j2.602	0.234+j2.014
NAZAS	NAZ-230	230	10.26	10.83	2.641+j12.666	1.505+j10.863	16.85	16.86	1.121+j8.595	1.361+j8.775
NICOLÁS BRAVO	NCB-115	115	1.23	0.91	14.909+j51.763	41.903+j102.509	1.39	1.01	14.219+j50.676	41.945+j102.866
NOMBRE DE DIÓS	NDD-115	115	10.35	9.84	1.747+j6.172	2.245+j7.174	13.85	12.11	1.143+j5.148	2.262+j7.241
NORTE III	CER-230	230	16.75	21.20	1.112+j7.850	0.259+j3.277	26.75	31.65	0.520+j5.437	0.316+j3.079
NUEVA HOLANDA	NHO-115	115	1.49	1.20	10.452+j43.405	15.449+j75.385	1.96	1.51	8.235+j36.342	14.122+j69.474
NUEVO CASAS GRANDES	NCG-115	115	9.43	11.34	0.995+j6.968	0.241+j3.517	10.91	12.79	0.808+j6.643	0.264+j3.746
NUEVO CASAS GRANDES	NCG-230	230	6.24	6.49	3.244+j21.045	2.240+j18.841	7.56	7.52	2.447+j19.154	2.429+j19.480



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
NUEVO IDEAL	NID-115	115	1.54	1.15	17.016+j39.730	38.661+j76.980	1.72	1.28	16.623+j39.205	38.756+j77.471
OASIS	OAS-115	115	1.44	1.17	11.149+j44.733	15.752+j76.409	1.89	1.51	8.815+j37.571	13.294+j66.670
OCAMPO	OCP-115	115	9.47	8.34	1.834+j6.769	3.265+j9.407	12.59	10.18	1.237+j5.669	3.274+j9.434
OJINAGA	OJI-115	115	0.82	0.61	25.281+j76.839	55.722+j155.197	0.99	0.73	22.682+j69.946	53.174+j145.354
ORIENTE VEINTIUNO	OTV-115	115	12.16	10.33	1.104+j5.348	2.786+j8.013	15.41	12.25	0.851+j4.662	2.791+j8.015
PAILA	PLA-115	115	1.02	0.94	18.775+j62.401	27.264+j77.096	1.10	1.01	19.482+j63.499	27.503+j79.070
PALMAREJO	PAL-115	115	0.65	0.46	36.962+j94.965	94.806+j213.662	0.72	0.50	36.176+j94.317	94.890+j214.177
PALOMAR	PMR-115	115	8.23	6.72	2.034+j7.805	3.532+j13.134	10.56	7.99	1.445+j6.767	3.543+j13.165
PALOMAS	PMS-115	115	1.53	1.18	11.135+j41.836	32.132+j76.761	1.70	1.30	10.936+j41.562	32.171+j77.157
PAPELERA CHIHUAHUA	PCH-115	115	10.04	9.30	1.608+j6.416	2.406+j7.946	13.67	11.51	0.996+j5.250	2.424+j8.039
PARQUE	PQE-115	115	16.88	18.25	0.864+j3.838	0.757+j3.034	23.97	25.33	0.559+j2.996	0.549+j2.532
PARRAL	PAR-115	115	2.04	1.85	12.135+j30.282	11.155+j41.380	2.35	2.07	10.856+j29.070	11.273+j42.279
PARRAS	PRA-115	115	1.31	1.34	13.349+j48.971	11.802+j46.292	1.40	1.43	14.053+j50.073	12.039+j48.261
PASO DEL AGULIA	PSA-115	115	9.84	7.18	1.659+j6.543	4.691+j13.487	12.41	8.48	1.323+j5.734	4.686+j13.318
PASO DEL NORTE	PNR-115	115	16.97	19.93	0.786+j3.833	0.304+j2.236	23.59	26.67	0.528+j3.050	0.272+j2.045
PASO DEL NORTE	PNR-230	230	9.69	10.92	2.265+j13.514	1.770+j9.236	13.83	15.53	1.350+j10.473	1.314+j7.131
PATRIA	PAT-115	115	11.38	9.21	1.283+j5.694	3.676+j9.393	14.32	10.86	1.024+j4.998	3.665+j9.382
PEDRICEÑA	PDA-115	115	1.63	0.96	17.142+j36.833	43.640+j117.497	1.84	1.07	16.717+j36.111	43.629+j117.327
PEÑALES	PEL-230	230	9.23	8.79	3.111+j14.041	3.385+j16.267	14.37	13.08	1.530+j10.051	2.770+j13.162
PHILIPS	PHS-115	115	20.48	18.35	0.691+j3.167	0.785+j4.311	30.91	24.57	0.367+j2.334	0.775+j4.145
PONDERCEL	POE-115	115	5.48	6.02	3.040+j11.720	2.199+j8.682	6.63	7.00	2.463+j10.732	2.326+j9.036
POPULAR	PPR-115	115	5.02	3.71	4.433+j12.456	8.393+j25.915	6.10	4.31	3.884+j11.321	8.372+j25.637
PORVENIR	PRR-115	115	1.72	1.21	10.216+j37.279	34.094+j81.414	1.92	1.33	9.957+j36.625	34.277+j81.733
PUENTE DE NEGROS	PDN-115	115	2.43	1.72	8.477+j25.989	25.040+j55.788	5.82	5.02	3.486+j12.045	6.150+j17.535
PUERTO JUSTO	PTJ-115	115	1.81	1.65	12.813+j34.321	15.753+j45.105	2.08	1.84	11.504+j33.143	15.887+j46.027
QUEVEDO	QVD-115	115	5.14	6.55	2.815+j12.616	0.289+j4.697	6.25	7.72	2.165+j11.486	0.328+j5.048
QUEVEDO	QVD-230	230	2.94	3.54	10.159+j43.978	1.835+j22.694	3.67	4.22	7.488+j39.128	2.061+j24.245
QUINCE DE OCTUBRE	QDO-115	115	8.78	9.23	1.551+j7.398	2.053+j6.177	10.71	10.84	1.261+j6.699	2.079+j6.281
RANCHO LUCERO	RLO-115	115	11.36	8.09	1.230+j5.714	2.918+j12.611	14.75	9.67	0.886+j4.873	2.911+j12.455
RAYÓN	RYN-115	115	11.47	9.92	1.061+j5.689	2.049+j8.339	14.34	11.66	0.822+j5.026	2.068+j8.401
REFORMA	REA-115	115	19.63	24.47	0.627+j3.323	0.147+j1.455	27.29	32.25	0.403+j2.646	0.158+j1.472
REFORMA	REA-230	230	13.28	15.42	1.659+j9.864	0.879+j6.097	20.01	21.39	0.917+j7.241	0.943+j5.978
REGIO MÁRMOL	REM-115	115	4.18	2.71	3.695+j15.437	12.404+j40.018	5.00	3.16	3.317+j14.221	12.211+j38.316
REVOLUCIÓN	REV-115	115	7.59	5.91	2.241+j8.453	5.903+j15.167	9.25	6.88	1.900+j7.668	5.898+j15.045
RIO FLORIDO	RIF-115	115	3.01	2.43	5.789+j21.305	14.024+j35.261	4.30	4.13	4.165+j16.452	4.266+j18.631
RIVEREÑA	RVA-115	115	14.59	14.30	0.994+j4.441	1.392+j4.714	21.73	21.15	0.636+j3.301	0.997+j3.540
ROBERT BOSH	ROB-115	115	12.37	11.04	1.308+j5.204	2.570+j6.948	16.05	13.52	1.023+j4.433	2.515+j6.721
ROBINSON	RNN-115	115	11.19	10.89	1.416+j5.761	1.685+j6.306	15.66	13.77	0.805+j4.594	1.703+j6.399
RUIZ CORTINES	RCS-115	115	3.94	3.91	3.819+j16.407	3.942+j16.904	4.68	4.48	3.161+j15.284	3.982+j17.256
SABINAS	SAB-115	115	1.00	0.63	28.278+j60.284	74.360+j167.992	1.65	1.08	18.688+j40.259	42.329+j106.328
SACRAMENTO	SCT-115	115	18.06	17.65	0.791+j3.591	1.076+j3.797	26.35	24.02	0.456+j2.734	0.985+j3.478
SALVARCAR	SVC-115	115	12.71	11.11	1.109+j5.103	2.677+j7.112	16.15	13.21	0.866+j4.438	2.689+j7.141



Subestación eléctrica	Acronimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
SAMALAYACA SUR	SYS-230	230	15.22	17.03	1.239+j8.634	0.941+j6.134	26.60	29.16	0.485+j5.470	0.582+j4.125
SAMALAYUCA	SYC-230	230	15.73	18.24	1.174+j8.362	0.642+j5.175	28.44	33.43	0.418+j5.119	0.230+j2.945
SAN ANTONIO DE BELÉN	ABE-115	115	1.07	0.68	25.983+j56.128	69.062+j154.291	1.85	1.23	16.441+j35.976	37.050+j92.643
SAN BUENAVENTURA	SBV-115	115	3.12	2.28	5.078+j20.666	17.445+j41.555	3.52	2.54	4.832+j20.151	17.456+j41.561
SAN FRANCISCO DE BORJA	SFB-115	115	1.55	0.99	12.165+j40.931	36.210+j110.088	1.76	1.10	11.461+j39.959	36.230+j110.162
SAN FRANCISCO DEL ORO	SFO-115	115	2.45	2.57	9.563+j25.416	5.176+j22.782	2.86	2.91	8.295+j24.168	5.291+j23.675
SAN IGNACIO	SIG-115	115	2.34	1.67	7.404+j27.419	23.735+j57.948	2.64	1.86	7.145+j26.763	23.917+j58.266
SAN ISIDRO	SID-115	115	7.22	6.08	2.014+j8.967	4.208+j13.846	8.60	6.90	1.765+j8.305	4.387+j14.163
SAN JERÓNIMO	SJE-115	115	5.10	2.36	2.275+j12.821	23.127+j54.266	5.98	2.65	2.010+j12.051	23.094+j54.075
SAN MARTIN	MRT-115	115	1.00	0.63	28.017+j59.853	73.775+j166.473	1.67	1.09	18.434+j39.804	41.744+j104.810
SAN PEDRO	SPD-115	115	6.15	4.54	2.519+j10.490	6.250+j21.384	7.49	5.27	2.042+j9.534	6.232+j21.233
SAN PEDRO POTENCIA	SPP-115	115	3.92	4.93	4.145+j16.435	0.522+j6.692	4.58	5.62	3.455+j15.569	0.583+j7.169
SAN PEDRO POTENCIA	SPP-230	230	2.28	2.60	14.356+j56.324	3.392+j37.539	2.74	3.00	11.426+j51.992	3.740+j39.715
SANTA BÁRBARA	BBA-115	115	2.54	2.74	9.340+j24.437	3.967+j20.136	2.98	3.12	8.082+j23.171	4.080+j21.025
SANTA MARÍA DEL ORO	SMO-115	115	0.81	0.59	29.467+j76.983	68.598+j158.564	0.90	0.65	28.062+j75.950	68.759+j159.529
SANTIAGO DOS	SGD-115	115	2.89	3.48	7.848+j21.631	0.629+j11.614	3.41	3.99	6.590+j20.352	0.741+j12.502
SANTIAGO DOS	SGD-230	230	1.64	1.86	27.180+j76.349	3.700+j53.656	1.99	2.16	22.017+j69.897	4.357+j57.363
SANTIAGO PAPAQUIARO	SGP-115	115	1.11	0.79	26.002+j53.813	61.619+j118.196	1.23	0.87	25.575+j53.334	61.726+j118.703
SANTIAGO UNO	SGU-115	115	2.82	3.35	8.103+j22.100	1.107+j12.700	3.33	3.83	6.845+j20.824	1.219+j13.588
SANTOS SOLAR MANIOBRAS	SSM-115	115	11.90	14.14	0.764+j5.525	0.575+j2.937	14.95	17.55	0.478+j4.862	0.531+j2.686
SAUZAL	SAZ-115	115	10.87	8.79	1.329+j5.963	3.592+j9.941	13.68	10.41	1.057+j5.234	3.573+j9.826
SETENTA Y TRES	SAT-115	115	1.75	1.35	10.407+j36.496	27.904+j65.969	2.00	1.52	9.709+j35.269	27.884+j65.976
SOMBRERETE	SOM-115	115	0.97	0.61	29.443+j61.815	76.672+j173.946	1.58	1.03	19.775+j41.933	44.627+j112.269
TABALAOA	TBL-115	115	11.36	11.60	1.545+j5.635	1.682+j5.323	16.01	14.85	0.938+j4.464	1.697+j5.413
TACUBAYA	TBA-115	115	1.05	0.77	20.562+j60.002	59.366+j119.709	3.71	3.89	4.801+j19.066	5.869+j16.094
TAKATA	TAK-115	115	13.75	12.48	1.123+j4.697	1.941+j6.009	18.06	15.79	0.826+j3.958	1.881+j5.521
TECNOLÓGICO	TEC-115	115	11.87	10.52	1.392+j5.420	2.685+j7.359	15.24	12.73	1.108+j4.664	2.650+j7.219
TERRANOVA	TER-115	115	17.64	21.05	0.723+j3.693	0.252+j2.004	23.82	26.79	0.487+j3.028	0.271+j2.066
TERRANOVA	TER-230	230	13.04	14.35	1.643+j10.047	1.186+j7.620	19.98	19.94	0.859+j7.259	1.251+j7.396
TINAJAS	TIN-115	115	2.90	2.14	3.931+j22.534	18.684+j44.352	3.29	2.39	3.626+j21.895	18.683+j44.177
TORREÓN	TRR-115	115	11.70	9.33	1.149+j5.556	2.655+j9.656	15.16	11.29	0.807+j4.749	2.664+j9.467
TORREÓN ORIENTE	TOT-115	115	15.07	13.48	1.056+j4.277	1.863+j5.690	20.30	17.13	0.749+j3.519	1.832+j5.334
TORREÓN SUR	TRS-115	115	17.87	19.62	0.760+j3.637	0.328+j2.717	24.75	27.56	0.472+j2.913	0.225+j2.059
TORREÓN SUR	TRS-230	230	10.79	12.71	2.383+j12.069	0.546+j6.808	16.70	18.64	1.097+j8.677	0.617+j6.163
TORREÓN SUR	TRS-400	400	6.72	7.71	5.761+j33.861	2.221+j21.209	9.82	10.72	2.658+j25.720	1.941+j19.527
TORREONCITOS SOLAR	TOS-115	115	2.94	2.38	6.021+j21.768	14.273+j35.827	4.19	4.05	4.372+j16.886	4.187+j18.725
TORRES	TOR-115	115	14.87	14.39	0.941+j4.364	1.687+j4.728	19.43	17.55	0.702+j3.692	1.697+j4.744
TRECE SOLAR MANIOBRAS	TSM-115	115	1.99	1.88	7.310+j32.575	7.254+j38.566	2.87	3.09	5.153+j24.914	2.210+j20.054
TRES HERMANOS	THS-115	115	1.66	1.62	11.344+j38.468	16.980+j39.685	2.21	2.02	9.522+j31.574	17.125+j39.367
TRES MANANTIALES	TMA-115	115	1.65	1.36	12.725+j38.225	21.191+j63.052	1.85	1.55	12.348+j37.536	20.376+j59.409
VADO SANTA MARÍA	VSM-115	115	1.76	1.44	9.529+j36.541	3.870+j62.991	1.95	1.59	9.331+j36.228	3.893+j63.223
VALLE DE JUÁREZ	VJZ-115	115	18.02	21.30	0.752+j3.608	0.255+j2.051	25.71	29.21	0.475+j2.800	0.242+j1.840



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$	3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$
VALLE DE JUÁREZ	VJZ-230	230	11.39	12.19	1.937+j11.494	1.450+j9.562	16.77	16.47	1.077+j8.641	1.438+j9.215
VALLE ESPERANZA	VEZ-115	115	2.25	1.55	5.117+j29.035	27.489+j64.727	2.54	1.73	4.809+j28.399	27.488+j64.553
VALLE VERDE	VAE-115	115	15.70	13.74	1.023+j4.103	1.865+j5.761	21.47	17.45	0.711+j3.326	1.852+j5.493
VERDE INDEPENDENCIA UNO	VIU-115	115	8.97	7.27	1.242+j7.295	4.630+j11.955	10.89	8.39	1.003+j6.633	4.648+j12.017
VICENTE GUERRERO	VGR-115	115	1.37	0.90	18.373+j44.830	52.517+j112.551	2.86	2.06	9.296+j23.747	20.893+j51.248
VIDRIERA CHIHUAHUA MANIOBRAS	VCM-115	115	3.21	2.18	5.955+j19.797	13.272+j48.508	6.89	5.05	2.009+j10.411	6.377+j21.297
VILLA AHUMADA	VAH-115	115	2.31	1.67	7.738+j27.698	24.689+j57.274	2.60	1.86	7.432+j27.059	24.687+j57.098
VIÑEDOS	VDS-115	115	12.22	9.31	1.275+j5.282	3.296+j10.018	15.98	11.25	0.940+j4.471	3.292+j9.855
WERNER	WER-115	115	12.48	10.86	1.296+j5.160	2.793+j7.302	15.89	12.95	1.056+j4.473	2.796+j7.278
WRANGLER	WRA-115	115	7.10	6.21	2.214+j9.084	7.654+j11.652	10.36	8.91	1.281+j6.931	5.251+j9.467
YERMO	YMO-115	115	1.32	0.79	18.783+j46.729	49.787+j144.055	2.29	1.40	11.892+j29.594	29.948+j87.476
ZARAGOZA	ZZA-115	115	15.22	14.94	1.011+j4.242	1.476+j4.461	20.60	19.04	0.727+j3.470	1.420+j4.233

Gerencia de Control Regional Noreste



[Regresar a mapa del SEN](#)

Subestación eléctrica	Acónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$	3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$
ACERO	AEO-115	115	9.81	8.95	1.002+j6.696	1.552+j8.597	11.20	10.01	0.904+j6.459	1.559+j8.737
ACEROS PLANOS	APM-115	115	21.92	13.69	0.623+j2.964	1.717+j8.321	28.35	17.62	0.511+j2.525	1.477+j7.131
ACUÑA	AUA-138	138	5.98	6.41	2.385+j13.102	1.435+j10.486	7.16	7.69	2.098+j12.055	1.393+j9.588
ACUÑA DOS	ACD-138	138	6.15	6.56	2.034+j12.802	1.361+j10.368	7.70	8.35	1.586+j11.266	1.181+j8.627
AEROPUERTO	AER-138	138	21.61	25.97	0.544+j3.647	0.122+j1.874	25.94	30.34	0.451+j3.348	0.137+j1.962
AEROPUERTO	AER-230	230	20.82	25.33	0.847+j6.322	0.256+j3.086	26.26	31.02	0.595+j5.531	0.273+j3.080
AEROPUERTO	AER-400	400	15.69	17.59	1.787+j14.609	1.244+j10.288	19.84	21.26	1.222+j12.745	1.312+j10.420
AEROPUERTO NORTE	ANE-115	115	12.96	6.93	1.024+j5.019	4.095+j18.036	18.00	9.75	0.742+j3.989	3.193+j14.003
AEROPUERTO OMA MONTERREY	OMA-115	115	19.64	13.81	0.529+j3.339	1.634+j7.487	24.01	16.12	0.473+j3.004	1.627+j7.344
AFI STEEL FOUNDRY	ASF-115	115	17.17	13.34	0.519+j3.832	1.540+j7.057	20.24	15.43	0.427+j3.584	1.505+j6.845
AGUA NUEVA	AGN-115	115	7.58	7.98	1.041+j8.701	0.698+j7.413	12.32	11.88	0.999+j5.845	0.822+j6.549
AGUAS TRATADAS	ATM-115	115	12.95	9.30	0.813+j5.063	2.389+j10.995	15.68	11.44	0.674+j4.608	1.971+j9.692
ALAMO	ALM-115	115	11.57	9.13	1.121+j5.628	2.422+j10.061	13.05	10.18	1.056+j5.496	2.417+j10.059
ÁLCALI MANIOBRAS	ACM-115	115	23.83	24.46	0.353+j2.764	0.222+j2.541	26.20	26.41	0.346+j2.766	0.243+j2.696
ALCOA PRIVADA	APV-115	115	13.36	7.15	0.991+j4.868	3.970+j17.482	18.72	10.15	0.710+j3.837	3.067+j13.449
ALEN DEL NORTE	ADN-115	115	11.23	7.49	1.055+j5.818	2.920+j14.481	12.61	8.28	1.002+j5.703	2.930+j14.594
ALIANZA	ALZ-115	115	25.22	17.24	0.416+j2.599	1.236+j6.166	28.27	19.06	0.389+j2.554	1.243+j6.209
ALLENDE	ALN-115	115	3.00	1.67	4.551+j21.666	16.172+j73.504	4.28	2.48	3.565+j16.706	12.486+j52.837
ALLENDE DOS	AED-138	138	6.04	4.57	2.154+j13.021	4.702+j25.332	6.99	5.18	1.968+j12.385	4.725+j25.211
ALMACENTRO DEFINITIVO	ALE-115	115	23.46	16.98	0.444+j2.796	1.199+j5.950	26.96	19.09	0.406+j2.678	1.203+j5.944
ALPES	ALP-115	115	14.54	11.83	0.677+j4.515	1.510+j7.573	16.85	13.57	0.586+j4.293	1.470+j7.351
ALTAMIRA	ALT-115	115	28.69	31.19	0.297+j2.295	0.170+j1.824	32.33	34.39	0.285+j2.241	0.173+j1.897
ALTAMIRA	ALT-230	230	22.08	26.16	0.513+j5.993	0.352+j3.488	26.59	31.41	0.408+j5.479	0.242+j3.126
ALTAMIRA	ALT-400	400	24.05	23.22	0.774+j9.571	1.911+j11.032	32.60	33.23	0.499+j7.776	0.939+j7.529
ALTAMIRA DE AGUA Y DRENAJE DE MONTERREY	AAD-115	115	19.80	12.54	0.630+j3.293	1.950+j8.974	32.48	22.65	0.411+j2.211	0.982+j5.083
ALTAMIRA III Y IV	ATC-400	400	28.07	33.25	0.505+j8.212	0.422+j5.194	35.78	42.01	0.367+j7.090	0.393+j4.641
ALTAMIRA V	ATV-400	400	27.81	32.58	0.522+j8.287	0.498+j5.479	35.70	41.96	0.370+j7.105	0.393+j4.641
ALTAMIRANO	ATR-115	115	7.63	5.85	1.405+j8.589	3.346+j16.311	8.68	6.52	1.292+j8.318	3.358+j16.486
ALTOS HORNOS DE MÉXICO	AHM-400	400	9.41	9.40	3.321+j24.306	2.797+j25.276	11.51	10.88	2.567+j21.913	3.090+j26.509
AMERICAN INDUSTRIES	AIN-138	138	16.77	17.18	0.871+j4.672	0.817+j4.382	19.90	19.84	0.763+j4.336	0.827+j4.431
AMERICAN INDUSTRIES DULCES NOMBRES	AID-115	115	19.86	15.86	0.445+j3.313	1.105+j5.775	27.97	20.47	0.357+j2.587	1.092+j5.393
AMÉRICAS	AME-115	115	19.26	12.60	0.493+j3.411	2.643+j8.566	22.90	14.74	0.453+j3.157	2.470+j8.161
AMISTAD	AMI-138	138	3.35	2.87	5.039+j23.271	7.881+j34.570	4.71	5.33	3.082+j18.355	1.062+j12.056
AMPAD	AMP-138	138	9.33	10.25	1.600+j8.391	0.952+j6.357	10.44	11.27	1.525+j8.259	0.984+j6.622
ANÁHUAC	ANH-138	138	2.25	1.40	7.074+j34.690	20.047+j97.705	2.53	1.55	6.798+j33.909	20.116+j98.130
ANÁHUAC POTENCIA	ANP-115	115	20.71	27.34	0.389+j3.183	0.270+j0.894	22.12	28.97	0.407+j3.277	0.311+j0.958
ANÁHUAC POTENCIA	ANP-400	400	17.62	28.23	1.069+j13.066	1.944-j1.294	20.38	32.71	0.934+j12.427	2.179-j1.441
ANÁHUAC TAM.POTENCIA	ATP-230	230	15.85	20.95	0.988+j8.322	0.142+j2.884	18.49	23.94	0.822+j7.857	0.146+j3.015
ANÁHUAC TAM.POTENCIA	ATP-400	400	12.06	14.22	1.786+j19.062	0.774+j11.705	16.43	19.77	1.053+j15.422	0.450+j8.443
ANILLO PERIFÉRICO	APF-115	115	13.92	10.38	0.782+j4.705	1.784+j9.483	15.46	11.33	0.743+j4.665	1.865+j9.725
ANZALDUAS	ANZ-138	138	15.63	13.47	0.917+j5.014	1.461+j7.448	18.24	15.36	0.816+j4.735	1.453+j7.415
ANZALDUAS RODÉ	ANR-138	138	12.68	9.76	1.271+j6.155	2.577+j11.669	14.76	11.22	1.153+j5.827	2.483+j11.330



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
APASCO	APC-230	230	10.21	8.50	2.071+j12.843	4.612+j20.377	11.59	9.47	1.854+j12.468	4.651+j20.580
APODACA	APO-115	115	11.72	7.68	0.926+j5.591	3.170+j14.250	19.33	12.69	0.684+j3.716	1.944+j9.511
ARCO VIAL	ARV-115	115	23.55	21.34	0.423+j2.788	0.623+j3.627	26.02	23.29	0.410+j2.777	0.630+j3.729
ARROYO DEL COYOTE	ADC-138	138	9.47	12.28	1.574+j8.264	0.143+j2.597	11.31	14.40	1.325+j7.635	0.163+j2.771
ARROYO DEL COYOTE	ADC-230	230	4.94	5.47	4.560+j26.496	1.391+j18.920	5.81	6.21	3.931+j24.821	1.561+j20.231
ARROYO DEL COYOTE	ADC-400	400	3.68	3.78	8.636+j62.245	4.391+j57.057	4.53	4.42	6.564+j55.691	5.085+j60.245
ARTEAGA	ATG-115	115	4.44	4.50	4.227+j14.352	3.276+j14.025	5.37	5.21	3.520+j13.130	3.478+j14.490
ARTES GRAFICAS	AGR-115	115	10.63	8.06	1.060+j6.155	2.105+j12.041	20.47	14.48	0.626+j3.513	1.492+j7.859
ARVIN MERITOR	AVM-115	115	12.20	6.52	1.086+j5.335	4.354+j19.175	16.68	9.02	0.804+j4.305	3.451+j15.143
ATLAPEXCO	APX-115	115	2.87	2.76	5.595+j22.488	7.756+j24.760	3.15	3.03	5.584+j22.475	7.770+j24.925
AXTLA	AXA-115	115	4.94	3.25	3.448+j12.995	8.681+j33.297	5.32	3.52	3.488+j13.278	8.706+j33.640
AZTECAS	AZT-115	115	1.16	0.74	17.720+j54.439	49.395+j146.710	3.29	2.02	6.191+j21.351	19.917+j60.894
AZTLÁN	AZN-138	138	16.83	14.55	0.875+j4.653	1.472+j6.835	19.94	16.88	0.767+j4.327	1.431+j6.683
BAJÍO	BAO-115	115	2.26	1.63	6.553+j28.675	14.843+j61.274	2.59	1.83	6.279+j27.436	14.853+j61.658
BALL METAL BEVERAGE	BMB-115	115	16.45	11.20	0.717+j3.972	1.893+j9.512	23.65	15.11	0.539+j3.041	1.765+j8.141
BARRETAL	BET-115	115	3.43	2.29	7.172+j17.969	16.614+j45.274	3.74	2.50	7.189+j18.177	16.628+j45.475
BARRY CALLEBAUT	BAC-115	115	22.02	11.26	0.509+j2.973	2.433+j11.398	24.62	12.40	0.482+j2.927	2.453+j11.482
BASF	BSF-115	115	15.66	11.02	0.781+j4.166	2.063+j9.444	18.54	13.39	0.702+j3.875	1.790+j8.347
BASF	BSF-115B	115	15.52	10.85	0.798+j4.202	2.203+j9.626	18.73	14.55	0.686+j3.839	1.375+j7.178
BERLÍN	BRN-115	115	27.81	19.66	0.456+j2.344	1.572+j5.131	31.79	21.99	0.423+j2.258	1.578+j5.147
BICENTENARIO	BIC-115	115	9.30	8.50	1.245+j7.033	2.234+j8.895	9.93	9.08	1.267+j7.243	2.277+j9.163
BIOFILM	BFL-115	115	17.55	12.72	0.668+j3.724	1.762+j7.960	20.15	14.99	0.630+j3.570	1.566+j7.249
BLACK & DECKER	BAD-138	138	17.17	14.46	0.741+j4.582	1.254+j7.169	20.76	17.09	0.623+j4.176	1.189+j6.876
BOMBEO LOMA LARGA	BLL-115	115	16.08	10.36	0.829+j4.044	2.139+j10.759	32.10	21.29	0.451+j2.230	1.110+j5.635
BOMBEO NUEVA CASTILLA III	BNC-115	115	11.33	6.11	1.007+j5.771	3.980+j20.488	12.58	6.67	0.978+j5.721	4.081+j20.843
BOMBEO PORVENIR	POR-115	115	3.18	2.27	6.266+j19.894	18.478+j42.213	3.50	2.50	6.268+j19.912	18.500+j42.262
BRAVO	BRA-115	115	2.04	1.28	9.215+j31.191	29.371+j85.460	2.24	1.41	9.228+j31.252	29.416+j85.501
CADEREYTA	CYN-115	115	15.22	11.68	0.613+j4.319	1.543+j8.193	18.16	13.62	0.553+j3.985	1.494+j7.906
CADEREYTA II	CDT-115B2	115	2.49	1.94	4.145+j26.297	16.280+j47.124	2.72	2.11	4.088+j26.546	16.347+j47.609
CADEREYTA II	CDT-115B1	115	2.56	2.32	4.115+j25.594	8.325+j33.033	2.79	2.50	4.073+j25.867	8.715+j34.164
CAMARGO	CAM-138	138	3.92	2.23	5.399+j19.577	17.228+j64.457	6.88	4.58	3.172+j12.337	7.163+j31.193
CAMPESTRE	CPR-138	138	7.61	7.60	1.972+j10.285	1.720+j10.325	8.95	8.70	1.716+j9.638	1.741+j10.497
CAMPO TAMAULIPAS	CTS-115	115	11.58	7.87	1.290+j5.588	3.335+j13.520	12.90	8.68	1.274+j5.518	3.337+j13.565
CAPELLANIA	CAP-115	115	11.81	9.70	0.827+j5.562	1.716+j9.148	13.53	10.84	0.737+j5.346	1.774+j9.273
CARBÓN DOS	CBD-400	400	11.76	12.43	2.208+j19.506	1.302+j15.866	23.06	27.16	0.658+j10.995	0.361+j6.449
CARPLASTIC	CIS-115	115	19.61	13.48	0.543+j3.342	1.714+j7.823	22.96	15.33	0.495+j3.142	1.713+j7.759
CASA BLANCA	CBL-138	138	9.82	7.93	1.547+j7.969	2.595+j13.830	11.06	8.80	1.465+j7.785	2.607+j13.943
CASTECH	CAS-115	115	17.03	13.25	0.526+j3.863	1.567+j7.090	20.04	15.27	0.434+j3.619	1.540+j6.917
CATERPILA JAGUAR	CJR-115	115	11.60	6.20	1.139+j5.608	4.576+j20.156	15.68	8.48	0.856+j4.578	3.674+j16.124
CEDROS	CED-115	115	26.02	29.23	0.442+j2.513	0.188+j1.717	31.42	34.20	0.354+j2.297	0.204+j1.756
CEDROS	CED-230	230	12.47	12.80	1.785+j10.499	1.288+j9.777	14.50	14.45	1.490+j9.962	1.368+j10.126
CEJA	CJA-115	115	2.52	2.30	4.109+j26.041	9.949+j32.587	2.74	2.48	4.075+j26.344	10.347+j33.636



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$	3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$
CELULOSA	CEL-115	115	31.29	21.33	0.407+j2.083	0.998+j4.993	36.16	24.27	0.370+j1.986	0.976+j4.892
CEMENTOS ANÁHUAC	CAN-115	115	14.07	13.03	0.823+j4.647	1.324+j5.745	15.17	14.08	0.841+j4.741	1.365+j5.810
CEMENTOS HIDALGO	CEH-115	115	7.15	4.68	2.530+j8.937	8.751+j22.349	7.91	5.16	2.502+j8.890	8.760+j22.395
CEMENTOS MEXICANOS	CEM-115	115	32.15	21.79	0.418+j2.022	0.982+j4.915	44.20	30.17	0.319+j1.621	0.781+j3.881
CEMEX (VALLES)	CMX-115	115	7.46	5.47	2.255+j8.612	4.306+j18.127	8.14	5.99	2.269+j8.686	4.347+j18.172
CENTEC	CNE-115	115	10.15	7.07	1.493+j6.372	3.543+j14.676	11.81	8.05	1.383+j6.025	3.508+j14.459
CENTRAL	CEN-138	138	12.27	11.58	1.311+j6.360	1.292+j7.722	13.92	12.89	1.224+j6.175	1.309+j7.858
CENTRAL ANÁHUAC	CAH-230	230	15.81	20.92	0.985+j8.342	0.136+j2.878	18.43	23.87	0.819+j7.882	0.142+j3.018
CENTRAL DULCES NOMBRES	CDU-115	115	17.18	19.17	0.109+j3.864	0.053+j2.660	17.44	19.39	0.102+j4.185	0.059+j2.926
CENTRAL DULCES NOMBRES	CDU-400	400	33.21	35.95	1.081+j6.869	0.459+j5.315	41.24	43.84	0.783+j6.110	0.418+j5.045
CENTRAL DULCES NOMBRES II	DNO-115	115	22.74	22.53	0.429+j2.888	0.203+j2.993	48.59	49.88	0.188+j1.491	0.170+j1.385
CENTRAL IBERDROLA COGENERACIÓN RAMOS	ICR-115	115	15.43	13.26	0.500+j4.274	0.919+j6.397	18.13	15.39	0.414+j4.007	0.921+j6.150
CERRALVO	CER-115	115	3.07	2.22	5.672+j20.836	16.196+j43.756	3.51	2.50	5.432+j20.060	15.818+j43.490
CERRO PRIETO	CEP-115	115	4.65	4.05	2.367+j14.096	5.720+j19.933	4.97	4.36	2.383+j14.509	5.725+j20.075
CHAIREL	CHR-115	115	18.41	15.22	0.626+j3.552	1.787+j5.709	20.66	16.83	0.608+j3.482	1.792+j5.761
CHAMPAYAN	CPY-400	400	30.44	34.28	0.542+j7.567	0.677+j5.593	39.16	43.62	0.384+j6.476	0.605+j4.901
CHAPACAO	CHW-115	115	4.36	3.07	3.941+j14.714	13.752+j31.687	4.80	3.38	3.937+j14.703	13.767+j31.736
CHRYSLER CAMIONES PLANTA MOTORES SUR	CPS-115	115	11.11	8.97	0.975+j5.894	2.354+j10.000	14.16	11.84	0.839+j5.089	1.824+j8.005
CHRYSLER DE MÉXICO	CYM-115	115	12.20	8.52	0.968+j5.354	2.548+j12.258	22.92	18.76	0.577+j3.134	1.168+j5.188
CHRYSLER PLANTA CAMIONES	CYC-115	115	11.34	9.28	0.935+j5.782	2.237+j9.516	14.56	12.42	0.795+j4.953	1.691+j7.437
CIBIOSA (FERSINSA)	CIB-115	115	11.92	9.09	0.860+j5.504	1.749+j10.639	13.65	10.09	0.773+j5.296	1.838+j10.865
CÍFUNSA	CIF-115	115	17.38	14.53	0.737+j3.748	1.190+j5.963	21.04	17.08	0.629+j3.414	1.169+j5.780
CIMA	CIM-138	138	11.78	12.65	1.291+j6.638	0.675+j5.521	13.26	13.94	1.213+j6.495	0.708+j5.772
CITROFRUT	CIT-115	115	7.12	3.03	2.431+j9.006	11.968+j45.635	7.92	3.38	2.381+j8.906	11.702+j45.006
CIUDAD INDUSTRIAL	CID-138	138	7.51	8.32	2.084+j10.397	0.834+j7.446	8.96	9.58	1.819+j9.609	0.896+j7.849
CIUDAD INDUSTRIAL	CID-230	230	4.82	5.07	4.960+j27.096	2.753+j23.114	5.73	5.81	4.323+j25.133	2.935+j24.293
CLOSURES INTERIORES	CLI-138	138	10.32	8.60	1.722+j7.523	2.643+j12.249	11.82	9.67	1.609+j7.239	2.637+j12.211
CODEFRONT	CFT-138	138	2.89	2.08	4.282+j27.252	10.400+j58.624	3.27	2.32	4.012+j26.467	10.462+j59.029
COMPañÍA CERVECERA DE COAHUILA	CVC-138	138	6.49	4.69	2.412+j12.033	6.174+j25.559	8.95	7.41	1.780+j9.630	3.535+j15.421
CONCEPCIÓN DEL ORO	CDO-115	115	1.34	0.81	14.207+j47.436	36.826+j142.405	1.56	0.91	13.976+j44.672	36.946+j141.512
CONDUCTORES MONTERREY	CDY-115	115	23.19	16.88	0.490+j2.821	1.421+j5.912	29.02	20.05	0.443+j2.478	1.437+j5.724
CONEK	CNK-115	115	22.84	20.26	0.439+j2.873	0.695+j3.944	25.24	22.12	0.426+j2.863	0.702+j4.046
CONEK II	COK-115	115	22.83	20.26	0.439+j2.875	0.695+j3.944	25.22	22.11	0.426+j2.864	0.702+j4.046
CONTEC MEXICANA	CON-115	115	25.13	23.11	0.314+j2.623	0.541+j3.290	38.23	32.42	0.226+j1.897	0.528+j2.909
CONTROLADORA DE TERMINALES	COT-115	115	20.47	9.80	0.551+j3.196	2.801+j13.558	22.87	10.75	0.524+j3.150	2.839+j13.702
CONTRY	CNY-115	115	24.67	15.68	0.485+j2.647	1.401+j7.185	29.23	18.14	0.433+j2.461	1.378+j6.948
CORONA	CRO-138	138	7.86	5.17	1.940+j9.949	6.092+j25.116	11.68	8.64	1.240+j7.401	3.453+j14.979
CORPORATE PROPERTIES OF AMÉRICA	CPA-115	115	10.12	5.41	1.292+j6.430	5.245+j23.100	13.30	7.18	1.009+j5.400	4.342+j19.068
COSMOPOLIS	CPL-115	115	23.26	15.13	0.515+j2.808	1.518+j7.293	26.28	16.82	0.488+j2.736	1.525+j7.316
CRUZ DE ATAQUE	CRQ-115	115	0.87	0.67	17.761+j74.199	57.934+j133.753	0.96	0.74	17.675+j73.989	57.947+j133.862
CRYOINFRA	CRY-115	115					18.35	15.51	0.811+j3.896	1.092+j6.241
CRYOINFRA SCMS	COF-115	115	38.92	33.01	0.270+j1.684	0.361+j2.596	52.04	41.59	0.230+j1.384	0.375+j2.435



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
CUADRO DE MANIOBRAS EL MEZQUITE	CMM-230	230	7.15	6.61	2.683+j18.366	4.476+j22.719	7.92	7.23	2.608+j18.257	4.520+j23.305
CUADRO DE MANIOBRAS EÓLICA DE COAHUILA	MEH-230	230	5.67	7.30	3.207+j23.185	0.891+j7.806	6.36	8.11	2.989+j22.772	0.942+j8.171
CUADRO DE MANIOBRAS PROMAX	MPX-115	115	33.44	13.88	0.387+j1.947	2.096+j10.169	39.51	17.12	0.341+j1.817	1.857+j8.914
CUADRO MANIOBRAS DE ABSORMEX	MBX-115	115	19.73	15.17	0.608+j3.310	1.395+j6.325	25.20	21.38	0.469+j2.860	0.823+j4.426
CUADRO MANIOBRAS EÓLICO SANTA CATARINA	MEO-230	230	15.21	12.26	1.233+j8.642	3.602+j14.654	17.07	13.54	1.109+j8.484	3.641+j14.869
CUATRO CIÉNEGAS	CCE-115	115	1.65	1.08	15.981+j36.985	37.029+j97.509	1.82	1.19	15.896+j36.815	37.040+j97.699
CUMBRES FRONTERA	CUF-138	138	21.75	24.61	0.553+j3.622	0.243+j2.408	25.98	28.58	0.461+j3.342	0.256+j2.475
CUMBRES FRONTERA	CUF-230	230	15.85	16.29	0.992+j8.319	0.932+j7.692	18.83	18.67	0.775+j7.716	0.982+j7.953
CUMBRES ORIENTE	CBO-115	115	14.26	10.11	0.664+j4.608	2.250+j10.156	17.30	12.06	0.589+j4.180	2.111+j9.502
CUMBRES PONIENTE	CMN-115	115	16.39	12.31	0.572+j4.011	1.702+j7.900	20.83	15.49	0.485+j3.473	1.506+j6.979
DE ACERO	DEA-230	230	10.25	9.32	2.089+j12.784	3.002+j16.597	11.80	10.45	1.793+j12.247	3.083+j16.946
DE ACERO CLAVOS MONTERREY	DCM-115	115	31.30	21.07	0.408+j2.082	1.036+j5.103	40.48	26.72	0.332+j1.773	0.927+j4.500
DE ACERO POTENCIA	DEP-400	400	20.95	14.33	1.526+j10.915	2.889+j26.273	24.93	15.83	1.144+j10.125	3.170+j27.679
DECOFINMEX	DFX-138	138	11.17	9.32	1.423+j6.988	2.150+j11.342	12.71	10.42	1.331+j6.768	2.156+j11.393
DENSO	DSO-115	115	10.31	6.45	1.093+j6.346	3.728+j17.639	20.56	13.98	0.641+j3.494	1.674+j8.401
DENSO GUADALUPE	DGP-115	115	14.30	8.39	0.833+j4.567	3.153+j14.101	19.85	11.66	0.610+j3.629	2.454+j11.172
DERRAMADERO	DMD-115	115	19.31	19.57	0.433+j3.412	0.362+j3.288	23.17	23.03	0.367+j3.130	0.362+j3.196
DERRAMADERO	DMD-400	400	10.75	9.10	2.666+j21.327	5.178+j32.861	12.72	10.42	2.102+j19.864	5.186+j32.863
DÍAZ ORDAZ	DOR-138	138	4.84	2.92	4.220+j15.913	12.413+j47.379	7.41	4.79	2.892+j11.468	7.546+j30.376
DINASTÍA	DNA-115	115	27.25	17.43	0.460+j2.393	1.229+j6.436	32.26	19.89	0.410+j2.226	1.235+j6.370
DIRONA	DIR-115	115	19.51	9.60	0.565+j3.356	2.703+j13.676	21.80	10.51	0.536+j3.307	2.760+j13.884
DIRONA Y FORJA	DFO-115	115	19.50	9.57	0.565+j3.358	2.734+j13.733	21.79	10.48	0.537+j3.309	2.788+j13.932
DOFASCO DE MÉXICO	DAO-115	115	20.14	9.65	0.561+j3.248	2.799+j13.757	22.50	10.58	0.533+j3.202	2.844+j13.926
DULCES NOMBRES AYD	RDN-115	115	7.73	4.81	1.578+j8.446	5.753+j23.579	8.74	5.36	1.523+j8.219	5.752+j23.495
DYNASOL	DYN-115	115	17.20	13.09	0.766+j3.785	1.722+j7.367	19.26	14.47	0.751+j3.717	1.723+j7.417
EARTH TECH	ETH-115	115	8.00	3.31	1.388+j8.180	9.325+j42.628	10.04	4.13	1.132+j7.189	7.681+j37.679
ÉBANO	EBN-115	115	4.45	3.14	4.095+j14.346	13.354+j30.944	4.90	3.46	4.090+j14.326	13.367+j30.996
EL ABRA	ABR-115	115	2.00	1.39	10.909+j31.335	18.862+j74.534	2.77	1.99	7.884+j25.128	13.178+j56.161
EL CANADÁ	ECN-115	115	21.86	11.55	0.454+j3.003	1.913+j11.007	24.51	12.58	0.424+j2.949	1.992+j11.284
EL COCO	COC-115	115	20.33	26.34	0.409+j3.241	0.334+j1.039	21.72	27.96	0.427+j3.335	0.375+j1.103
EL CUCHILLO	CCL-115	115	6.08	7.14	1.098+j10.868	0.577+j6.040	6.54	7.60	1.037+j11.111	0.620+j6.491
EL CUCHILLO	CCL-230	230	6.00	5.53	3.459+j21.848	4.053+j27.443	7.05	6.22	3.088+j20.491	4.389+j28.684
EL FRAILE	FAI-400	400	26.77	28.27	0.965+j8.572	0.555+j7.288	30.71	31.32	0.768+j8.235	0.612+j7.815
EL GUERREÑO	GRR-138	138	20.36	24.47	0.562+j3.872	0.116+j1.998	24.29	28.38	0.462+j3.579	0.131+j2.105
EL GUERREÑO	GRR-400	400	13.03	13.32	2.002+j17.611	2.489+j16.953	16.42	15.97	1.377+j15.407	2.610+j16.957
EL HIGO DOS	HGD-115	115	2.89	1.71	4.265+j22.587	19.318+j68.200	3.16	1.88	4.313+j22.735	19.327+j68.271
EL MIRADOR	MIO-115	115	27.22	18.24	0.460+j2.396	1.321+j5.896	36.49	25.30	0.361+j1.969	0.967+j4.559
EL PORVENIR	EPR-138	138	8.06	7.44	2.014+j9.675	1.727+j12.281	9.12	8.18	1.937+j9.410	1.872+j12.848
EL REGIONMONTANO	RGM-115	115	29.47	29.01	0.254+j2.238	0.267+j2.344	34.81	33.25	0.229+j2.085	0.281+j2.380
EL REGIONMONTANO	RGM-400	400	21.19	18.07	1.430+j10.805	3.072+j16.263	25.09	20.69	1.146+j10.058	3.123+j16.327
ELECTRICIDAD ÁGUILA ALTAMIRA	EAA-400	400	27.78	32.40	0.524+j8.296	0.538+j5.623	35.53	41.32	0.377+j7.139	0.464+j4.904
ELENA	ELN-115	115	15.81	16.34	0.693+j4.143	0.610+j3.815	18.40	19.08	0.628+j3.919	0.553+j3.553



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$	3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$
EMERSON	EMR-138	138	11.09	8.32	1.467+j7.031	2.995+j14.106	13.50	9.95	1.223+j6.377	2.816+j13.272
EMERSON DOS	EMD-138	138	9.47	6.02	1.908+j8.195	5.680+j22.238	17.23	11.84	0.969+j4.995	2.783+j11.742
EMPALME	EML-138	138	7.22	4.97	2.691+j10.701	6.122+j25.384	8.37	5.69	2.494+j10.168	5.980+j24.687
ENERGÍA MK KF	KAF-115	115	19.93	15.52	0.585+j3.280	1.236+j6.119	24.76	20.49	0.482+j2.910	0.897+j4.758
ENERTEK	ETK-115	115	23.43	21.96	0.412+j2.804	0.512+j3.452	26.74	25.40	0.389+j2.704	0.457+j3.194
EÓLICA CIUDAD VICTORIA	ECV-115	115	13.82	14.17	0.625+j4.764	0.881+j4.389	14.56	14.89	0.640+j4.975	0.911+j4.615
EÓLICA GUADALUPE MANIOBRAS	EGM-400	400	9.37	9.66	2.312+j24.533	2.496+j22.419	10.48	10.56	2.158+j24.155	2.646+j23.590
EÓLICA LA MESA	ELM-115	115	7.39	7.30	1.712+j8.820	1.720+j9.177	7.94	7.76	1.738+j9.034	1.834+j9.659
EÓLICA TRES MESAS	EMS-115	115	5.46	3.59	0.186+j12.150	8.054+j30.575	5.57	3.73	0.175+j13.113	8.082+j31.871
EÓLICA TRES MESAS	EMS-115B	115	3.80	4.17	2.396+j17.304	0.258+j12.890	3.97	4.30	2.387+j18.259	0.284+j14.182
ÉOLICA TRES MESAS FASE CUATRO	EMC-115	115	4.30	4.12	0.993+j15.407	0.987+j17.443	4.37	4.20	1.071+j16.681	1.000+j18.723
ÉOLICA TRES MESAS FASE CUATRO	EMC-115A	115	3.45	3.89	2.116+j19.142	0.129+j12.791	3.56	3.98	2.199+j20.401	0.142+j14.071
ESCOBEDO	ESC-115	115	55.67	56.70	0.178+j1.179	0.108+j1.122	63.96	63.41	0.151+j1.132	0.116+j1.167
ESCOBEDO	ESC-230	230	21.78	20.19	0.826+j6.042	1.063+j7.461	24.72	22.30	0.717+j5.865	1.136+j7.769
ESCOBEDO	ESC-400	400	29.91	29.66	1.329+j7.606	1.180+j7.759	36.33	34.61	1.025+j6.918	1.220+j7.918
ESPERANZAS	ESP-115	115	2.24	1.64	6.961+j28.747	14.322+j60.212	2.57	1.84	6.691+j27.597	14.332+j60.596
ESTANZUELA	ETZ-115	115	16.91	12.91	0.533+j3.891	1.395+j7.451	20.56	15.46	0.495+j3.517	1.331+j6.953
ESTANZUELA	ETZ-115B	115	21.51	14.50	0.592+j3.029	1.465+j7.424	25.98	17.38	0.522+j2.762	1.377+j6.848
ESTRELLA	ELL-115	115	7.23	5.11	1.570+j9.052	4.431+j20.153	7.77	5.53	1.590+j9.260	4.446+j20.357
FALCÓN MEXICANO	FAM-138	138	5.24	3.04	3.974+j14.683	12.506+j46.630	6.38	5.66	3.278+j13.347	2.188+j18.982
FARO	FAR-115	115	19.95	12.61	0.624+j3.269	1.771+j8.967	23.38	14.65	0.571+j3.071	1.732+j8.539
FÉLIX U. GÓMEZ	FUG-115	115	31.42	21.64	0.407+j2.074	0.927+j4.892	39.55	26.90	0.340+j1.815	0.852+j4.370
FINSA	FIT-115	115	12.28	9.00	0.846+j5.342	2.290+j11.091	16.45	11.30	0.713+j4.382	2.239+j10.285
FINSA	FIS-115	115	16.00	13.78	0.617+j4.104	1.326+j6.035	18.70	15.66	0.524+j3.871	1.337+j6.054
FINSA GUADALUPE	FIG-115	115	18.36	12.99	0.637+j3.560	1.532+j7.952	27.63	18.31	0.454+j2.604	1.402+j6.542
FINSA LAREDO	FIL-138	138	7.61	7.70	2.277+j10.220	2.027+j9.843	8.99	8.84	2.007+j9.544	2.050+j10.021
FIRESTONE	FRS-115	115	13.96	8.26	0.939+j4.661	3.206+j14.238	19.97	12.38	0.654+j3.599	2.287+j10.126
FLEX AMÉRICAS	FME-115	115	17.00	12.94	0.462+j3.878	1.588+j7.495	19.23	14.56	0.436+j3.772	1.550+j7.352
FOMERREY	FOM-115	115	11.20	7.46	1.060+j5.834	2.933+j14.540	12.56	8.24	1.011+j5.726	2.943+j14.653
FREIGHTLINER	FRI-115	115	10.00	7.64	1.134+j6.540	3.069+j12.461	12.16	9.39	1.003+j5.922	2.654+j11.014
FRISA	FSA-115	115	19.92	17.26	0.414+j3.308	0.804+j4.790	22.11	18.92	0.402+j3.278	0.818+j4.894
FRONTERA	FRO-115	115	12.37	15.45	0.648+j5.328	0.123+j2.188	14.08	17.23	0.567+j5.154	0.133+j2.375
FRONTERA	FRO-230	230	11.33	13.56	1.526+j11.624	0.424+j6.037	13.24	15.42	1.247+j10.962	0.464+j6.479
FRONTERA	FRO-400	400	10.57	10.70	2.952+j21.651	2.231+j21.495	13.17	12.58	2.184+j19.166	2.478+j22.473
FUENTES	FTE-138	138	9.56	9.01	1.326+j8.227	1.772+j9.598	12.10	10.98	1.068+j7.165	1.686+j9.236
FUNDICIÓN	FDC-115	115	19.17	15.38	0.464+j3.431	1.217+j5.924	22.95	18.20	0.370+j3.160	1.156+j5.578
FUNDIDORA	FUN-115	115	28.76	20.18	0.438+j2.267	0.979+j5.163	36.52	26.43	0.359+j1.967	0.759+j4.226
G. E. PLASTIC	GEP-115	115	9.26	5.78	1.315+j7.051	4.359+j19.728	10.70	6.74	1.223+j6.717	4.051+j18.488
GALVASID	GLS-115	115	19.55	13.87	0.509+j3.357	1.480+j7.430	28.64	19.96	0.412+j2.516	1.164+j5.763
GARCIA	GAC-115	115	9.90	8.03	0.795+j6.657	2.182+j11.193	10.90	8.79	0.785+j6.652	2.194+j11.311
GENERACIÓN ELÉCTRICA HUINALA	GEH-115	115	7.67	8.03	0.728+j8.628	0.606+j7.481	8.52	8.73	0.737+j8.544	0.693+j7.929
GENERAL MOTOR	GMO-115	115	12.13	9.39	1.002+j5.380	2.228+j10.042	13.98	10.57	0.906+j5.144	2.239+j10.059



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$	3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$
GIRASOLES	GRS-115	115	26.45	18.54	0.428+j2.474	1.128+j5.609	29.78	20.57	0.399+j2.420	1.133+j5.639
GOLDEN DRAGÓN	GOD-115F	115	6.61	4.47	1.664+j9.908	5.178+j23.998	7.45	4.95	1.564+j9.681	5.185+j24.131
GOLLEK	GOK-115	115	4.57	3.45	2.071+j14.391	6.145+j28.029	4.99	4.30	1.995+j14.492	3.485+j21.453
GP BIENES INMUEBLES	GPI-115	115	9.21	6.60	1.256+j7.100	2.884+j15.475	18.30	12.25	0.717+j3.927	1.947+j9.714
GRANJAS	GRA-115	115	8.13	5.97	1.310+j8.060	3.513+j16.703	9.23	6.64	1.207+j7.819	3.520+j16.841
GUADALUPE	GDL-115	115	23.20	15.44	0.557+j2.808	1.421+j7.032	27.84	18.12	0.495+j2.576	1.372+j6.705
GÜEMEZ	GUE-115	115	17.22	18.79	0.366+j3.838	0.291+j2.893	17.96	19.51	0.381+j4.049	0.305+j3.094
GÜEMEZ	GUE-400	400	14.30	12.42	1.667+j16.058	3.922+j23.409	16.28	13.74	1.509+j15.528	4.111+j24.119
GUILLFORD MILLS	GUI-115	115	15.68	11.23	0.671+j4.180	1.822+j9.163	17.57	12.49	0.654+j4.104	1.802+j9.102
H.C. INDUSTRIAS	HCI-115	115	12.83	9.52	1.114+j5.054	2.393+j10.302	15.17	10.97	1.003+j4.707	2.358+j10.085
HIDALGO	HID-115	115	7.91	5.30	2.232+j8.095	8.071+j19.219	8.75	5.84	2.205+j8.048	8.080+j19.264
HUASTECA	HST-115	115	3.71	2.25	4.580+j17.288	12.783+j51.076	4.04	2.46	4.616+j17.490	12.806+j51.315
HUEJUTLA II	HJD-115	115	4.10	3.38	3.466+j15.836	7.858+j25.348	4.47	3.69	3.496+j15.973	7.871+j25.510
HUERTAS	HUS-115	115	7.03	6.24	1.134+j9.382	2.873+j12.750	7.41	6.66	1.148+j9.793	2.878+j12.892
HUICHIHUAYAN	HUH-115	115	3.27	1.96	5.772+j19.459	15.210+j59.232	3.58	2.15	5.796+j19.572	15.233+j59.355
HUINALA	HUI-115	115	34.38	39.70	0.223+j1.918	0.056+j1.154	60.89	69.42	0.136+j1.192	0.043+j0.773
HUINALA	HUI-115B	115	34.38	39.70	0.223+j1.918	0.056+j1.154	60.89	69.42	0.136+j1.192	0.043+j0.773
HUINALA	HUI-230	230	24.37	28.10	0.694+j5.405	0.255+j3.268	34.21	38.58	0.441+j4.247	0.225+j2.839
HUINALA	HUI-230B	230	24.57	28.08	0.677+j5.361	0.298+j3.360	34.38	38.53	0.435+j4.227	0.254+j2.900
HUINALA	HUI-400	400	33.85	36.71	1.093+j6.735	0.445+j5.176	42.23	44.98	0.791+j5.963	0.397+j4.893
HUINALA DOS	HUO-400	400	33.71	36.59	1.089+j6.765	0.437+j5.183	42.01	44.84	0.788+j5.995	0.386+j4.885
HYLSA MANIOBRAS	HYM-400	400	27.88	25.82	1.685+j8.109	1.311+j10.155	33.81	30.14	1.374+j7.386	1.311+j10.171
HYLSA NORTE	EHN-230	230	15.08	11.51	1.350+j8.702	4.020+j16.544	17.89	13.16	1.166+j8.080	4.036+j16.532
IBERDROLA COGENERACIÓN ALTAMIRA	IBC-115	115	21.34	20.34	0.437+j3.080	0.420+j3.616	23.89	22.30	0.428+j3.027	0.448+j3.730
IMIS	IMI-115	115	9.87	7.68	1.347+j6.591	3.096+j12.110	11.26	8.62	1.253+j6.365	3.097+j12.073
IMSA	INM-115	115	10.93	11.69	0.803+j6.019	0.664+j4.872	12.47	13.03	0.710+j5.811	0.679+j5.089
IMSA PARTICULARES	IMO-115	115	17.85	10.71	0.692+j3.655	2.344+j10.913	22.02	13.04	0.615+j3.260	2.153+j9.945
INDUSTRIA VIDRIERA DE COAHUILA	IVC-138	138	7.00	4.54	2.287+j11.142	7.122+j28.940	10.03	7.13	1.585+j8.596	4.483+j18.802
INFONAVIT	INF-115	115	16.53	14.01	0.679+j3.959	2.069+j5.975	18.53	15.48	0.661+j3.885	2.077+j6.034
INFONAVIT	INV-138	138	9.88	8.33	1.528+j7.922	2.286+j12.549	11.08	9.20	1.454+j7.772	2.302+j12.714
INGENIO SAN MIGUEL EL NARANJO	MGN-115	115	2.50	2.81	7.756+j25.377	1.820+j18.048	3.14	3.58	6.197+j22.425	1.934+j14.764
INTERNACIONAL REGIOMONTANA DE ACERO	IRG-115	115	21.26	14.99	0.488+j3.084	1.454+j6.893	24.56	16.91	0.448+j2.940	1.456+j6.870
INTERPUERTO	IPR-115	115	17.52	8.14	0.509+j3.755	3.572+j16.528	19.60	9.05	0.482+j3.695	3.495+j16.401
IQUISA NORESTE	IQN-115	115	14.61	10.86	0.562+j4.510	1.920+j9.047	16.77	12.31	0.526+j4.324	1.890+j8.903
JABIL	JAB-138	138	11.23	8.51	1.450+j6.944	2.902+j13.673	13.63	10.13	1.218+j6.314	2.747+j12.936
JARACHINA	JRA-138	138	17.65	15.44	0.763+j4.449	1.180+j6.378	21.79	19.10	0.632+j3.973	1.021+j5.671
JARDÍN DOS	JAD-138	138	12.10	10.76	1.341+j6.446	1.632+j9.077	13.76	12.00	1.252+j6.247	1.643+j9.171
JERÓNIMO POTENCIA	JEP-115	115	41.43	36.04	0.297+j1.575	0.264+j2.309	52.18	43.99	0.245+j1.378	0.267+j2.169
JERÓNIMO POTENCIA	JEP-115B	115	41.71	36.88	0.293+j1.565	0.237+j2.209	52.21	44.63	0.243+j1.377	0.245+j2.101
JERÓNIMO POTENCIA	JEP-400	400	20.96	19.28	1.727+j10.883	2.099+j13.751	24.77	22.01	1.359+j10.164	2.140+j13.984
JIMÉNEZ	JIM-115	115	1.57	1.07	12.971+j40.166	41.654+j94.068	1.72	1.17	12.998+j40.366	41.673+j94.278
JOHNSON AND CONTROL	JCC-115	115	8.96	5.28	1.380+j7.281	5.029+j22.376	14.40	9.12	0.810+j5.008	3.066+j13.561



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$	3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$
JOHNSON CONTROL	JHC-115	115	15.01	11.98	0.532+j4.392	1.410+j7.640	16.53	13.10	0.522+j4.387	1.422+j7.758
JOSEFA ZOZAYA	JZO-115	115	15.22	9.55	0.804+j4.288	2.425+j11.873	20.58	12.13	0.647+j3.490	2.321+j10.733
JUÁREZ	JUZ-138	138	19.60	18.74	0.686+j4.006	0.924+j4.575	23.81	22.23	0.569+j3.637	0.881+j4.426
JUÁREZ NORTE	JNO-115	115	16.47	11.57	0.627+j3.983	1.757+j8.981	23.09	15.14	0.514+j3.121	1.640+j8.001
KALOS GUADALUPE	KGP-115	115	18.03	12.83	0.471+j3.653	2.053+j7.927	22.94	15.32	0.404+j3.159	2.047+j7.709
KEMET	KMT-115	115	20.75	14.31	0.549+j3.153	1.746+j7.314	25.66	16.82	0.500+j2.802	1.762+j7.126
KEMET	KMM-138	138	8.36	6.47	1.800+j9.362	3.369+j17.773	9.35	7.14	1.727+j9.213	3.385+j17.937
KEMET VICTORIA	KWM-115	115	6.92	5.47	2.308+j9.308	5.233+j16.425	7.46	5.92	2.332+j9.513	5.255+j16.644
KIKAPU	KIK-115	115	2.07	1.47	7.251+j31.192	17.024+j69.561	2.37	1.64	6.978+j29.952	17.034+j69.945
KRAFT	KRA-115	115	31.65	21.42	0.402+j2.059	1.013+j5.001	41.09	27.25	0.327+j1.747	0.903+j4.396
KRAFT FOODS DE MÉXICO	KRF-115	115	16.68	10.31	0.684+j3.920	2.474+j11.091	20.44	12.55	0.579+j3.526	2.259+j10.064
LA FE	LAF-115	115	37.46	25.91	0.329+j1.741	0.760+j4.071	46.17	31.08	0.283+j1.557	0.725+j3.821
LA ROSITA	RSI-115	115	4.09	2.95	4.604+j15.549	14.154+j32.393	4.50	3.24	4.606+j15.567	14.176+j32.442
LA SILLA	SLL-115B	115	12.94	8.10	0.928+j5.045	3.161+j13.968	19.20	12.60	0.624+j3.752	2.109+j9.561
LA SILLA	SLL-115	115	6.37	4.14	1.424+j10.321	6.005+j26.640	19.11	12.53	0.626+j3.771	2.120+j9.613
LADRILLERA	LDA-115	115	1.66	1.15	12.701+j37.869	19.498+j90.907	1.81	1.26	12.748+j38.241	19.503+j91.050
LADRILLERA REVOLUCIÓN	LRR-115	115	23.91	17.38	0.532+j2.725	1.028+j5.816	28.54	20.36	0.473+j2.515	1.000+j5.558
LAGO	LAO-138	138	7.23	7.03	2.361+j10.761	2.424+j11.634	8.49	8.04	2.098+j10.103	2.445+j11.807
LAGUNA DEL CONEJO	LDC-115	115	25.45	23.13	0.381+j2.581	0.567+j3.425	29.23	27.50	0.355+j2.474	0.453+j2.991
LAGUNAS DE MIRALTA	LGM-115	115	17.66	13.75	0.620+j3.709	1.713+j6.852	19.82	15.20	0.602+j3.635	1.721+j6.914
LAJAS	LAJ-115	115	9.07	11.97	0.535+j7.300	0.087+j2.005	9.45	12.44	0.549+j7.712	0.092+j2.147
LAJAS	LAJ-400	400	12.14	10.62	2.065+j18.914	4.751+j26.870	13.78	11.75	1.850+j18.347	4.950+j27.636
LAMOSA	LMS-115	115	16.43	11.52	0.570+j4.002	2.410+j8.917	20.60	13.63	0.503+j3.509	2.404+j8.699
LAMOSA LAREDO	LAL-138	138	7.52	7.50	2.282+j10.339	2.044+j10.429	8.89	8.61	2.012+j9.655	2.070+j10.617
LAMPAZOS	LAM-400	400	9.94	6.84	2.470+j23.107	12.177+j53.369	12.60	8.25	1.763+j20.086	11.955+j51.024
LAREDO PONIENTE	LAP-138	138	6.41	5.82	2.569+j12.171	2.915+j15.897	7.51	6.61	2.300+j11.437	2.957+j16.174
LAS BRISAS	BRI-115	115	17.51	15.32	0.780+j3.710	0.948+j5.351	20.72	17.54	0.682+j3.459	0.961+j5.366
LAS CRUCES	CRU-115	115	1.46	1.20	13.967+j43.443	26.103+j70.570	1.81	1.58	11.236+j38.689	18.964+j54.688
LAS GLORIAS	GLO-115	115	35.13	32.64	0.248+j1.874	0.265+j2.308	42.09	37.71	0.218+j1.722	0.281+j2.323
LAS GLORIAS	GLO-400	400	22.82	18.53	1.330+j10.033	2.509+j16.940	26.93	21.15	1.053+j9.374	2.536+j16.992
LAS MESAS	MES-115	115	11.84	12.14	0.530+j5.582	0.327+j5.151	12.15	12.38	0.586+j5.984	0.365+j5.624
LAS NORIAS	NOI-115	115	0.95	0.59	23.624+j66.160	67.745+j188.023	1.04	0.64	23.650+j66.350	67.766+j188.238
LAS PUENTES	PTS-115B2	115	32.30	22.84	0.357+j2.024	0.872+j4.524	38.54	26.20	0.320+j1.868	0.880+j4.489
LAS PUENTES	PTS-115B1	115	32.76	22.51	0.363+j1.994	0.913+j4.706	37.78	25.25	0.329+j1.905	0.919+j4.726
LAS TORRES	LTO-138	138	10.97	10.58	1.391+j7.127	1.314+j8.153	12.34	11.68	1.313+j6.979	1.337+j8.358
LAURO VILLAR	LVI-138	138	12.04	13.60	1.231+j6.500	0.459+j4.522	13.54	14.95	1.156+j6.368	0.490+j4.788
LAURO VILLAR	LVI-230	230	8.51	9.37	2.870+j15.330	1.569+j11.764	9.71	10.42	2.627+j14.815	1.661+j12.299
LECHUGAL	LEC-115	115	15.21	10.46	0.779+j4.294	2.043+j10.100	17.18	11.62	0.725+j4.189	2.049+j10.145
LEGO REAL ESTATE	LGR-115	115	12.27	6.56	1.080+j5.304	4.329+j19.065	16.80	9.09	0.798+j4.274	3.426+j15.032
LEONA	LEO-115	115	14.77	10.10	0.840+j4.415	2.130+j10.514	17.19	11.41	0.738+j4.184	2.135+j10.492
LG	LGE-115	115	10.68	6.72	1.050+j6.126	3.548+j16.848	20.70	14.00	0.637+j3.471	1.688+j8.422
LIBERTAD (MONTEMORELOS)	LBT-115	115	7.35	7.84	0.902+j8.994	2.310+j7.099	7.73	8.31	0.916+j9.406	2.315+j7.240



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$	3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$
LIBERTAD (CIUDAD VICTORIA)	LBT-115	115	7.67	6.18	2.047+j8.412	4.292+j14.288	8.24	6.67	2.070+j8.618	4.315+j14.507
LIBRAMIENTO	LBR-115	115	2.08	1.35	10.544+j30.052	20.668+j81.401	3.05	2.02	7.199+j22.819	14.919+j58.674
LINARES	LSN-115	115	3.76	2.67	2.793+j17.427	8.657+j38.434	4.09	3.06	2.756+j17.640	7.292+j35.075
LINDA VISTA	LDV-115	115	5.05	3.08	2.325+j12.930	8.010+j37.584	5.57	3.39	2.321+j12.901	8.026+j37.685
LLANO GRANDE	LLG-138	138	12.88	14.81	1.160+j6.075	0.372+j3.946	14.54	16.33	1.085+j5.931	0.401+j4.186
LLANO GRANDE	LLG-230	230	9.33	10.54	2.629+j13.986	1.239+j9.800	10.68	11.76	2.389+j13.472	1.312+j10.271
LOMA LARGA	LOL-115	115	23.22	15.18	0.539+j2.808	1.555+j7.234	41.61	31.75	0.320+j1.726	0.587+j3.342
LOS NOVILLOS	LNV-138	138	7.28	7.93	1.493+j10.837	0.910+j8.151	8.94	9.77	1.198+j9.728	0.868+j7.223
LOS NOVILLOS	LNV-230	230	6.18	6.28	2.812+j21.293	3.272+j20.084	7.54	7.56	2.244+j19.239	3.087+j18.849
LUVATA	LUV-115	115	17.94	12.54	0.654+j3.642	1.624+j8.325	26.54	17.38	0.475+j2.711	1.496+j6.954
MABE	MAB-115	115	15.50	12.02	0.817+j4.206	1.814+j7.812	19.97	15.32	0.661+j3.596	1.536+j6.833
MAGNA FORMEX SALTILLO	MFS-115	115	27.16	26.56	0.371+j2.416	0.375+j2.601	34.53	34.91	0.272+j2.098	0.273+j2.039
MAGNA POWER TRAIN	MGP-115	115	24.38	24.41	0.427+j2.689	0.405+j2.700	30.79	31.80	0.326+j2.349	0.302+j2.137
MAGNÉTICOS DE MÉXICO	MME-138	138	7.50	7.56	2.279+j10.383	2.145+j10.093	8.84	8.67	2.010+j9.711	2.166+j10.265
MALE PISTONES	MPI-115	115	20.53	17.95	0.544+j3.188	0.887+j4.561	26.29	23.27	0.428+j2.745	0.728+j3.802
MANIOBRAS DE ALTAMIRA	MDA-230	230	16.63	17.71	0.820+j7.945	0.806+j7.044	18.92	19.59	0.769+j7.680	0.870+j7.325
MANIOBRAS DULCES NOMBRES II	MDU-115	115	23.68	22.31	0.432+j2.771	0.328+j3.298	55.44	59.76	0.172+j1.306	0.122+j1.036
MANIOBRAS LOS RAMONES	MLR-400	400	12.31	11.41	1.223+j18.714	1.530+j21.478	13.49	12.25	1.144+j18.792	1.739+j22.927
MANIOBRAS MAMULIQUE	MMQ	115	5.49	5.93	2.921+j11.729	1.528+j9.310	6.15	6.46	2.890+j11.509	1.740+j10.053
MANIOBRAS MESA LA PAZ	MPM-400	400	9.72	6.48	2.334+j23.648	14.306+j58.212	11.01	7.22	2.166+j22.981	14.350+j58.213
MANIOBRAS RANCHO NORTE	MRN-400	400	10.21	8.47	1.940+j22.533	6.004+j35.623	11.59	9.35	1.691+j21.846	6.260+j36.683
MANIOBRAS TRACTEBEL ENERGÍA DE PANUCO	ENP-115	115	17.58	15.74	0.756+j3.699	0.838+j5.212	19.73	17.23	0.741+j3.627	0.889+j5.402
MANNESMANN SACH	MSC-115	115	20.25	17.55	0.552+j3.232	0.923+j4.720	25.87	22.66	0.436+j2.789	0.764+j3.960
MANIOBRAS POLLUX	MAN-115	115	1.40	1.64	18.155+j43.691	3.850+j27.386	1.74	1.94	14.419+j39.384	4.261+j29.102
MANTE	MAN-115	115	2.19	1.35	10.050+j28.535	21.667+j84.384	3.43	2.16	6.417+j20.276	15.624+j56.863
MANUEL	MUL-115	115	7.04	3.00	2.463+j9.101	12.055+j45.950	7.84	3.35	2.413+j8.999	11.778+j45.294
MATAMOROS	MTM-138	138	12.72	11.27	1.289+j6.130	1.635+j8.695	14.58	12.68	1.192+j5.893	1.638+j8.713
MATAMOROS POTENCIA	MMP-138	138	13.33	15.30	0.974+j5.898	0.385+j3.845	14.98	16.83	0.913+j5.780	0.405+j4.064
MATAMOROS POTENCIA	MMP-230	230	11.67	12.46	1.722+j11.245	1.569+j9.671	13.48	14.02	1.517+j10.728	1.617+j9.932
MATRIMAR	MTR-115	115	3.19	2.24	5.470+j20.097	15.873+j44.533	3.59	2.51	5.316+j19.652	15.620+j43.957
MAXITILE	MAX-138	138	6.62	6.25	2.439+j11.777	2.376+j13.902	7.80	7.13	2.171+j11.025	2.425+j14.218
MAYTAG	MYG-138	138	11.13	8.37	1.464+j7.009	2.971+j13.984	13.53	10.00	1.224+j6.363	2.800+j13.183
MESAS	MES-400	400	21.84	22.96	0.502+j10.564	0.437+j8.271	23.43	24.29	0.483+j10.831	0.485+j8.940
METALDYNE SINTERED COMPONENTS MÉXICO S. DE R.L DE C.V.	MST-115	115	22.46	22.82	0.476+j2.918	0.435+j2.797	28.39	29.64	0.371+j2.546	0.331+j2.232
METALSA	MSA-115	115	23.14	17.31	0.416+j2.839	1.075+j5.669	32.83	23.81	0.346+j2.198	0.914+j4.668
METRO CUAUHTÉMOC	MCU-115	115	22.56	14.23	0.573+j2.887	1.650+j7.945	27.99	17.43	0.491+j2.563	1.520+j7.195
METRO LINCOLN	MLI-115	115	20.09	12.57	0.608+j3.248	1.899+j9.040	23.05	14.06	0.555+j3.120	1.904+j9.054
MEXICHEM FLUOR	MEF-138	138	9.65	7.58	1.831+j8.052	3.282+j14.811	10.95	8.47	1.734+j7.814	3.285+j14.829
MÉXICO	MEX-138	138	16.04	14.32	0.937+j4.879	1.445+j6.651	19.01	16.47	0.826+j4.536	1.447+j6.653
MEZQUITAL	MZQ-115	115	16.79	10.75	0.672+j3.896	2.269+j10.383	18.82	11.90	0.646+j3.828	2.275+j10.406
MEZQUITAL PROVISIONAL	MZP-115	115					18.56	11.47	0.654+j3.880	2.411+j10.978
MICARE	MCR-138	138	7.85	5.05	1.959+j9.964	6.392+j26.121	12.68	12.24	1.081+j6.829	1.383+j7.469



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$	3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$
MICARE DOS	MDS-138	138	12.26	13.39	0.787+j6.449	0.558+j4.722	14.81	15.71	0.612+j5.885	0.562+j4.802
MIGUEL ALEMÁN	MIG-138	138	4.01	2.33	5.371+j19.123	16.313+j60.803	6.24	4.68	3.502+j13.590	5.414+j27.604
MINA TAYAHUA	MTU-115	115	1.20	0.73	16.096+j53.061	42.998+j156.396	1.38	0.82	15.850+j50.309	43.119+j155.503
MINERA	MIE-115	115	3.58	4.01	2.743+j18.323	1.749+j12.390	4.21	4.61	2.504+j17.149	1.759+j12.772
MINERA AUTLÁN	MIA-230	230	6.81	4.81	2.968+j19.284	10.645+j43.007	7.62	5.31	2.879+j18.948	10.697+j43.222
MIRAVALLE	MAV-115	115	25.70	19.32	0.460+j2.542	1.413+j4.958	30.17	22.17	0.415+j2.385	1.421+j4.852
MISIONES	MSI-115	115	7.50	4.71	1.990+j8.631	5.736+j23.858	11.48	7.26	1.416+j6.204	4.194+j16.945
MITRAS	MIT-115B2	115	21.08	15.59	0.467+j3.114	1.322+j6.344	29.47	21.18	0.373+j2.450	1.095+j5.277
MITRAS	MIT-115B1	115	19.85	14.37	0.506+j3.306	1.469+j7.021	27.22	19.11	0.412+j2.651	1.246+j5.972
MODELO	MOD-115	115	16.79	8.51	0.778+j3.877	3.209+j15.171	26.02	15.07	0.499+j2.762	1.848+j8.735
MODINE	MNE-138	138	7.56	7.61	2.300+j10.281	2.072+j10.082	8.93	8.73	2.031+j9.606	2.096+j10.263
MOLANGO	MOL-115	115	1.56	1.12	11.510+j40.973	35.152+j86.973	1.71	1.22	11.541+j41.107	35.166+j87.136
MONCLOVA	MON-115	115	12.12	14.53	0.692+j5.435	0.187+j2.772	13.88	16.24	0.599+j5.227	0.203+j2.989
MONCLOVA	MON-115F	115	11.78	13.47	0.727+j5.591	0.373+j3.524	13.52	15.08	0.628+j5.364	0.388+j3.733
MONCLOVA	MON-230	230	10.31	11.30	1.882+j12.738	1.144+j9.529	12.06	12.80	1.587+j12.012	1.217+j10.035
MONTE KRISTAL	MKL-115	115	12.77	8.11	0.890+j5.123	3.299+j13.775	15.59	10.04	0.763+j4.623	2.823+j12.138
MONTEMORELOS	MTN-115	115	1.62	1.13	13.010+j38.734	20.369+j92.886	1.77	1.23	13.058+j39.106	20.374+j93.029
MONTERREY	MTY-115	115	42.98	40.41	0.237+j1.527	0.166+j1.832	60.13	53.66	0.197+j1.199	0.181+j1.648
MONTERREY POTENCIA SF6	MTP-115	115	53.69	50.33	0.212+j1.218	0.142+j1.479	64.01	57.90	0.183+j1.126	0.151+j1.499
MONTERREY POTENCIA SF6	MTP-115B	115	43.80	42.03	0.231+j1.498	0.133+j1.704	61.86	56.47	0.191+j1.165	0.148+j1.516
MONTERREY POTENCIA SF6	MTP-400	400	31.14	31.21	1.402+j7.282	0.788+j7.296	38.30	37.10	1.092+j6.541	0.777+j7.234
MONTOI	MTI-115	115	21.05	10.09	0.536+j3.108	2.751+j13.151	23.52	11.08	0.508+j3.063	2.783+j13.275
MORELOS	MRL-115	115	11.18	8.33	0.913+j5.866	2.526+j11.800	12.74	9.37	0.830+j5.672	2.501+j11.672
MÚNICH	MUN-115	115	18.36	12.11	0.562+j3.571	1.887+j9.022	20.83	13.49	0.516+j3.468	1.893+j9.044
MUSEO	MSO-115	115	10.34	8.05	1.227+j6.301	3.160+j11.548	11.25	8.78	1.241+j6.371	3.203+j11.588
NADADORES	NAD-115F	115	4.59	3.44	4.702+j13.694	9.822+j27.307	5.11	3.79	4.618+j13.522	9.833+j27.495
NARANJOS	NRJ-115	115	3.27	2.02	5.000+j19.662	22.910+j53.638	3.63	2.23	4.955+j19.520	22.917+j53.699
NARCISO MENDOZA	NMZ-138	138	6.49	5.83	2.586+j12.000	3.259+j16.065	7.58	6.62	2.321+j11.320	3.285+j16.259
NAVA	NAV-138	138	10.53	11.59	1.056+j7.493	0.570+j5.362	12.68	13.72	0.872+j6.855	0.593+j5.242
NAVA	NAV-230	230	11.61	11.88	1.506+j11.337	1.722+j10.204	15.94	15.48	0.967+j9.110	1.706+j9.661
NAVIDAD	NVD-115	115	1.73	1.87	12.664+j36.242	6.609+j29.298	2.11	2.18	10.320+j32.960	6.900+j30.721
NAVISTAR	NAS-115	115	15.93	9.72	0.737+j4.102	2.528+j11.891	17.74	10.72	0.710+j4.056	2.537+j11.937
NEMAK	NEK-115	115	15.66	12.44	0.531+j4.206	1.480+j7.386	17.74	13.90	0.505+j4.086	1.477+j7.383
NGM CERÁMICA	NGM-115	115	12.96	7.64	1.001+j5.026	3.488+j15.426	17.51	10.69	0.748+j4.103	2.694+j11.863
NOGALAR	NOG-115	115	37.70	26.77	0.359+j1.724	0.745+j3.845	55.96	41.25	0.252+j1.281	0.505+j2.655
NOKIA	NOK-138	138	15.05	9.01	0.983+j5.202	3.651+j15.552	19.43	13.10	0.784+j4.443	2.493+j10.807
NORTE	NRE-138	138	10.61	7.33	1.631+j7.327	4.082+j17.168	12.43	8.58	1.480+j6.894	3.795+j16.156
NUEVA CASTILLA	NUC-115	115	12.76	6.72	0.889+j5.127	3.697+j18.887	14.19	7.34	0.860+j5.076	3.784+j19.197
NUEVA ESCOBEDO	NUE-115	115	29.75	20.89	0.352+j2.204	0.942+j4.985	33.47	23.11	0.325+j2.158	0.950+j5.028
NUEVA ROSITA	NUR-115	115	5.36	6.44	1.507+j12.291	0.324+j6.107	6.53	7.59	1.275+j11.113	0.334+j6.489
NUEVA ROSITA	NUR-115F	115	5.26	6.18	1.578+j12.525	0.504+j6.900	6.43	7.30	1.323+j11.274	0.513+j7.282
NUEVA ROSITA	NUR-230	230	6.09	6.26	3.762+j21.494	2.201+j19.686	7.37	7.40	3.173+j19.570	2.192+j19.365



Subestación eléctrica	Acónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
NUEVO LAREDO	NUL-138	138	7.77	7.96	2.227+j10.013	1.830+j9.260	9.19	9.16	1.956+j9.333	1.854+j9.444
NUEVO PROGRESO	NVP-138	138	9.62	7.11	1.905+j8.059	3.909+j16.673	11.75	8.71	1.623+j7.283	3.553+j15.036
NUEVO SANTANDER	NST-115	115	8.24	7.98	1.468+j7.919	1.718+j8.686	8.83	8.50	1.493+j8.131	1.794+j9.093
NUTEC FIBRATEC S.A. DE C.V.	NUF-115	115	15.56	12.17	0.817+j4.187	1.908+j7.613	21.21	16.87	0.634+j3.384	1.463+j5.941
OBISPADO	OBI-115	115	20.19	15.99	0.608+j3.232	0.983+j5.800	23.65	18.38	0.556+j3.038	0.986+j5.663
OBRA DE TOMA	ODT-115	115	1.85	1.38	12.267+j33.706	23.617+j68.134	2.02	1.51	12.320+j33.941	24.056+j69.290
OJO CALIENTE	OJC-138	138	6.82	6.30	2.407+j11.432	2.802+j14.238	7.98	7.17	2.145+j10.768	2.825+j14.419
OLIVO	OVO-115	115	9.97	9.17	1.138+j6.564	2.282+j8.131	10.63	9.79	1.159+j6.774	2.315+j8.365
ORIENTE	OTE-138	138	12.21	12.25	1.292+j6.397	1.002+j6.571	13.81	13.58	1.209+j6.232	1.023+j6.750
ORIÓN	ORN-115	115	24.92	21.46	0.493+j2.618	0.566+j3.916	29.61	25.02	0.442+j2.427	0.569+j3.782
ORIZATLAN	ORZ-138	138	12.78	10.00	1.209+j6.115	2.322+j11.249	15.50	11.85	1.010+j5.562	2.224+j10.762
OXFORD	OXF-115	115	15.24	11.36	0.677+j4.304	1.760+j8.657	18.06	13.38	0.578+j4.003	1.666+j8.136
OZULUAMA	OZL-115	115	3.32	2.19	5.219+j19.327	20.099+j46.973	3.66	2.41	5.197+j19.249	20.108+j47.035
P. IND. COLONIAL	PIC-138	138	11.16	8.38	1.453+j6.987	2.966+j13.998	13.60	10.04	1.209+j6.329	2.783+j13.150
P. IND. PUENTE	PIP-138	138	10.16	7.47	1.785+j7.636	3.948+j15.882	12.10	8.71	1.589+j7.069	3.839+j15.334
P.I. DEL NORTE	INO1-138	138	12.29	7.31	1.318+j6.345	4.639+j19.221	17.57	12.02	0.940+j4.898	2.740+j11.620
P.I. SANTA MARÍA	PSM-115	115	22.03	19.96	0.424+j2.983	0.683+j3.910	27.03	24.82	0.325+j2.682	0.589+j3.389
PANUCO	PAN-115	115	5.11	2.63	1.958+j12.834	11.368+j49.331	5.52	2.87	2.032+j13.073	11.380+j49.405
PARQUE DE INVESTIGACIONES E INNOVACIÓN TECNOLÓGICA	IIT-115	115	10.88	7.82	0.767+j6.054	2.629+j13.004	13.60	9.28	0.679+j5.328	2.616+j12.623
PARQUE EÓLICO FENICIAS	FEN-230	230	4.59	5.03	3.455+j28.709	1.240+j21.390	5.13	5.49	3.309+j28.284	1.425+j22.908
PARQUE EÓLICO VICENTE GUERRERO	VIG-115	115	7.43	8.07	1.340+j8.831	0.734+j6.810	7.98	8.60	1.352+j9.052	0.781+j7.150
PARQUE IND. ACUÑA	PIU-138	138	6.23	6.31	1.895+j12.654	1.668+j12.102	7.71	7.84	1.507+j11.271	1.538+j10.651
PARQUE INDL. ESTRELLA	EST-115	115	14.20	8.38	0.930+j4.582	3.166+j14.052	20.24	12.53	0.650+j3.549	2.264+j10.020
PARQUE INDUSTRIAL	PAI-138	138	14.17	11.91	1.036+j5.527	1.647+j8.731	17.24	14.13	0.855+j5.012	1.587+j8.386
PARQUE INDUSTRIAL AMISTAD-AEROPUERTO	PIA-115	115	10.56	7.45	1.033+j6.201	2.900+j13.878	12.11	8.40	0.938+j5.959	2.890+j13.730
PARQUE INDUSTRIAL APODACA TECHNOLOGY PARK	PQT-115	115	12.33	8.17	0.859+j5.316	2.964+j13.295	13.75	9.02	0.786+j5.255	2.986+j13.365
PARQUE INDUSTRIAL DEL NORTE	INO2-138	138	8.99	5.68	2.033+j8.623	6.051+j23.614	17.57	12.02	0.940+j4.899	2.741+j11.621
PARQUE INDUSTRIAL ESCOBEDO	PIE-115	115	24.37	17.66	0.441+j2.688	1.147+j5.718	27.34	19.56	0.413+j2.640	1.152+j5.747
PARQUE INDUSTRIAL LA SILLA	SIA-115	115	14.31	9.48	0.724+j4.584	2.595+j11.456	16.58	10.71	0.670+j4.355	2.593+j11.372
PARQUE INDUSTRIAL LINARES	PIL-115	115	4.43	3.32	2.217+j14.830	6.516+j29.332	4.80	3.85	2.178+j15.044	5.151+j25.973
PARQUE INDUSTRIAL MONTERREY - APODACA	PMA-115	115	9.28	6.69	1.254+j7.041	2.862+j15.191	20.52	13.99	0.642+j3.502	1.666+j8.381
PARQUE INDUSTRIAL ORADEL	PIO-138	138	7.34	7.61	2.188+j10.632	1.406+j9.526	8.72	8.74	1.921+j9.870	1.457+j9.860
PARQUE INDUSTRIAL SALTILLO RAMOS ARIZPE	ISR1-115	115	21.00	19.60	0.525+j3.118	0.688+j3.791	26.75	25.29	0.413+j2.699	0.567+j3.163
PARQUE INDUSTRIAL SALTILLO RAMOS ARIZPE	ISR2-115	115	16.98	13.36	0.529+j3.874	1.554+j6.950	19.96	15.35	0.437+j3.633	1.534+j6.814
PEMEX	PEM-115	115	44.41	34.30	0.284+j1.468	0.501+j2.770	63.64	49.25	0.207+j1.129	0.385+j2.122
PEMEX CADEREYTA	PCD-230	230	9.01	7.20	2.274+j14.564	5.843+j25.232	11.43	8.50	1.777+j12.652	5.907+j25.301
PEMEX CRIOGÉNICA	PXC-138	138	5.66	3.45	2.650+j13.821	8.248+j40.405	6.84	5.28	2.238+j12.616	3.114+j24.067
PEMEX CRIOGÉNICA	PXC-138B	138	5.23	3.16	2.945+j14.960	9.066+j44.363	6.30	4.84	2.502+j13.684	3.403+j26.369
PEMEX NARANJOS	PMX-115	115	3.14	1.95	5.229+j20.473	23.756+j55.561	3.48	2.15	5.183+j20.330	23.763+j55.621
PEMEX-REFINERÍA	PRF-115	115	8.26	4.07	1.340+j7.929	8.729+j31.703	10.47	6.26	1.069+j6.891	3.731+j20.690
PEÑOLES	PÑL-115	115	15.73	12.36	0.808+j4.143	1.872+j7.455	21.49	17.20	0.625+j3.340	1.427+j5.783
PERFILES	PFS-115	115	22.48	16.69	0.427+j2.923	1.134+j5.916	32.03	23.11	0.355+j2.252	0.953+j4.833



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
PESQUERÍA	PQA-115	115	15.25	12.27	0.620+j4.311	1.407+j7.400	19.05	14.60	0.556+j3.794	1.413+j7.213
PETROCEL	GPT-115	115	16.24	13.10	0.786+j4.012	2.059+j6.818	18.57	15.66	0.741+j3.864	1.636+j5.967
PETROLERA	PER-138	138	15.26	13.47	0.917+j5.139	1.401+j7.205	17.79	15.32	0.816+j4.859	1.401+j7.219
PHEPS DODGE	PHD-115	115	11.41	6.10	1.154+j5.702	4.652+j20.489	15.37	8.31	0.872+j4.672	3.750+j16.456
PIEDRAS NEGRAS	PNE-138	138	11.05	10.53	1.073+j7.131	1.287+j8.068	13.28	12.36	0.890+j6.538	1.282+j7.917
PIEDRAS NEGRAS POTENCIA	PNG-138	138	12.24	13.14	0.871+j6.452	0.600+j5.033	14.81	15.38	0.693+j5.875	0.627+j5.160
PIEDRAS NEGRAS POTENCIA	PNG-230	230	10.16	10.05	1.648+j12.964	2.081+j13.072	13.36	12.48	1.131+j10.877	2.151+j12.909
PLANTA	PTA-138	138	12.05	10.49	1.358+j6.472	1.779+j9.561	13.73	11.73	1.265+j6.257	1.787+j9.624
PLANTA BOMBEO DOS	PBD-115	115	4.91	4.97	1.588+j13.420	3.158+j12.775	5.31	5.33	1.529+j13.669	3.231+j13.274
PLANTA BOMBEO UNO	PBU-115	115	3.81	3.69	2.335+j17.259	5.146+j18.580	4.13	3.97	2.287+j17.531	5.316+j19.250
PLANTA DE AGUAS RESIDUALES NORTE	RNO-115	115	24.16	15.39	0.401+j2.719	1.461+j7.306	27.16	16.98	0.371+j2.663	1.480+j7.384
PLANTA DE BOMBEO 0	PB0-115	115	2.37	2.13	4.406+j27.696	10.007+j36.197	2.58	2.30	4.375+j28.006	10.491+j37.476
PLANTA DE BOMBEO LA SILLA	PBS-115	115	14.59	9.82	0.802+j4.481	2.216+j10.951	17.35	11.41	0.718+j4.148	2.163+j10.575
PLANTA DE BOMBEO SAN ROQUE DE AYD	PBR-115	115	14.02	9.40	0.835+j4.660	2.345+j11.484	17.03	11.16	0.730+j4.225	2.232+j10.829
PLANTA DE BOMBEO SANTA ROSA APODACA	PBA-115	115	13.06	8.75	0.800+j5.022	2.746+j12.294	14.57	9.66	0.727+j4.960	2.768+j12.364
PLANTA DUPONT	DUT-115	115	17.40	15.58	0.763+j3.739	0.834+j5.263	19.51	17.05	0.748+j3.667	0.886+j5.460
PLANTA EL SALTO	STO-115	115	2.23	2.10	9.340+j28.286	9.937+j33.945	2.99	3.27	6.641+j23.489	2.834+j18.095
PLANTA FALCÓN	PFA-115	115	4.26	5.16	3.005+j15.300	0.250+j7.478	4.81	5.69	2.609+j14.967	0.285+j8.187
PLAZA SF6	PZA-115	115	44.49	34.17	0.286+j1.465	0.371+j2.823	56.55	43.85	0.235+j1.270	0.332+j2.394
PLAZA SF6	PZA-400	400	20.48	19.23	1.797+j11.132	1.750+j13.361	24.23	21.94	1.422+j10.387	1.814+j13.679
POLARIS	POI-115	115	18.82	14.69	0.479+j3.495	1.245+j6.392	26.12	18.71	0.391+j2.769	1.232+j6.011
POLICYD	PLC-115	115	19.79	16.38	0.602+j3.301	1.138+j5.404	22.17	18.07	0.589+j3.242	1.141+j5.468
POLVORÍN	POL-115	115	18.63	16.19	0.593+j3.514	1.039+j5.151	22.20	19.28	0.515+j3.249	0.921+j4.750
POSCO DE MÉXICO	PCO-115	115	23.27	19.28	0.376+j2.829	0.862+j4.609	26.51	23.21	0.353+j2.732	0.634+j3.923
PRAX AIR	PAX-115	115	22.36	14.02	0.560+j2.917	1.706+j8.084	37.17	24.22	0.376+j1.928	1.043+j5.012
PRIMEX	PRX-115	115	18.17	13.54	0.651+j3.595	1.590+j7.304	26.27	23.11	0.425+j2.747	0.645+j3.922
PRIMEX	PRX-115B	115	18.22	13.59	0.649+j3.586	1.582+j7.273	26.27	23.11	0.425+j2.747	0.644+j3.919
PROEZA GREDE	PGR-115	115	22.98	17.68	0.495+j2.847	1.899+j5.192	25.73	19.55	0.468+j2.800	1.907+j5.238
PROLAMSA	POM-115	115	19.76	9.66	0.549+j3.315	2.681+j13.630	22.09	10.57	0.520+j3.265	2.739+j13.844
PROLEC	PLE-115	115	23.76	17.62	0.469+j2.755	1.078+j5.613	28.25	20.29	0.441+j2.547	1.087+j5.526
PROLEC PARTICULAR	PLP-115	115	20.08	14.37	0.492+j3.269	1.408+j7.114	29.24	20.51	0.400+j2.465	1.123+j5.580
PROLOGIS	POG-138	138	11.57	8.89	1.397+j6.741	2.714+j12.889	14.03	10.56	1.176+j6.136	2.582+j12.244
PROLOGIS-APODACA	PLG-115	115	14.09	11.15	0.721+j4.656	1.482+j8.318	21.80	15.98	0.534+j3.307	1.345+j6.887
PROPARK	PPK-115	115	6.47	3.94	1.896+j10.092	6.964+j29.152	7.28	4.39	1.841+j9.865	6.962+j29.068
PROPASA	PDP-115	115	20.63	14.21	0.553+j3.170	1.761+j7.377	25.53	16.70	0.502+j2.816	1.776+j7.189
PROVIDENCIA	PRO-115	115	9.87	7.36	1.235+j6.611	3.436+j13.203	11.75	8.79	1.129+j6.114	3.105+j12.119
PTA BOMBEO CUATRO	PBC-115	115	2.24	2.05	4.776+j29.228	8.615+j37.124	2.44	2.21	4.734+j29.501	9.072+j38.482
PTA DE TRATAMIENTO DE AGUAS RESIDUALES NORESTE	RNE-115	115	11.50	7.52	0.926+j5.700	3.242+j14.579	12.81	8.30	0.853+j5.638	3.264+j14.649
PTA. BOMBEO TRES	PBT-115	115	2.85	2.70	3.563+j23.040	7.239+j26.408	3.10	2.90	3.519+j23.314	7.595+j27.423
PUENTE INTERNACIONAL	PUI-138	138	8.83	7.42	1.439+j8.904	2.722+j13.798	10.75	8.65	1.213+j8.059	2.715+j13.767
PUERTO	PUO-115	115	28.01	26.68	0.264+j2.356	0.430+j2.755	31.69	30.16	0.250+j2.291	0.407+j2.670
PUERTO ALTAMIRA ELÉCTRICA	PAE-115	115	30.08	30.62	0.227+j2.196	0.286+j2.134	34.01	34.56	0.214+j2.136	0.268+j2.074



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
PUERTO ALTAMIRA ELÉCTRICA	PAE-400	400	28.59	34.19	0.487+j8.063	0.406+j4.938	36.71	43.86	0.341+j6.913	0.340+j4.247
QUÍMICA FLUOR	QFL-138	138	9.65	7.58	1.830+j8.052	3.282+j14.811	10.95	8.47	1.733+j7.814	3.285+j14.829
RAMOS ARIZPE	RRA-115	115	19.35	16.03	0.593+j3.380	1.114+j5.469	25.77	22.08	0.458+j2.797	0.836+j4.181
RAMOS ARIZPE POTENCIA	RAP-115	115	29.24	30.47	0.334+j2.246	0.222+j2.001	37.46	41.11	0.236+j1.935	0.119+j1.439
RAMOS ARIZPE POTENCIA	RAP-400	400	23.84	21.26	1.432+j9.581	2.474+j13.084	28.75	24.92	1.048+j8.775	2.262+j12.800
RASSINI	RNI-138	138	8.53	6.37	1.664+j9.188	3.873+j18.334	10.05	7.28	1.480+j8.596	3.868+j18.183
RAYÓN	RAY-115	115	2.44	1.61	7.626+j26.132	24.444+j65.340	2.68	1.76	7.641+j26.197	24.488+j65.381
REAL DE PALMAS	RDP-115	115	6.00	3.56	1.998+j10.879	7.453+j32.946	18.86	12.31	0.571+j3.829	2.312+j9.805
REBOMBEO I	RBU-115	115	3.07	2.58	7.338+j20.329	8.872+j32.912	3.34	2.78	7.389+j20.564	9.305+j34.062
REBOMBEO II	RBD-115	115	4.61	4.00	4.231+j13.780	5.385+j20.341	4.99	4.29	4.265+j13.999	5.599+j21.047
REFINERÍA MADERO	RMA-115	115	14.21	10.51	0.786+j4.605	2.009+j9.474	17.62	13.40	0.629+j4.096	1.520+j7.961
REGIDORES	RGS-115	115	9.30	6.75	1.057+j7.063	3.119+j14.953	10.54	7.50	0.966+j6.862	3.125+j15.091
REYNOSA	REY-138	138	16.82	14.79	0.818+j4.666	1.196+j6.616	19.72	16.97	0.717+j4.385	1.178+j6.537
REYNOSA CENTRO	RYC-138	138	12.26	9.79	1.248+j6.376	2.474+j11.189	14.14	11.02	1.151+j6.091	2.482+j11.236
RHEEM	RHM-138	138	7.56	7.61	2.300+j10.281	2.072+j10.082	8.93	8.73	2.031+j9.606	2.096+j10.263
RICSÁ	RIS-138	138	10.82	8.03	1.649+j7.179	3.632+j14.661	12.78	9.27	1.484+j6.694	3.561+j14.291
RIEL	RIE-115	115	28.25	18.03	0.451+j2.306	1.281+j6.215	36.43	22.76	0.363+j1.972	1.142+j5.501
RIO	RIO-115	115	17.23	11.21	0.754+j3.780	1.910+j9.884	36.48	24.78	0.376+j1.966	0.880+j4.761
RIO BRAVO	RIB-138	138	16.44	15.96	0.902+j4.761	0.753+j5.302	22.53	24.67	0.574+j3.847	0.244+j3.065
RIO BRAVO	RIB-230	230	14.32	13.11	1.363+j9.174	2.268+j11.812	19.38	20.11	0.848+j7.488	0.753+j6.809
RIO BRAVO III	RBT-400	400	11.86	13.99	1.786+j19.382	0.819+j11.890	16.22	19.52	1.046+j15.626	0.461+j8.507
RIO BRAVO IV	RBC-400	400	11.95	14.13	1.774+j19.243	0.765+j11.706	16.21	19.52	1.047+j15.639	0.461+j8.507
RIO BRAVO PONIENTE	RBP-138	138	12.16	9.35	1.243+j6.435	2.260+j12.305	15.29	11.83	0.961+j5.651	1.903+j10.759
RIO ESCONDIDO	REC-138	138	12.80	14.79	0.692+j6.185	0.206+j3.605	15.55	17.49	0.518+j5.614	0.212+j3.683
RIO ESCONDIDO	REC-230	230	14.98	18.29	1.009+j8.805	0.213+j3.718	22.48	27.32	0.479+j6.480	0.122+j2.836
RIO ESCONDIDO	REC-400	400	11.63	12.28	2.244+j19.733	1.320+j16.093	22.64	26.22	0.679+j11.201	0.457+j6.936
RIO SALADO	SDO-138	138	3.67	2.49	5.512+j20.969	13.652+j50.897	4.21	3.84	5.133+j20.151	4.553+j26.507
RÍO VERDE	RVE-115	115	2.20	1.38	8.465+j28.940	26.920+j79.892	2.42	1.51	8.477+j29.002	26.965+j79.933
ROCKWELL	ROW-115	115	17.51	12.19	0.670+j3.733	1.677+j8.584	25.87	16.88	0.488+j2.781	1.546+j7.179
SABINAS	SAB-115	115	3.87	3.29	2.985+j16.891	5.435+j25.650	4.64	3.77	2.626+j15.508	5.444+j26.032
SABINAS HIDALGO	SAH-115	115	2.00	2.31	9.631+j31.850	2.832+j19.513	2.22	2.52	9.497+j31.510	3.147+j20.935
SALITRILLO	SLT-115	115	4.24	3.52	2.748+j15.427	8.287+j23.985	4.54	3.81	2.764+j15.840	8.292+j24.127
SALITRILLOS	SLT-138	138	4.92	6.98	1.788+j16.081	0.127+j1.902	5.49	7.76	1.721+j15.880	0.143+j1.991
SALTILLO	SAL-115	115	23.06	25.49	0.526+j2.831	0.203+j2.061	28.08	30.04	0.426+j2.566	0.220+j2.091
SALTILLO	SAL-230	230	12.47	13.79	1.782+j10.500	0.866+j7.583	14.51	15.61	1.486+j9.960	0.913+j7.918
SAN AGUSTÍN	AUS-115	115	29.00	20.01	0.421+j2.250	1.086+j5.263	36.00	24.69	0.361+j1.996	0.965+j4.721
SAN BERNABÉ	BER-115	115	15.74	10.36	0.726+j4.156	2.253+j10.548	19.18	12.30	0.659+j3.751	2.132+j9.979
SAN CARLOS POTENCIA	SCP-400	400	9.31	9.41	2.316+j24.692	2.965+j23.962	10.40	10.29	2.165+j24.322	3.117+j25.127
SAN CRISTOBAL	SCB-138	138	7.10	4.48	2.108+j11.026	6.155+j30.319	8.52	6.28	1.810+j10.123	3.284+j21.056
SAN FERNANDO	FDO-115	115	0.81	0.49	28.358+j76.528	78.941+j229.945	0.89	0.54	28.381+j76.714	78.962+j230.161
SAN JORGE	JOR-115	115	22.47	14.30	0.560+j2.901	1.576+j7.866	26.17	16.15	0.505+j2.745	1.581+j7.825
SAN JUAN	JAN-115	115	3.93	2.21	3.055+j16.635	11.882+j55.106	8.03	4.84	1.812+j8.911	6.842+j26.231



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$	3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$
SAN MARCOS	MCO-115	115	6.61	3.98	1.753+j9.893	6.284+j29.330	10.09	6.05	1.330+j7.113	4.875+j21.184
SAN MARTIN	SMA-115	115	13.69	8.47	0.872+j4.771	2.832+j13.519	15.22	9.35	0.844+j4.725	2.838+j13.553
SAN NICOLÁS	NIC-115	115	60.50	57.61	0.198+j1.079	0.136+j1.256	71.14	65.22	0.169+j1.013	0.145+j1.301
SAN NICOLÁS	NIC-115B	115	60.59	57.80	0.197+j1.078	0.135+j1.247	71.32	65.50	0.168+j1.010	0.144+j1.291
SAN NICOLÁS	NIC-400	400	27.75	26.58	1.544+j8.178	1.353+j9.278	33.55	30.86	1.232+j7.471	1.396+j9.436
SAN ROBERTO	RBO-115	115	0.90	0.98	34.868+j65.233	19.564+j52.221	1.06	1.13	31.098+j61.237	19.980+j53.941
SAN ROQUE	ROQ-115B	115	17.81	12.00	0.660+j3.670	1.917+j8.934	23.50	15.72	0.514+j3.065	1.631+j7.560
SAN ROQUE	ROQ-115	115	17.68	11.90	0.666+j3.695	1.940+j9.027	23.36	15.61	0.518+j3.083	1.645+j7.620
SANDOVAL	SDV-138	138	8.20	6.94	2.300+j9.441	3.332+j14.762	9.41	7.84	2.157+j9.065	3.315+j14.672
SANTA AMALIA TAMAULIPAS	AAT-115	115	21.92	20.81	0.417+j3.000	0.418+j3.559	24.56	22.85	0.408+j2.946	0.441+j3.662
SANTA CATARINA	CAT-115	115	11.53	7.65	1.025+j5.668	2.865+j14.228	12.87	8.43	0.984+j5.587	2.875+j14.341
SANTA CRUZ	STZ-115	115	22.08	15.83	0.532+j2.960	1.249+j6.443	32.55	22.01	0.384+j2.211	1.140+j5.357
SANTANDER	SNT-138	138	9.54	6.44	1.533+j8.206	4.021+j20.053	11.46	8.39	1.325+j7.533	2.754+j15.823
SANTO DOMINGO	DON-115	115	38.58	27.80	0.315+j1.692	0.701+j3.654	55.47	40.84	0.241+j1.295	0.510+j2.685
SANTO DOMINGO VIEJO PROVISIONAL	DVP-115	115	23.14	16.44	0.490+j2.828	1.495+j6.206	28.97	19.49	0.442+j2.482	1.511+j6.018
SARAPE MANIOBRAS	ZIS-230	230	12.03	12.07	1.887+j10.874	1.896+j10.817	13.98	13.64	1.588+j10.325	1.943+j11.100
SELLO ROJO	SER-115	115	4.27	3.14	2.262+j15.391	6.960+j31.622	4.67	3.86	2.186+j15.493	4.309+j25.068
SENDERO NACIONAL	SEN-138	138	10.64	8.68	1.494+j7.337	2.386+j12.519	12.07	9.68	1.403+j7.122	2.393+j12.577
SIDERÚRGICA	SIG-138	138	11.66	9.98	1.365+j6.694	1.926+j10.267	13.28	11.17	1.273+j6.475	1.933+j10.318
SIDERÚRGICA DEL GOLFO S.A.	SGA-230	230	10.32	8.24	1.794+j12.744	4.723+j22.351	13.12	11.02	1.273+j11.063	3.208+j17.346
SIECOR	SIE-138	138	13.09	7.80	1.207+j5.964	4.309+j17.998	18.02	12.27	0.899+j4.780	2.680+j11.428
SOLIDARIDAD	SRD-115	115	15.41	10.05	0.745+j4.244	2.355+j10.946	18.31	11.68	0.687+j3.928	2.278+j10.536
SORIANA CEDIS	SOC-115	115	14.43	8.53	0.872+j4.517	3.111+j13.795	19.26	11.50	0.670+j3.733	2.539+j11.196
SOTO LA MARINA	SOT-115	115	1.08	0.77	20.064+j58.022	50.301+j127.776	1.19	0.84	20.118+j58.254	50.752+j128.943
SPARTECH	SEH-115	115	14.86	10.97	0.698+j4.414	1.850+j9.053	17.57	12.88	0.599+j4.113	1.756+j8.532
STIVA	STV-115	115	18.97	13.16	0.553+j3.457	1.799+j7.936	22.72	15.18	0.494+j3.176	1.797+j7.818
TAMALIN	TLN-115	115	3.73	2.50	4.625+j17.211	17.244+j40.766	4.11	2.75	4.607+j17.145	17.254+j40.833
TAMAULIPAS	TAM-115	115	15.18	11.63	0.789+j4.303	2.208+j8.164	17.34	13.18	0.751+j4.145	2.178+j7.969
TAMAZUNCHALE 115	TZE-115	115	7.00	5.37	1.722+j9.333	3.741+j17.652	7.38	5.72	1.781+j9.732	3.778+j18.125
TAMAZUNCHALE 400	TMH-400	400	21.71	23.02	0.505+j10.628	0.358+j8.037	23.26	24.32	0.489+j10.909	0.407+j8.721
TAMBACA	TBC-115	115	3.40	2.34	5.187+j18.800	16.593+j43.340	3.73	2.56	5.202+j18.867	16.636+j43.381
TAMOS	TMO-115	115	21.98	19.92	0.428+j2.990	0.705+j3.973	24.41	21.77	0.424+j2.961	0.721+j4.074
TAMOS	TMO-400	400	19.12	15.95	1.007+j12.036	4.001+j19.402	24.16	19.89	0.753+j10.487	3.481+j17.200
TAMPICO	TPC-115	115	27.93	30.34	0.337+j2.353	0.242+j1.895	31.73	33.57	0.319+j2.279	0.257+j1.984
TAMPICO	TPC-230	230	16.51	16.52	0.893+j7.991	1.312+j8.379	18.91	18.39	0.823+j7.680	1.369+j8.607
TAMPIQUITO	TPQ-115	115	31.17	19.57	0.391+j2.094	1.081+j5.816	36.45	22.16	0.347+j1.974	1.087+j5.783
TANCOL	TCL-115	115	17.39	14.89	0.633+j3.766	1.908+j5.560	19.51	16.46	0.615+j3.692	1.917+j5.624
TECHNOCAST	THC-115	115	14.38	10.34	0.706+j4.563	2.051+j9.838	17.00	12.14	0.605+j4.254	1.948+j9.276
TECNOLÓGICO POTENCIA SF6	TEC-115	115	43.60	40.36	0.289+j1.495	0.207+j1.881	54.13	49.32	0.242+j1.328	0.196+j1.737
TECNOLÓGICO POTENCIA SF6	TEC-400	400	20.03	18.48	1.872+j11.376	1.886+j14.307	23.68	21.12	1.497+j10.623	1.925+j14.529
TEKSID	TKS-115	115	8.91	8.21	1.019+j7.379	1.768+j9.239	10.05	9.10	0.936+j7.206	1.778+j9.426
TELEFLEX	TLX-138	138	7.26	6.97	2.013+j10.796	2.079+j12.110	8.51	7.95	1.758+j10.151	2.100+j12.281



Subestación eléctrica	Acónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$	3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$
TEMPOAL II	TED-115	115	2.71	1.70	4.852+j24.011	17.150+j66.266	2.97	1.87	4.886+j24.124	17.161+j66.361
TERNIUM MANIOBRAS	TNM-400	400	14.40	10.61	1.477+j15.973	6.228+j32.299	16.36	11.87	1.257+j15.473	6.215+j32.342
TEXTILERAS	TXE-115	115	16.93	12.46	0.612+j3.874	1.595+j8.064	19.00	13.87	0.595+j3.798	1.575+j8.003
TIERRA NUEVA	TNA-115	115	6.28	4.55	3.343+j10.028	7.428+j21.426	6.78	4.93	3.359+j10.237	7.442+j21.626
TOPO CHICO	THO-115	115	29.22	21.66	0.445+j2.228	0.881+j4.567	33.24	24.18	0.413+j2.158	0.882+j4.584
TOSHIBA	TOS-115	115	11.41	6.10	1.154+j5.702	4.652+j20.489	15.37	8.31	0.872+j4.672	3.750+j16.456
TRANE	TNE-115	115	18.97	13.16	0.553+j3.457	1.799+j7.936	22.72	15.18	0.494+j3.176	1.797+j7.818
TRES MESAS MANIOBRAS	TMS-400	400	9.74	6.59	2.214+j23.598	12.621+j56.811	11.00	7.32	2.062+j22.996	12.701+j57.001
TRIARA II	TII-115	115	11.66	9.23	0.940+j5.617	1.656+j10.063	20.82	15.26	0.601+j3.455	1.309+j7.224
TRICO COMPTS.	TCO-138	138	10.97	9.11	1.436+j7.117	2.208+j11.667	12.46	10.17	1.346+j6.901	2.215+j11.726
TUBACERO MONTERREY	TBM-115	115	21.75	15.22	0.522+j3.007	1.628+j6.792	27.07	17.97	0.472+j2.656	1.644+j6.604
UCAR	UCA-230	230	15.43	12.61	1.309+j8.507	3.377+j13.994	18.61	14.69	1.108+j7.772	3.362+j13.772
UNIVERSIDAD	UNI-115	115	21.79	14.02	0.557+j2.996	1.642+j7.946	25.44	15.82	0.488+j2.829	1.647+j7.945
UNIVERSIDAD SACH	UNT-115	115	17.04	13.25	0.646+j3.843	1.466+j7.169	19.80	15.21	0.588+j3.642	1.401+j6.949
VALADECES	VDL-138	138	4.36	2.60	4.739+j17.628	14.173+j53.667	7.83	5.18	2.730+j10.861	6.695+j27.561
VALLE	VLL-115	115	34.20	23.13	0.380+j1.904	0.842+j4.654	39.82	26.20	0.338+j1.803	0.846+j4.620
VALLE ALTO	VAL-115	115	12.60	10.55	0.897+j5.192	1.979+j8.163	13.68	11.49	0.909+j5.259	2.024+j8.198
VALLE DEL ROBLE	VRO-115	115	9.47	6.37	1.114+j6.924	3.951+j16.786	10.95	7.24	1.053+j6.588	3.900+j16.495
VALLE HERMOSO	VHE-138	138	3.15	2.75	7.150+j24.295	8.879+j35.301	3.54	3.09	6.933+j23.780	8.736+j34.602
VALLE ORIENTE	VOT-115	115	42.65	32.26	0.303+j1.527	0.427+j3.033	53.64	40.77	0.252+j1.338	0.391+j2.626
VALLE PONIENTE	VAP-115	115	16.10	12.05	0.761+j4.054	1.583+j8.121	18.66	13.66	0.680+j3.854	1.589+j8.063
VALLE SOLEADO DEFINITIVO	VSL-115	115	20.91	13.18	0.604+j3.117	1.752+j8.580	26.75	16.21	0.510+j2.682	1.657+j7.885
VALLE SUR	VSR-138	138	3.60	3.39	6.197+j21.265	6.409+j25.499	4.06	3.83	5.982+j20.748	6.266+j24.800
VALLES	VES-115	115	12.70	10.56	0.895+j5.149	1.957+j8.242	13.78	11.48	0.910+j5.223	1.999+j8.287
VENTIKA MANIOBRAS	VKM-230	230	6.81	5.93	3.037+j19.248	4.773+j27.870	7.59	6.47	2.919+j19.016	4.965+j28.823
VERDE CO.	VEC-138	138	10.12	7.36	1.793+j7.668	4.036+j16.298	12.08	8.64	1.590+j7.081	3.881+j15.546
VICTORIA	VRA-115	115	7.91	6.36	1.839+j8.188	3.763+j14.051	8.49	6.86	1.863+j8.394	3.791+j14.281
VIDRIERA MONTERREY	VMO-115	115	27.39	17.89	0.483+j2.376	1.255+j6.156	35.53	23.06	0.393+j2.017	1.093+j5.282
VILLA DE CASAS	VDC-115	115	2.44	1.90	9.855+j25.405	14.879+j48.308	2.66	2.05	9.906+j25.640	15.317+j49.464
VILLA DE GARCÍA	VDG-115	115	28.00	31.89	0.344+j2.347	0.098+j1.495	31.07	34.70	0.327+j2.328	0.109+j1.608
VILLA DE GARCÍA	VDG-230	230	25.70	29.59	0.646+j5.126	0.282+j3.133	28.90	32.59	0.541+j5.025	0.300+j3.343
VILLA DE GARCÍA	VDG-400	400	30.72	30.32	1.186+j7.424	1.326+j7.736	37.29	35.28	0.868+j6.757	1.365+j7.911
VILLA DE JUÁREZ DOS	VJD-115	115	11.40	6.97	0.984+j5.738	3.503+j16.580	15.83	9.36	0.806+j4.544	3.057+j13.865
VILLA DE SANTIAGO	VDS-115	115	5.44	3.04	2.477+j11.961	8.910+j40.144	10.25	6.36	1.566+j6.948	5.235+j19.504
VILLA FLORIDA	VLV-138	138	17.01	14.97	0.738+j4.624	1.114+j6.541	20.43	17.67	0.625+j4.245	1.052+j6.253
VISTEON	VIS-115	115	13.02	9.74	0.784+j5.039	1.986+j10.061	17.68	12.37	0.652+j4.079	1.935+j9.255
WHIRLPOOL	WHI-115	115	14.50	10.60	0.720+j4.524	1.939+j9.449	17.11	12.42	0.620+j4.223	1.845+j8.927
WHIRLPOOL APODACA	WHA-115	115	21.85	16.12	0.439+j3.007	1.192+j6.164	31.29	22.46	0.364+j2.306	0.991+j4.995
XICOTENCATL II	XID-115	115	1.42	0.90	14.927+j44.345	38.672+j122.812	1.93	1.24	11.224+j36.160	32.578+j95.220
XOCHIPILLI	XOC-115	115	9.35	7.97	1.089+j7.019	2.057+j10.630	10.71	8.91	0.976+j6.747	2.069+j10.804
YESOS INDUSTRIALES DEL NORTE	YIN-115	115	34.09	10.76	0.389+j1.908	5.583+j13.564	38.53	11.88	0.362+j1.861	5.591+j13.609
ZAPALINAME	ZPL-115	115	12.47	9.85	0.937+j5.243	1.903+j9.396	14.36	11.11	0.842+j5.017	1.903+j9.359



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$	3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$
ZINC NACIONAL	ZNA-115	115	32.04	13.41	0.403+j2.033	2.168+j10.485	37.73	16.47	0.357+j1.902	1.928+j9.230

Gerencia de Control Regional Baja California

Sistema Baja California



Regresar a mapa del SEN



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
ACUEDUCTO	ACU-115	115	3.56	2.69	2.992+j18.426	10.429+j35.497	4.15	3.06	2.750+j17.362	10.436+j35.103
AEROPUERTO DOS	APD-230	230	9.93	7.90	1.901+j13.234	4.299+j23.362	11.27	8.82	1.780+j12.838	4.368+j23.396
BAJA RECYCLING	B.RECYCLING	69	14.11	13.00	0.420+j2.793	0.655+j3.503	15.68	14.28	0.409+j2.764	0.664+j3.574
BAJÍO	BAJ-69	69	4.74	0.95	2.139+j8.125	24.489+j106.019	5.23	1.05	2.128+j8.104	24.521+j106.177
CACHANILLA	KCH-161	161	15.90	13.60	0.714+j5.801	1.766+j8.675	17.85	15.05	0.663+j5.688	1.783+j8.779
CAÑÓN	KON-115	115	3.29	2.31	5.134+j19.495	10.632+j44.709	3.71	2.57	4.939+j19.054	10.637+j44.763
CÁRDENAS	CNA-69	69	14.59	10.18	0.515+j2.681	1.276+j6.182	16.61	11.33	0.485+j2.594	1.283+j6.218
CARRANZA	CNZ-161	161	14.57	12.72	0.838+j6.322	1.828+j9.022	16.34	14.05	0.788+j6.209	1.852+j9.152
CEMENTOS	CEC-115	115	8.17	7.45	1.450+j7.998	5.141+j9.611	9.92	8.73	1.207+j7.265	5.097+j9.500
CENTENARIO	CNT-230	230	12.93	9.87	1.330+j10.182	4.619+j19.371	14.65	11.03	1.243+j9.895	4.638+j19.338
CENTINELA	CTA-69	69	2.62	3.05	3.744+j14.761	11.341+j4.840	2.86	3.34	3.742+j14.854	11.345+j4.925
CENTRO	CRO-161	161	18.87	18.75	0.609+j4.888	0.673+j4.992	21.29	20.73	0.556+j4.771	0.705+j5.160
CENTRO	CRO-230	230	16.12	14.07	1.036+j8.173	1.732+j11.743	18.38	15.66	0.943+j7.889	1.812+j11.984
CERRO PRIETO CUATRO	CPC-161	161	12.54	13.23	0.870+j7.360	0.683+j6.237	13.76	14.42	0.864+j7.379	0.718+j6.388
CERRO PRIETO DOS	CPD-230	230	13.83	14.63	1.253+j9.520	0.804+j8.020	16.23	17.19	1.096+j8.932	0.751+j7.486
CERRO PRIETO TRES	CPT-230	230	13.77	14.14	1.266+j9.561	1.012+j8.860	16.38	17.23	1.078+j8.854	0.764+j7.583
CERRO PRIETO UNO	CPU-161	161	12.00	11.28	0.994+j7.681	1.340+j9.154	13.22	12.70	0.982+j7.670	1.185+j8.621
CERVECERA BAJA CALIFORNIA	CBC-230	230	11.60	9.46	1.660+j11.328	4.078+j18.835	13.17	10.54	1.551+j10.984	4.173+j19.014
CESPT	CPT-69	69	13.82	8.99	0.440+j2.849	1.592+j7.386	15.56	9.97	0.420+j2.785	1.596+j7.416
CETYS	CTY-161	161	16.89	16.25	0.723+j5.455	0.951+j6.100	18.98	17.94	0.673+j5.344	0.986+j6.270
CETYS	CTY-230	230	10.71	8.77	1.735+j12.278	3.485+j20.366	12.14	9.76	1.622+j11.922	3.595+j20.565
CHAPULTEPEC	CHQ-230	230	9.51	9.39	2.126+j13.804	1.961+j14.386	10.88	10.69	1.959+j13.276	1.918+j14.050
CICLO COMBINADO MEXICALI	CCM-230	230	25.72	27.02	0.528+j5.136	0.381+j4.455	29.81	31.65	0.461+j4.879	0.325+j4.076
CIPRÉS	CIP-115	115	9.64	11.38	1.172+j6.788	0.346+j3.853	12.01	13.91	0.921+j6.010	0.315+j3.668
CIPRÉS	CIP-230	230	6.16	6.31	3.485+j21.277	2.274+j20.482	7.54	7.43	2.793+j19.176	2.256+j20.566
COLONET	COE-115	115	2.25	1.44	8.544+j28.185	19.301+j76.680	2.52	1.60	8.335+j27.757	19.306+j76.735
COMISIÓN ESTATAL DE SERVICIOS PÚBLICOS DE TJUANA	CES-69	69	18.59	14.80	0.318+j2.120	0.711+j3.755	21.34	16.57	0.288+j2.033	0.717+j3.792
DART CONTAINER	DAR-69	69	17.94	19.36	0.389+j2.186	0.268+j1.731	19.98	21.23	0.378+j2.160	0.277+j1.804
DINAMIS PLASTICS	PLA-69	69	16.74	14.75	0.402+j2.346	0.584+j3.314	18.74	16.22	0.387+j2.306	0.592+j3.395
DURAZNO	DRA-69	69	12.67	8.00	0.523+j3.100	1.866+j8.482	14.30	8.88	0.499+j3.023	1.869+j8.501
EL ARRAJAL	ARJ-115	115	3.48	4.22	3.013+j18.836	0.761+j9.063	3.76	4.51	3.044+j19.166	0.841+j9.737
EL ARRAJAL	ARJ-230	230	2.33	2.32	9.145+j56.231	6.087+j57.667	2.58	2.51	8.960+j55.799	6.764+j61.274
ENCINAL	ENL-69	69	4.17	4.05	1.565+j9.430	1.529+j10.302	4.59	4.38	1.559+j9.423	1.649+j10.796
ENSENADA	EDA-115	115	8.39	8.58	1.402+j7.789	1.630+j7.350	10.16	10.03	1.172+j7.095	1.649+j7.381
FABRICAS MONTERREY	FAM-115	115	8.11	7.95	1.458+j8.057	2.041+j8.582	9.80	9.27	1.223+j7.348	2.057+j8.586
FEVISA	FEV-161	161	4.75	2.94	3.168+j19.319	12.352+j54.464	5.23	3.25	3.156+j19.308	12.197+j53.929
FLORIDO	FLO-69	69	13.13	8.81	0.520+j2.990	1.694+j7.333	14.66	9.72	0.505+j2.946	1.699+j7.373
FRANCISCO VILLA	FCO-69	69	13.58	10.23	0.492+j2.892	1.482+j5.654	15.15	11.28	0.478+j2.853	1.487+j5.709
FRONTERA	FTA-69	69	22.44	16.37	0.300+j1.750	0.798+j3.688	25.53	18.23	0.280+j1.693	0.801+j3.715
GALLO	GLL-115	115	8.50	8.56	1.394+j7.689	1.999+j7.531	10.34	10.07	1.155+j6.966	2.009+j7.475
GONZALES ORTEGA	GOR-161	161	14.32	12.30	0.879+j6.431	1.841+j9.540	16.05	13.62	0.830+j6.317	1.854+j9.628
GUERRERO	GER-69	69	18.99	13.29	0.380+j2.063	1.003+j4.722	21.85	14.89	0.350+j1.974	1.006+j4.739



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
HERRADURA	HRA-69	69	25.59	28.58	0.214+j1.542	0.096+j1.083	28.66	31.29	0.203+j1.516	0.105+j1.156
HERRADURA	HRA-230	230	13.36	11.80	1.252+j9.862	1.917+j13.910	15.79	13.35	1.086+j9.185	2.045+j14.335
HIDALGO	HGO-161	161	7.01	5.63	2.201+j13.076	4.440+j22.581	7.75	6.18	2.150+j13.025	4.461+j22.817
HIPÓDROMO	HMO-69	69	28.24	21.66	0.266+j1.386	0.623+j2.649	33.09	24.55	0.239+j1.303	0.624+j2.658
HUNTER	HTR-69	69	16.91	11.46	0.406+j2.321	1.218+j5.613	19.27	12.78	0.380+j2.242	1.221+j5.633
HYUNDAI. CARGA INDUSTRIAL	HIU-69	69	27.43	18.22	0.256+j1.430	0.614+j3.623	31.14	20.13	0.241+j1.387	0.622+j3.683
INDUSTRIAL	INA-69	69	25.18	18.70	0.265+j1.560	0.667+j3.182	28.85	20.90	0.245+j1.499	0.669+j3.206
IOJOS NEGROS	ONG-69	69	1.34	1.00	10.526+j27.856	16.285+j57.922	1.44	1.08	10.680+j28.465	16.344+j58.864
JATAY	JAT-115	115	3.79	2.83	2.816+j17.313	9.807+j34.045	4.41	3.21	2.586+j16.370	9.824+j33.821
JOVITA	JOV-230	230	7.94	9.00	1.772+j16.629	0.647+j11.838	9.08	9.96	1.642+j16.000	0.753+j12.692
JOYA	JOY-115	115	8.44	9.03	0.927+j7.813	1.345+j6.292	13.18	13.77	0.586+j5.511	1.287+j4.730
KENWORTH	KEN-230	230	5.80	6.60	2.884+j22.711	2.799+j14.375	6.48	7.34	2.778+j22.378	2.843+j14.426
LA ENCANTADA	ENA-69	69	17.44	18.91	0.391+j2.251	0.278+j1.749	19.69	20.99	0.373+j2.194	0.288+j1.808
LA MESA	LMS-69	69	22.60	17.16	0.328+j1.732	0.706+j3.389	25.91	19.19	0.305+j1.664	0.709+j3.417
LA ROSITA	ROA-230	230	28.46	28.46	0.511+j4.637	0.658+j4.669	32.93	32.67	0.447+j4.413	0.648+j4.534
LAGO	LGO-69	69	15.41	11.73	0.488+j2.539	0.997+j4.945	17.31	12.96	0.468+j2.488	1.003+j5.005
LIBRAMIENTO	LIB-230	230	6.47	6.09	3.323+j20.266	3.775+j24.122	7.27	6.75	3.155+j19.842	3.948+j24.502
LOMAS	LOS-69	69	3.06	3.29	2.190+j12.853	0.456+j10.327	3.21	3.41	2.335+j13.463	0.515+j11.267
LOMAS	LOS-115	115	8.87	10.27	1.255+j7.383	0.415+j4.528	10.71	12.00	1.046+j6.740	0.449+j4.693
LOMAS	LOS-230	230	6.23	6.02	3.364+j21.044	3.027+j23.887	7.62	7.02	2.708+j18.984	3.150+j24.282
MABAMEX	MAB-69	69	13.45	8.93	0.534+j2.912	1.871+j7.248	15.05	9.87	0.518+j2.865	1.875+j7.287
MANEADERO	MND-115	115	7.57	7.99	1.602+j8.619	1.064+j7.456	9.13	9.42	1.353+j7.880	1.035+j7.279
MATRIX	MATRIX-69	69	11.01	6.48	0.843+j3.517	2.438+j10.959	12.33	7.17	0.822+j3.457	2.441+j10.983
MESA INDUSTRIAL GROUP	MGI-69	69	15.45	10.05	0.555+j2.518	1.446+j6.604	17.42	11.15	0.534+j2.458	1.449+j6.628
METROPOLIS	MEP-69	69	31.86	33.59	0.160+j1.240	0.098+j1.076	36.34	37.23	0.145+j1.197	0.105+j1.135
METROPOLIS	MEP-230	230	21.46	22.11	0.756+j6.141	0.968+j5.814	28.26	27.58	0.542+j5.139	0.999+j5.699
MEXICALI II	MXI-161	161	21.52	22.44	0.527+j4.287	0.492+j3.777	24.73	25.20	0.458+j4.110	0.511+j3.884
MEXICALI II	MXI-230	230	18.96	17.88	0.959+j6.939	1.223+j8.221	21.98	20.26	0.852+j6.592	1.267+j8.272
MEXICALI ORIENTE	MOE-161	161	12.26	10.95	0.952+j7.520	1.897+j10.150	13.64	12.00	0.912+j7.441	1.968+j10.413
MÉXICO	MXC-69	69	17.81	11.52	0.442+j2.193	1.300+j5.787	20.42	12.88	0.412+j2.106	1.302+j5.798
MINERA	MIN-115	115	2.18	1.92	8.281+j29.310	13.070+j40.964	2.37	2.08	8.314+j29.637	13.151+j41.639
MISIÓN	MSN-115	115	3.49	2.71	3.013+j18.810	10.124+j34.123	4.10	3.11	2.758+j17.608	10.122+j33.533
MONTECITO	MUE-69	69	17.55	13.29	0.412+j2.232	0.902+j4.387	19.85	14.74	0.391+j2.173	0.907+j4.431
NACOSARI	NZI-161	161	13.94	11.47	0.911+j6.608	1.924+j10.821	15.60	12.66	0.860+j6.496	1.954+j10.965
OPTICA	OPT-69	69	23.38	17.06	0.261+j1.684	0.746+j3.546	26.60	18.99	0.242+j1.630	0.749+j3.571
ORIZABA	OZA-230	230	17.29	14.63	1.005+j7.616	2.011+j11.749	19.87	16.45	0.906+j7.295	2.049+j11.803
PACIFICO	PAF-69	69	24.32	19.90	0.246+j1.620	0.465+j2.717	28.27	22.32	0.219+j1.535	0.482+j2.775
PACKARD	PKD-161	161	17.64	16.55	0.695+j5.224	1.105+j6.233	20.02	18.44	0.632+j5.069	1.123+j6.339
PANAMERICANA	PNM-115	115	6.69	5.73	1.241+j9.851	3.423+j14.653	9.60	7.64	0.887+j7.557	3.375+j13.128
PANAMERICANA POTENCIA	PAP-69	69	37.94	45.08	0.135+j1.041	0.042+j0.578	45.36	52.25	0.109+j0.960	0.046+j0.608
PANAMERICANA POTENCIA	PAP-230	230	18.00	19.69	0.951+j7.316	0.720+j5.756	24.20	25.10	0.654+j6.001	0.764+j5.631
PARQUE INDUSTRIAL	PID-161	161	8.02	8.36	1.804+j11.443	1.261+j10.143	8.83	9.06	1.749+j11.445	1.358+j10.630



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
PARQUE INDUSTRIAL	PID-230	230	6.71	6.25	3.215+j19.516	4.045+j23.929	7.55	6.88	3.049+j19.116	4.368+j24.650
PARQUE INDUSTRIAL LOS OLIVOS	POL-69	69	17.61	19.67	0.386+j2.229	0.229+j1.556	19.89	21.85	0.368+j2.172	0.238+j1.614
PARQUE INDUSTRIAL PACÍFICO	PFCO	69	15.34	12.70	0.434+j2.560	0.857+j4.155	17.44	14.18	0.408+j2.479	0.860+j4.186
PLANTA DE BOMBEO UNO	PB1-69	69	13.49	7.05	0.617+j2.887	2.624+j10.754	15.32	7.83	0.586+j2.799	2.629+j10.780
POPOTLA	POP-115	115	5.01	4.39	1.815+j13.123	5.696+j18.299	6.48	5.44	1.491+j11.168	5.673+j17.052
PRESIDENTE JUÁREZ	PJZ-115	115	9.72	11.40	0.607+j6.804	0.167+j3.911	16.21	19.37	0.273+j4.497	0.106+j2.344
PRESIDENTE JUÁREZ	PJZ-230	230	21.11	26.11	0.771+j6.243	0.284+j3.059	31.56	39.61	0.419+j4.610	0.170+j2.162
PUERTO NUEVO	PNU-115	115	4.06	3.88	2.395+j16.158	5.614+j17.998	4.98	4.68	2.100+j14.506	5.593+j16.792
PUNTA CHICA	PCH-115	115	2.33	2.06	7.348+j27.506	9.532+j38.491	2.63	2.31	7.111+j26.851	9.507+j38.346
RIO	RII-69	69	23.01	16.23	0.334+j1.699	0.872+j3.828	26.69	18.28	0.305+j1.613	0.874+j3.837
RIO NUEVO	RIN-161	161	16.47	14.55	0.722+j5.596	1.449+j7.770	18.52	16.10	0.669+j5.479	1.473+j7.900
RSI HOME PRODUCTS	RSI-69	69	25.01	21.52	0.235+j1.576	0.461+j2.345	28.33	23.83	0.220+j1.531	0.467+j2.400
RUBÍ	RUB-69	69	29.64	30.88	0.167+j1.333	0.119+j1.209	34.90	35.14	0.139+j1.248	0.126+j1.253
RUBÍ	RUB-230	230	14.41	14.82	1.190+j9.139	1.369+j8.726	19.18	18.71	0.833+j7.570	1.423+j8.432
RUIZ CORTINEZ	RZC-161	161	8.06	6.60	1.921+j11.370	3.369+j18.916	8.92	7.25	1.871+j11.312	3.374+j19.097
RUMOROSA	RUM-69	69	10.31	13.75	0.363+j3.849	0.044+j0.968	11.07	14.66	0.360+j3.943	0.048+j1.053
RUMOROSA	RUM-230	230	9.53	8.41	1.709+j13.832	2.530+j19.398	10.78	9.25	1.600+j13.461	2.721+j20.141
SAMSUNG	SAM-230	230	19.00	18.13	0.863+j6.934	1.481+j8.110	24.48	22.10	0.649+j5.932	1.512+j7.994
SAN FELIPE	SAF-115	115	2.17	1.79	6.038+j30.048	11.342+j48.552	2.36	1.95	6.058+j30.301	11.394+j49.148
SAN LUIS REY	SRY-230	230	6.48	6.37	3.283+j20.240	2.721+j21.394	7.29	7.11	3.113+j19.788	2.745+j21.400
SAN MATÍAS	SMT-115	115	2.66	2.95	5.854+j24.291	1.668+j17.613	2.91	3.18	5.843+j24.409	1.873+j18.785
SAN QUINTÍN	SQN-115	115	1.31	0.77	17.159+j47.551	39.686+j151.525	1.46	0.85	16.919+j47.152	39.691+j151.580
SAN SIMÓN	SMN-115	115	1.04	0.60	20.505+j60.167	50.682+j198.373	1.16	0.66	20.256+j59.774	50.688+j198.428
SAN VICENTE	SVE-115	115	3.11	2.16	5.511+j20.659	11.711+j47.958	3.50	2.41	5.305+j20.162	11.706+j47.946
SÁNCHEZ TABOADA	STB-230	230	15.56	13.19	1.212+j8.450	2.479+j12.939	17.83	14.82	1.108+j8.117	2.522+j12.989
SANTA ISABEL	SIS-161	161	21.63	22.61	0.472+j4.271	0.482+j3.730	24.33	25.02	0.426+j4.180	0.497+j3.843
SANTA ISABEL	SIS-230	230	21.52	19.95	0.759+j6.123	1.273+j7.572	24.81	22.56	0.676+j5.849	1.303+j7.578
SAUZAL	SAZ-115	115	3.43	2.64	3.274+j19.105	9.955+j35.655	3.99	2.99	3.006+j18.074	9.943+j35.353
SEMINARIO	SIO-69	69	15.29	9.06	0.466+j2.564	1.722+j7.819	17.25	10.05	0.444+j2.501	1.725+j7.840
SHARP	SHA-115	115	8.81	9.44	0.731+j7.499	0.653+j6.097	14.02	14.57	0.394+j5.194	0.613+j4.627
SIDERÚRGICA	CSC-230	230	12.14	10.04	1.575+j10.821	3.329+j17.555	14.02	11.48	1.432+j10.322	3.260+j17.074
SKYWORKS	SKW-161	161	15.26	13.69	0.822+j6.034	1.312+j8.102	17.12	15.10	0.772+j5.922	1.352+j8.283
SONY	SON-69	69	11.17	6.23	0.674+j3.501	2.556+j11.788	12.48	6.87	0.655+j3.450	2.562+j11.848
TAICO	TYC-69	69	16.44	12.89	0.432+j2.384	0.871+j4.363	18.50	14.25	0.414+j2.332	0.877+j4.421
TECATE	TCT-69	69	6.23	3.91	1.239+j6.277	4.211+j17.328	6.87	4.27	1.228+j6.255	4.256+j17.528
TECATE DOS	TCD-69	69	6.99	5.61	1.004+j5.613	1.840+j9.754	7.71	6.08	0.995+j5.593	1.930+j10.081
TECNOLÓGICO	TEK-230	230	13.78	11.45	1.345+j9.541	2.992+j15.290	15.76	12.83	1.232+j9.183	3.047+j15.359
TECOLOTE	TEE-69	69	16.28	10.87	0.359+j2.421	1.285+j5.998	18.63	12.15	0.329+j2.330	1.287+j6.015
TECRA	TCR-69	69	5.84	3.10	1.341+j6.692	5.816+j24.290	6.44	3.40	1.330+j6.670	5.847+j24.447
TENSHO. CARGA INDUSTRIAL	TSHO-115	115	9.07	9.99	0.694+j7.291	0.485+j5.361	14.61	15.79	0.358+j4.985	0.446+j3.894
THOMSOM	THO-230	230	13.68	11.00	1.375+j9.612	3.281+j16.531	15.60	12.31	1.271+j9.278	3.324+j16.581
TIJUANA	TJI-69	69	39.97	47.13	0.115+j0.990	0.041+j0.563	46.22	53.08	0.099+j0.943	0.045+j0.599



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$	3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$
TIJUANA	TJI-69A	69	19.06	21.77	0.327+j2.064	0.082+j1.333	21.26	23.73	0.316+j2.037	0.092+j1.439
TIJUANA	TJI-230	230	23.67	26.26	0.664+j5.570	0.553+j4.139	31.20	32.91	0.470+j4.658	0.590+j4.125
TOYOTA	TOY-230	230	12.10	9.93	1.385+j10.891	3.019+j18.098	14.30	11.27	1.208+j10.146	3.115+j18.368
TRINIDAD	TRI-115	115	2.54	1.99	6.591+j25.271	10.722+j46.900	2.81	2.18	6.506+j25.142	10.820+j47.477
UNIVERSIDAD	UND-69	69	14.65	9.23	0.510+j2.672	1.671+j7.347	16.60	10.27	0.484+j2.595	1.673+j7.357
VALLE	VAL-69	69	16.00	10.10	0.472+j2.444	1.423+j6.731	18.28	11.27	0.441+j2.357	1.425+j6.745
VALLE DE GUADALUPE	VLP-69	69	2.44	1.61	5.748+j15.301	11.072+j40.247	2.63	1.74	5.815+j15.612	11.095+j40.630
VALLE DE LAS PALMAS	VPM-69	69	3.27	2.21	5.120+j11.045	7.033+j29.231	3.60	2.42	5.110+j11.058	7.035+j29.330
VALLE DE PUEBLA	VPA-230	230	12.05	9.51	1.601+j10.906	4.317+j19.456	13.70	10.60	1.490+j10.556	4.389+j19.576
VALLECITOS	VLC-69	69	2.54	1.67	6.452+j14.273	10.866+j39.074	2.78	1.82	6.464+j14.378	10.872+j39.258
VICTORIA	VIC-230	230	6.91	5.74	2.876+j18.992	6.121+j30.412	7.83	6.45	2.707+j18.465	6.077+j30.075
VIGOBITE	VIB-69	69	21.29	13.63	0.329+j1.842	1.093+j4.929	24.37	15.22	0.306+j1.772	1.095+j4.943
WISTERIA	WIS-230	230	20.44	19.00	0.865+j6.438	1.285+j7.917	23.73	21.59	0.765+j6.108	1.312+j7.908
XOCHIMILCO	XCO-230	230	18.20	15.93	0.979+j7.231	1.766+j10.300	21.03	18.01	0.875+j6.892	1.800+j10.316

Gerencia de Control Regional Baja California

Sistema Baja California Sur



[Regresar a mapa del SEN](#)



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
AEROPUERTO SAN JOSÉ	ASJ-115	115	2.08	1.95	12.874+j29.293	8.154+j37.576	4.14	2.99	3.847+j17.239	8.249+j37.003
AURA SOLAR	ASU-115	115	3.29	4.11	6.350+j19.183	1.042+j8.060	8.20	8.53	1.105+j8.835	1.232+j7.786
BLEDALES	BLE-115	115	3.18	3.69	6.765+j19.736	2.623+j11.984	7.99	7.52	1.278+j9.050	2.595+j10.565
BUENAVISTA	BUV-115	115	1.68	1.34	14.966+j36.557	16.868+j68.045	2.72	1.79	7.659+j25.730	16.708+j66.475
CABO BELLO	CAB-115	115	2.25	2.50	12.108+j26.870	3.980+j20.652	5.69	4.94	2.339+j12.625	3.899+j18.254
CABO FALSO	CAF-115	115	2.34	2.79	11.583+j25.887	2.175+j15.075	6.81	6.65	1.771+j10.584	1.912+j11.307
CABO REAL	CRE-115	115	2.37	2.71	11.526+j25.480	2.927+j17.918	5.83	5.13	2.308+j12.314	3.069+j17.351
CABO SAN LUCAS DOS	CAD-115	115	2.40	2.90	11.571+j25.175	1.986+j13.678	6.99	6.92	1.808+j10.290	1.791+j10.615
CABO SOL	CAS-115	115	2.24	2.44	12.007+j27.040	4.121+j22.480	5.41	4.54	2.446+j13.276	4.177+j20.881
CAMINO REAL	CAR-115	115	2.27	2.19	9.418+j27.685	10.718+j30.707	4.39	3.55	3.550+j16.273	10.079+j26.714
CENTRAL TURBOGÁS LOS CABOS	TCB-230	230	1.30	1.74	41.064+j93.896	1.909+j25.176	3.93	4.58	4.982+j36.814	1.455+j21.359
COROMUEL	COR-230	230	1.80	2.45	21.842+j70.520	0.844+j15.462	4.86	5.97	2.273+j29.945	0.662+j13.370
EL PALMAR	ELP-115	115	2.54	3.17	10.977+j23.732	1.036+j11.012	6.94	6.95	1.829+j10.357	1.180+j10.441
EL PALMAR	ELP-230	230	1.36	1.82	39.363+j89.263	2.498+j25.200	4.06	4.61	5.093+j35.574	2.513+j23.104
EL RECREO	RCO-115	115	3.21	3.81	6.669+j19.609	2.215+j10.649	8.04	7.84	1.213+j9.001	2.267+j9.565
EL TRIUNFO	ETR-115	115	2.05	1.84	11.253+j30.313	12.555+j41.965	3.66	2.72	4.853+j19.362	12.117+j38.725
GENERAL AGUSTÍN OLACHEA	GAO-115	115	0.88	1.02	31.763+j68.460	6.362+j45.294	3.24	4.14	2.678+j22.355	0.315+j7.947
INSURGENTES	INS-115	115	0.94	1.33	33.370+j62.381	1.541+j8.555	2.55	3.34	6.619+j27.897	1.416+j8.066
LA PAZ	LPZ-115	115	2.91	3.13	7.428+j21.549	4.709+j17.520	6.79	5.88	1.865+j10.587	4.391+j15.226
LAS PILAS	LAP-115	115	1.47	1.54	18.859+j41.177	12.187+j37.262	3.32	2.75	4.939+j21.455	10.775+j33.973
LORETO	LRO-115	115	0.53	0.45	52.583+j112.853	42.697+j192.916	0.88	0.60	23.961+j79.551	42.562+j192.408
MANIOBRAS EÓLICO COROMUEL	MAN-ENV	115	2.07	2.08	9.831+j30.542	10.698+j29.795	3.66	3.13	3.827+j19.596	10.561+j28.362
MONTE REAL	MOR-115	115	2.15	2.10	12.615+j28.182	6.937+j32.692	4.47	3.34	3.502+j15.966	7.044+j32.133
OLAS ALTAS	OLA-115	115	3.48	4.55	6.221+j18.044	0.689+j5.697	9.54	10.65	0.910+j7.601	0.858+j5.199
OLAS ALTAS	OLA-230	230	1.79	2.34	23.626+j70.247	2.805+j21.889	4.99	5.50	2.529+j29.151	2.902+j21.001
PALMILLA	PAA-115	115	2.84	2.94	7.335+j22.158	4.353+j20.725	6.58	5.44	1.787+j10.948	4.040+j17.633
PALMILLA	PML-115	115	2.20	2.28	12.202+j27.658	5.359+j26.772	4.83	3.84	2.935+j14.827	5.494+j26.215
PUERTO ESCONDIDO	PES-115	115	0.58	0.51	49.385+j104.284	35.553+j161.702	0.99	0.70	20.948+j70.745	35.418+j161.195
PUNTA PRIETA	PUP-115	115	3.39	4.25	6.206+j18.605	1.050+j7.681	10.70	13.05	0.666+j6.795	0.265+j3.123
PUNTA PRIETA	PUP-115B	115	3.38	4.25	6.192+j18.637	1.003+j7.647	10.62	12.89	0.675+j6.842	0.285+j3.238
PUNTA PRIETA DISTRIBUCIÓN	PUP-DIST	115	3.38	4.23	6.213+j18.641	1.077+j7.813	10.64	12.89	0.672+j6.830	0.292+j3.256
REFORMAS AGRARIAS	REA-115	115	1.88	1.87	11.137+j33.446	12.450+j33.822	3.28	2.78	4.489+j21.778	12.237+j32.309
ROFOMEX	RFO-115	115	1.15	0.91	20.818+j54.035	29.463+j98.320	1.81	1.21	9.921+j39.197	28.802+j96.384
SAN JOSÉ DEL CABO	SJC-115	115	2.30	2.45	12.055+j26.226	4.654+j23.438	5.25	4.28	2.830+j13.632	4.780+j22.886
SANTIAGO	SNT-115	115	1.68	1.36	15.665+j36.201	15.790+j66.216	2.77	1.83	7.900+j25.129	15.734+j65.152
SANTO DOMINGO	DOM-115	115	0.87	1.09	34.887+j68.368	6.172+j29.795	2.09	2.19	7.920+j34.084	6.046+j29.305
TURBO GAS LOS CABOS	TCB-115	115	2.44	3.19	10.904+j24.912	0.504+j8.527	8.35	10.41	1.137+j8.677	0.126+j3.548
VILLA CONSTITUCIÓN	VIO-115	115	1.05	1.33	29.470+j56.258	4.983+j22.470	3.44	4.09	3.814+j20.916	1.475+j10.987

Gerencia de Control Regional Baja California

Sistema Mulegé



Regresar a mapa del SEN



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$	3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$
BAHÍA ASUNCIÓN	BAS-115	115	0.26	0.35	60.314+j253.333	3.903+j37.276	0.35	0.48	48.523+j201.391	4.361+j40.401
MEZQUITAL	MEZ-115	115	0.39	0.52	25.253+j169.787	6.365+j34.562	0.67	0.86	10.386+j108.337	6.532+j36.429
SANTA ROSALÍA	SRI-115	115	0.37	0.51	29.498+j178.504	2.451+j26.280	0.66	0.88	11.202+j109.755	2.690+j28.487
TRES VÍRGENES	GLV-115	115	0.40	0.53	21.443+j164.010	6.234+j41.508	0.66	0.83	9.960+j109.664	6.691+j44.120
VIZCAÍNO	VIZ-115	115	0.33	0.45	32.584+j200.475	4.163+j32.331	0.49	0.66	20.694+j147.331	4.595+j34.727

Gerencia de Control Regional Peninsular



[Regresar a mapa del SEN](#)



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
AH KIM PECH	AKI-115	115	4.19	3.70	5.463+j14.857	6.749+j21.561	5.65	4.67	3.624+j12.411	6.742+j21.028
AK TUNCHEN	AUC-115	115	4.02	2.83	5.663+j15.500	10.265+j36.022	4.91	3.26	4.286+j14.240	10.272+j36.150
AKUMAL II	AKD-115	115	3.56	2.38	6.463+j17.502	12.741+j44.810	4.29	2.72	5.118+j16.256	12.742+j44.885
ALOM	ALO-115	115	11.18	10.59	1.683+j5.696	1.536+j7.044	16.87	14.90	0.826+j4.250	1.314+j6.222
AVENTURA PALACE	AVP-115	115	3.55	2.76	5.803+j17.782	8.707+j33.718	4.30	3.18	4.321+j16.439	8.727+j33.957
BALAM	BLM-115	115	8.94	11.88	2.891+j6.845	0.180+j2.120	14.94	19.06	1.168+j4.747	0.170+j1.978
BALAM	BLM-230	230	4.56	5.56	10.435+j27.158	1.031+j14.465	7.23	8.17	4.136+j19.766	1.003+j14.240
BICENTERARIO	BIN-115	115	8.82	8.09	2.075+j7.237	1.919+j9.678	12.00	10.10	1.290+j5.949	1.927+j9.605
BONAMPAK	BNP-115	115	8.64	11.17	3.006+j7.068	0.398+j2.632	14.74	18.39	1.182+j4.811	0.297+j2.256
BONFIL	BNI-115	115	7.84	8.36	3.071+j7.898	1.659+j6.845	12.79	12.25	1.229+j5.578	1.569+j6.545
CALICA	CLC-115	115	5.03	4.52	4.284+j12.480	4.125+j17.323	6.36	5.36	2.803+j11.130	4.145+j17.562
CALKINI II	CKD-115	115	3.10	1.94	6.633+j20.380	18.384+j56.918	3.68	2.21	5.541+j19.077	18.372+j56.789
CAMPECHE PLAYA	CPY-115	115	2.66	1.85	7.452+j23.862	14.433+j56.173	3.28	2.15	5.571+j21.568	14.431+j56.065
CANCUN	CNC-115	115	8.67	10.97	2.976+j7.054	0.513+j2.992	15.20	18.65	1.093+j4.680	0.317+j2.396
CANDELARIA II	CAS-115	115	1.62	1.18	11.541+j39.305	34.000+j80.405	1.91	1.34	9.645+j37.099	34.026+j80.683
CANEK	CEK-115	115	7.82	8.21	3.230+j7.851	1.559+j7.364	12.44	11.74	1.451+j5.690	1.474+j7.034
CAUCEL POTENCIA	CCP-115	115	12.88	16.28	1.437+j4.951	0.168+j2.229	19.72	23.64	0.655+j3.646	0.177+j2.153
CAUCEL POTENCIA	CCP-230	230	7.81	9.62	4.335+j16.436	0.940+j8.405	11.87	13.75	1.766+j12.175	0.955+j8.096
CAYAL	CYL-115	115	2.28	1.60	8.999+j27.629	18.264+j64.748	2.80	1.86	7.005+j25.086	18.258+j64.239
CD. DEL CARMEN	CRE-115	115	3.10	3.76	6.225+j20.522	1.755+j10.183	4.68	5.94	2.936+j15.314	0.847+j7.196
CEMENTOS MAYA	CMY-115	115	9.06	7.38	2.187+j6.993	3.229+j12.186	13.48	10.96	1.169+j5.291	2.211+j9.240
CENTRO	CNO-115	115	11.29	10.65	1.804+j5.598	1.613+j7.051	16.41	14.22	0.997+j4.338	1.484+j6.631
CHAAC	HAA-115	115	7.63	9.39	3.266+j8.065	0.815+j3.910	12.11	14.04	1.469+j5.850	0.782+j3.728
CHAMPOTON	CMO-115	115	3.45	2.57	5.986+j18.264	9.688+j38.162	4.44	3.07	4.095+j15.920	9.682+j37.974
CHEMAX	CEX-115	115	3.01	2.07	5.453+j21.378	15.922+j49.570	3.73	2.43	4.460+j19.049	15.889+j49.048
CHETUMAL NORTE	CTE-115	115	2.84	2.90	8.079+j21.912	4.934+j21.798	4.43	4.03	3.961+j16.002	4.872+j20.960
CHICBUL	CBU-115	115	2.56	1.85	7.332+j24.901	14.266+j54.294	3.13	2.14	5.473+j22.670	14.281+j54.450
CHICHÍ SUÁREZ	CCS-115	115	14.04	18.51	1.375+j4.524	0.158+j1.577	20.97	26.25	0.672+j3.418	0.175+j1.627
CHICHÍ SUÁREZ	CCS-230	230	7.69	9.39	4.637+j16.627	0.931+j8.893	11.56	13.06	1.975+j12.479	1.022+j9.100
CHOLUL	HOL-115	115	11.25	11.04	1.756+j5.636	1.756+j6.260	15.67	14.04	1.056+j4.540	1.769+j6.299
CHUBURNA	CBR-115	115	10.29	9.50	1.867+j6.178	1.979+j8.105	14.18	11.92	1.141+j5.024	1.991+j8.107
CONCORDIA	CNR-115	115	2.85	3.08	6.902+j22.272	3.902+j17.936	4.18	4.50	3.585+j17.115	2.994+j14.948
DZITAS	DZI-115	115	3.42	2.36	4.745+j18.820	13.600+j43.557	4.22	2.76	3.959+j16.834	13.579+j43.014
DZITNUP	DZT-400	400	3.52	3.54	19.537+j62.648	13.296+j64.983	4.93	4.51	8.038+j50.909	13.398+j66.190
ESCÁRCEGA	ESA-115	115	5.05	6.57	3.464+j12.673	0.163+j4.415	6.95	8.67	1.607+j10.390	0.187+j4.690
ESCÁRCEGA	ESA-230	230	3.28	4.17	12.682+j38.458	1.258+j15.912	5.22	6.24	5.256+j27.471	1.436+j15.996
ESCÁRCEGA	ESA-400	400	4.19	4.56	10.533+j54.074	3.406+j43.251	5.38	5.47	5.196+j46.967	3.714+j45.336
GOBERNADORES CAMPECHE	GOB-115	115	4.47	4.04	4.820+j14.036	5.426+j19.278	6.20	5.22	2.878+j11.431	5.417+j18.699
HECELCHACAN	HCE-115	115	2.91	1.80	7.103+j21.642	14.901+j63.961	3.50	2.05	5.778+j20.023	14.904+j63.812
HÉROES	HRO-115	115	11.26	11.38	1.728+j5.635	1.269+j5.852	15.91	14.74	0.989+j4.483	1.260+j5.811
HIDROGENADORA YUCATECA	HRA-115	115	11.29	10.41	1.773+j5.605	1.703+j7.469	18.36	18.01	0.768+j3.903	0.685+j4.524
HOLPECHEN	HOP-115	115	1.21	0.78	16.290+j52.388	43.555+j139.135	1.38	0.87	14.928+j50.821	43.557+j138.985



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	Z _{TH(+)}	Z _{TH(0)}	3F	1F	Z _{TH(+)}	Z _{TH(0)}
HUNABKU	HBK-115	115	7.74	9.65	3.279+j7.924	0.717+j3.572	12.35	14.60	1.477+j5.725	0.679+j3.373
HUNUCMA	HNC-115	115	6.38	5.07	2.644+j10.073	4.333+j18.200	8.09	6.02	1.860+j8.831	4.340+j18.139
HUXECTAMAN	HUX-115	115	9.31	7.77	2.125+j6.811	2.823+j11.310	13.93	11.65	1.110+j5.125	1.841+j8.476
IBEROESTAR	IBR-115	115	6.66	6.23	2.933+j9.530	2.614+j11.877	8.75	7.59	1.546+j8.201	2.635+j12.064
INSURGENTES	INS-115	115	2.86	2.95	7.977+j21.776	4.496+j21.094	4.48	4.12	3.867+j15.855	4.434+j20.258
ITZAES	IZE-115	115	10.22	8.98	1.988+j6.182	2.170+j9.266	15.07	12.60	1.079+j4.725	1.706+j7.842
ITZIMNA	IZI-115	115	11.08	11.87	1.692+j5.751	1.590+j4.787	15.33	15.27	1.000+j4.657	1.604+j4.832
IXCHEL	IXC-115	115	5.66	5.36	4.289+j10.908	6.106+j12.413	7.94	6.90	2.545+j8.838	6.096+j12.269
IZAMAL	IZL-115	115	3.04	1.84	6.183+j20.947	17.591+j61.959	3.57	2.09	5.484+j19.710	17.602+j61.788
KABAH	KAB-115	115	7.94	10.00	3.216+j7.724	0.638+j3.313	12.81	15.32	1.416+j5.523	0.597+j3.106
KALA	KAL-115	115	4.82	4.60	4.574+j12.991	4.310+j15.633	6.80	6.07	2.650+j10.415	4.301+j15.068
KAMBUL	KBL-115	115	1.88	2.20	12.344+j32.993	1.980+j20.088	2.35	2.61	9.471+j29.616	2.170+j21.630
KANASÍN POTENCIA	KNP-115	115	12.87	18.82	1.439+j4.954	0.071+j0.514	18.89	27.37	0.705+j3.801	0.074+j0.519
KANASÍN POTENCIA	KNP-230	230	8.37	9.96	4.361+j15.261	1.352+j9.061	12.81	14.05	1.758+j11.264	1.418+j9.080
KEKEN	KEK-115	115	7.56	8.70	3.153+j8.203	1.457+j5.287	11.63	12.41	1.425+j6.116	1.448+j5.145
KOHUNLICH	KHN-115	115	5.78	5.33	3.917+j10.790	3.353+j14.231	8.10	6.83	2.210+j8.744	3.276+j13.928
KOPTE	KOP-115	115	4.24	3.25	4.313+j15.050	9.803+j28.471	4.93	3.67	3.819+j14.304	9.821+j28.600
KUKULKAN	KUK-115	115	7.84	8.45	3.198+j7.840	1.298+j6.763	12.50	12.16	1.418+j5.669	1.237+j6.482
LAGUNA DE TÉRMINOS	LTE-115	115	2.87	3.09	6.893+j22.125	3.940+j17.970	4.21	4.52	3.576+j16.972	3.032+j14.981
LÁZARO CÁRDENAS	LAC-115	115	2.06	1.42	11.306+j30.169	26.963+j71.014	2.76	1.71	7.792+j25.335	26.957+j70.629
LEE	LEE-115	115	7.24	4.08	2.020+j8.942	9.812+j29.211	9.17	4.72	1.277+j7.863	9.817+j29.279
LERMA	LRA-115	115	6.04	8.09	3.560+j10.403	0.112+j3.126	9.41	12.95	1.587+j7.601	0.104+j2.500
LERMA	LRA-230	230	3.13	3.86	13.133+j40.329	0.902+j20.265	4.68	5.67	5.854+j30.663	0.841+j18.382
MAHAHUAL	MHH-115	115	1.11	0.64	20.475+j56.130	63.802+j181.661	1.35	0.73	16.899+j51.308	63.793+j181.268
MAXCANU	MAX-115	115	4.59	2.89	4.615+j13.721	11.872+j38.312	5.56	3.32	3.693+j12.609	11.855+j38.241
MAYA KOBÁ	MYK-115	115	6.45	6.24	3.178+j9.793	2.460+j11.183	8.45	7.62	1.735+j8.463	2.476+j11.365
MÉRIDA COUNTRY CLUB	MCR-115	115	7.75	5.85	1.670+j8.403	4.208+j16.654	9.64	6.81	1.127+j7.495	4.225+j16.779
MÉRIDA II	MDA-115	115	12.19	12.19	1.653+j5.191	1.290+j5.573	20.63	23.44	0.640+j3.481	0.272+j2.627
MÉRIDA ORIENTE	MDN-115	115	10.46	9.91	1.868+j6.066	2.274+j7.332	14.52	12.57	1.119+j4.902	2.267+j7.297
MÉRIDA POTENCIA	MDP-230	230	8.16	10.53	3.953+j15.780	0.373+j6.322	12.44	15.52	1.556+j11.634	0.295+j5.598
METROPOLITANA	MTO-115	115	10.32	9.32	1.927+j6.141	2.255+j8.480	15.33	13.33	1.009+j4.655	1.749+j7.011
MOON PALACE	MPA-115	115	6.34	5.50	3.025+j10.029	3.772+j14.897	8.71	6.86	1.466+j8.252	3.774+j14.932
NACHI COCOM	NCM-115	115	13.46	15.66	1.495+j4.702	0.705+j3.040	20.27	21.98	0.741+j3.526	0.679+j2.949
NICHUPTE	NCT-115	115	8.09	10.34	3.180+j7.569	0.513+j2.998	13.07	15.94	1.401+j5.408	0.478+j2.796
NICTE HA	NIH-115	115	7.67	9.15	3.154+j8.059	0.968+j4.506	12.22	13.56	1.361+j5.818	0.943+j4.358
NIZUC	NIZ-115	115	9.30	13.25	2.687+j6.618	0.103+j0.865	16.53	23.36	0.918+j4.321	0.090+j0.810
NIZUC	NIZ-230	230	5.18	5.99	9.071+j23.996	1.961+j15.843	8.19	8.79	3.370+j17.520	1.737+j14.900
NORTE	NTE-115	115	13.59	17.42	1.371+j4.690	0.211+j1.943	19.89	24.05	0.691+j3.606	0.232+j2.015
NORTE	NTE-230	230	7.52	9.05	4.625+j17.035	1.127+j9.713	11.27	12.55	1.986+j12.803	1.219+j9.828
OXTANKAH	OXT-115	115	2.74	2.58	8.479+j22.666	9.054+j27.623	4.22	3.49	4.356+j16.762	8.991+j26.785
PHOTOEMERIS SUSTENTABLE	PHS-115	115	1.85	2.19	12.509+j33.696	1.639+j19.033	2.30	2.60	9.586+j30.233	1.833+j20.616
PLAYA CAR	PLY-115	115	7.55	7.50	3.051+j8.253	1.661+j8.992	10.33	9.38	1.575+j6.890	1.681+j9.231



Subestación eléctrica	Acónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$	3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$
PLAYA DEL CARMEN	PCN-115	115	7.81	9.91	2.963+j7.972	0.206+j3.297	10.79	12.96	1.487+j6.606	0.226+j3.536
PLAYA DEL CARMEN	PCN-230	230	4.43	5.23	9.998+j28.266	1.842+j16.954	6.27	6.86	4.503+j22.840	1.990+j17.847
PLAYA MUJERES	PMU-115	115	6.51	6.54	3.619+j9.532	2.250+j10.001	9.50	8.68	1.877+j7.459	2.240+j9.857
POKTAPOK	PKP-115	115	8.40	10.81	3.096+j7.270	0.468+j2.774	13.94	17.12	1.297+j5.077	0.422+j2.547
POLYUC	PYU-115	115	1.64	1.25	14.419+j37.889	19.311+j76.012	2.01	1.44	11.496+j34.443	19.513+j76.890
PONIENTE	PTE-115	115	12.18	13.30	1.562+j5.222	0.831+j4.292	17.96	18.00	0.799+j3.987	0.838+j4.243
POPOLNAH	PPH-115	115	2.49	1.92	7.090+j25.654	12.723+j48.868	2.92	2.19	6.059+j24.263	12.706+j48.812
PUERTO JUÁREZ	PJU-115	115	8.68	10.81	2.958+j7.051	0.497+j3.303	14.37	16.79	1.218+j4.934	0.471+j3.117
PUERTO MORELOS	PMO-115	115	7.83	7.71	2.626+j8.059	1.786+j8.835	10.78	9.69	1.246+j6.658	1.816+j9.040
PUERTO PROGRESO	PPO-115	115	4.14	4.26	2.977+j15.754	2.312+j14.795	4.77	4.75	2.635+j15.090	2.437+j15.546
PUERTO REAL	PTR-115	115	3.67	5.30	5.207+j17.350	0.029+j1.629	5.47	8.01	2.429+j13.133	0.043+j1.734
PUERTO REAL	PTR-230	230	1.94	2.72	20.171+j65.548	0.263+j10.837	2.90	4.05	9.449+j49.447	0.347+j11.616
PUNTA SAM	PSA-115	115	7.57	7.62	3.176+j8.176	1.832+j8.608	11.66	10.47	1.441+j6.093	1.823+j8.464
RIVIERA MAYA	RMV-115	115	9.27	10.90	2.384+j6.754	0.318+j4.149	13.20	14.31	1.052+j5.433	0.357+j4.409
RIVIERA MAYA	RMV-230	230	5.22	6.80	8.807+j23.875	0.443+j8.458	7.77	9.55	3.566+j18.450	0.500+j8.994
RIVIERA MAYA	RMV-400	400	3.23	4.07	24.121+j67.349	1.825+j29.387	4.71	5.55	9.773+j53.058	2.038+j31.319
SABANCUY	SBY-115	115	2.28	1.57	8.354+j27.853	17.661+j66.974	2.76	1.80	6.490+j25.626	17.670+j67.053
SAMULA	SAM-115	115	4.77	4.71	4.549+j13.160	3.692+j14.498	6.78	6.29	2.570+j10.463	3.683+j13.889
SAMULA II	SAD-115	115	4.45	4.51	4.729+j14.142	3.134+j14.444	6.20	5.97	2.767+j11.459	3.124+j13.839
SAN IGNACIO	IGN-115	115	5.43	5.77	1.887+j12.075	1.559+j10.207	6.37	6.54	1.529+j11.371	1.609+j10.680
SAN PEDRO	SAE-115	115	2.12	1.36	5.514+j30.813	26.720+j79.861	2.56	1.57	4.630+j28.198	26.720+j79.162
SANTA LUCIA	SLC-230	230	4.03	3.10	8.018+j31.929	15.385+j61.654	7.49	8.23	2.388+j19.362	0.864+j15.087
SANTO DOMINGO	SDM-115	115	3.25	3.57	4.641+j19.920	2.485+j14.800	3.65	3.93	4.426+j19.502	2.650+j15.631
SIHOCHAC	SHC-115	115	2.72	1.88	7.444+j23.251	13.372+j56.264	3.40	2.20	5.530+j20.784	13.364+j55.933
SUCILA	SUC-115	115	3.29	2.80	4.994+j19.573	9.120+j29.346	3.78	3.15	4.601+j18.773	9.176+j29.664
SUR	SUR-115	115	12.12	12.42	1.676+j5.217	1.354+j5.171	18.35	17.74	0.832+j3.891	1.155+j4.536
TEKAX II	TKD-115	115	3.14	2.31	6.616+j20.075	9.062+j42.978	3.76	2.64	5.305+j18.673	9.093+j43.330
TEMAX II	TXS-115	115	3.42	3.30	4.528+j18.865	5.813+j20.786	3.85	3.66	4.286+j18.456	5.866+j21.218
TICUL I	TIU-115	115	7.65	7.76	2.575+j8.285	1.870+j8.274	9.53	9.17	1.778+j7.452	1.885+j8.529
TICUL II	TIC-115	115	9.89	12.33	1.605+j6.516	0.097+j2.958	12.74	15.11	0.808+j5.677	0.112+j3.214
TICUL II	TIC-230	230	7.77	9.96	5.101+j16.305	0.488+j6.593	11.38	13.64	2.039+j12.672	0.552+j7.040
TICUL II	TIC-400	400	4.44	5.33	15.107+j49.799	2.105+j28.088	6.33	7.01	5.992+j39.702	2.362+j29.945
TIXMEHUAC	TXM-115	115	2.01	1.34	8.645+j31.816	20.329+j79.747	2.33	1.51	7.330+j30.420	20.361+j80.100
TIZIMIN	TZM-115	115	4.01	3.47	4.043+j16.060	6.708+j23.374	4.74	3.98	3.537+j15.002	6.744+j23.540
TULUM	TUM-115	115	2.72	1.82	7.896+j23.122	15.609+j58.767	3.21	2.07	6.685+j21.724	15.581+j58.610
UCU	UCU-115	115	8.70	7.83	1.975+j7.370	2.446+j10.159	11.68	9.69	1.202+j6.139	2.453+j10.106
UMAN	UMA-115	115	6.36	4.08	3.429+j9.857	8.735+j26.738	8.10	4.82	2.565+j8.646	8.603+j26.304
VALLADOLID	VAD-115	115	7.97	10.28	1.361+j8.214	0.091+j2.833	13.42	17.99	0.466+j5.422	0.041+j1.950
VALLADOLID	VAD-230	230	8.44	10.67	2.412+j15.554	0.084+j5.794	12.57	15.73	0.775+j11.592	0.070+j5.281
VALLADOLID DISTRIBUCIÓN	VDD-115	115	6.73	5.83	1.882+j9.684	6.372+j13.285	10.24	7.98	1.016+j7.063	6.373+j12.590
XCALACOCO	XLC-115	115	6.75	6.32	2.907+j9.390	2.428+j11.758	8.90	7.70	1.523+j8.067	2.450+j11.953
XPUJIL	XPU-115	115	1.59	1.26	8.463+j40.763	18.727+j72.239	1.96	1.48	5.546+j36.884	18.708+j71.960



Subestación eléctrica	Acrónimo	Tensión (kV)	Corriente de cortocircuito (kA) e impedancias de Thévenin secuencias positiva y cero (Ω)							
			NCC mínimo 2022				NCC máximo 2022			
			3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$	3F	1F	$Z_{TH(+)}$	$Z_{TH(0)}$
XUL HA	XUL-115	115	3.56	4.85	6.213+j17.561	0.161+j4.141	6.24	8.26	2.228+j11.486	0.100+j3.309
XUL HA	XUL-230	230	2.01	2.50	21.431+j62.359	1.675+j28.873	3.24	3.77	8.138+j44.280	1.406+j26.894
YAXCHE	YXE-115	115	6.37	5.68	3.540+j9.797	3.137+j14.135	9.19	7.31	1.801+j7.739	3.128+j13.993
ZAC NICTÉ	ZNE-115	115	6.90	6.98	3.100+j9.106	1.344+j9.435	9.21	8.62	1.635+j7.758	1.363+j9.633