			Subi	station 1	Longitude_Substation_1	Latitude_Substation_1	Sut	betation 2	Longitude_Substition_2	Latitude_Substation_2				Ma	cimum Current I	THE (A)			Dynamic lin	e rating (DLR)		Electrical Param		TSO Share until border	
NE name	EIC Code	TSO	Full name	Short name			Full nam	e Short name			Voltage JevelikVi	Period 1	Period 2	Period 2	Period 4	Period 5	Period 6	Flood	DLRmin(A)	DLRmax(A)	Resistance RIO	Reactance X(D)	Susceptance BruSt	Length (km)	Comment
Ritano-Zandvier 380 G	HIT.SE.M JAWASE	TENANT NI	Diland	Q1 1 580	411	11.07	Two-to-last	744 980	A SARTY	11 8681	400	2500	2100								0.095	0.976	6.655	6.600	Tie-line to SE (Elia)
Riland-Zandvlet 380 W	10T-BE-NL-00004C	TENNET NL	Riland	R11380	4.22		Zandvšet	255,380	430031	53,36953	400	2500	3100								0.089	0.976	6.736	6.600	Tie-line to BE (Elia)
Maasbracht-Van Evck 390 W	10T-RE-NL-00002G	TENNET N.	Mansbracht	MRT280	5/92	11.11	Van Evsk	V90380	5,778920	10.1218001	400	2500	2075								0.139	1.579	22.957	8.100	Tie-line to BE (Elia)
Meanbracht-Van Evck 390 Z	10T-RE-NL-00001	TENNET N.	Mansbracht	MRT280	5.92	11.11	Van Evsk	V90380	3,7789049	10.1208001	400	2500	2075								0.136	1.576	22.837	8.100	Tie-line to BE (Elia)
Gronau-Hengelo 280 W	10T-DE-NL-00000R	TENNET NL	Gronau	GNA380	7.08	12.2	Hangelo	HGL380	6.76	10.25	400	2500	2100								0.300	2.900	45.521	16.400	Tie-line to DE (Amprion
Gronau-Hengelo 390 Z	10T-DE-NL-00004P	TENNET N.	Gronau	GNA380	7.01	10.2	Henoelo	HGL390	6.79	12.21	400	2500	2100								0.300	2.900	45.521	16.400	Tie-line to DE (Amprion)
Massbracht-Oberzier 360 W	10T-DE-NL-00009N	TENNET N.	Mansbracht	MRT280	5.92	11.11	Oberzier	092390	6.69722	10,8733	400	2500	2075								0.726	7.548	120.438	10.500	Tie-line to DE (Amprion)
Massbracht-Sieradof 360 Z	10T-DG-NL-0000GL	TENNET N.	Mansbracht	MOTSON	5.92	11.10	Siersdorf	S0F380	6,22006	10,1121	400	2500	2675								0.499	4.893	81.901	10.500	Tie-line to DE (Amprion)
Diele-Meeden 380 W	10T-DE-NL-00000T	TENNET N.	Diele	D4.390	7.80	15.25	Meden	MEE380	6.70	55.12	400	1520	1520								0.326	3.708	52.972	16.500	Tie-line to DE (TENNET D
Diele-Meeden 380 Z	10T-DE-NL-00001V	TENNET N.	Diele	D4.360	7.00	35.25	Meden	MEE380	6.75	10.12	400	1520	1520								0.326	3.708	52.972	16.500	Tie-line to DE (TENNET D
Doelinchem-Niederheit 260 W	10T1001C-000235	TENNET N.	Doesinchem	DTC390	623	11.98	Nederhein	N0R380	6.68072	11,600	400	4000	4000								0.479	7.221	131.421	22.190	Tie-line to DE (Amprion
Doelinchem-Niederhein 390 Z	18T-DC-M -000021	TENNET N	Doestorbern	DTC299	679		Niederhein	NOP301	4 68777	11.698	400	4000	4000						l .		0.471	7.198	130.793	22.190	Tie-line to DE (Amprion)

i name	EIC Code	TSO	Full name	Short name	Longitude_Substation_1 Latitude_Sub	Full name		Longitude_Substation_2 Latitude_Sub-	Volts	ONTERNI SEE	Period 1	Period 2	Maximum Current Inna: (A) Period 2 Period 5 Period 5 Fixed	DLRmin(A)	ine rating (DLR) DLRnexi®	Resistance RVDI	Electrical Parameters Reactance XIO: S	usceptance Bludi)	Length (km)	Comment
erwile-Costzaan 380 W erwile-Costzaan 380 7	49T0000000000517	TENNET N.	Oostzaan	NOZNOS1 NOZNOS1	4.88	1241 Beverwik	NEW361	444	12 47	400	2890 2890	2200 2200				0.372	4353 4353	65-61	17,000	
erwiii-Oostzaan 380 Z erwiii-Withuizen 380 W	49T0000000000000009V	TENNET N.	Gostzaan Revereik	NOZNIH NEVWIRI	488	12.61 Beveruik 12.67 Vilhuizen	NEW381 NH2381	6.70	12.67	400	3000	2000				0.3/2	2860	194.002	14,310	
erwiik-Villhuizen 280 Z	49T000000000048X	TENNET N.	Severalit.	NEW 281	546	12.67 Whispen	MHZ381	4.70	12.17	400	2000	2000				0.967	2860	194.002	14,310	
swilk-Vilhuizen 280 O	49T000000000047Z	TENNET N.	Rinkwik	NEWK381	418	szos Vilhuizen	MH2381	479	22.27	400	2000	2000				1.071	10.191	1425.929	45.944	
alle/diffurites 180 P	49T00000000000000	TENNET N	Shirair.	NEW YORK	410	anne Village	MAG2381	4.00	22.27	400	3000	2000				1.071	10.191	1405.000	45.944	
sele-Riland 180 G	ANTOCOCCCCCCCCCCC	TENNET N	Sonsele	NDSI 181	171	11 61 Riland	NG11 191	422	12.67	400	2500	2200		9500.0	4000	0.020	10.184	153.060	28.924	
rain-Diland NR 7	4170000000000000	TENNET N	Sometin	NDSI 181	171	stee Riland	MOLLOW!	411	11.07	400	2500	2200		2500.0	4000	0.000	10.184	153.000	38.924	
neer-Dodewaard 380 Z	49T000000000000C	TENNET N.	Dodeward	NDOD381	100	11 11 Borney	NEMBARI	100	22.64	400	2500	2875		20000	4000	6970	11.421	171,589	41.700	
Avier Knotik-Diemen 200 W	4970000000000000	TENNET N	Grankwise Knots		4.00	1716 Diemen	NORSS:	3.00	27.00	400	2500	3100				0.640	5.155	134,299	20,010	
estein-Krimpen aid Ussel 390 W	497000000000000000000000000000000000000	TENNET N	Cranetio	NOSTRA	473	11.81 Krimpen ald Us		441	11.71	400	4000	4000				6.992	3,590	71.698	14.035	
setsin-Krimpen aid Ussel 380 Z	49T00000000000000	TENNET N	Cravestein	NCST381	679	11.81 Krimpen aid Us	an indicated	641	****	400	4000	4000				6.992	2.596	71 666	14.835	
nen-Lekstad 280 W	497000000000000	TENNET N.	Diemen	NDM981	101	NZ NE Lebeled	NLLS081	114	1218	400	4000	4000				1.190	13.716	209.651	50.430	
nen-Lekstad 380 Z	49T0000000000070L	TENNET N.	Diemen	NOMES!	166	32.35 Lebeted	N I 5391	116	2228	400	2900	2100				1.190	13.716	209.651	50.430	
waard-Doelinchem 200 W	49T0000000000011J	TENNET N.	Dodewaard	NDQD381	3.66	11.91 Doelinchem	NDTC381	623	11.70	400	2500	3100				1.156	12,372	192,859	45.400	
wasni Doefortem 380.7	49/7000000000001734	TENNET N	Dodewand	NDODGE	3.66	st st. Doellochem	MOTORIA	4.79	22.00	400	9500	3100				1 155	12 122	192 859	45,400	
nchem-Hengelo 200 W	49T0000000000014D	TENNET N	Doellochem	NOTCHE	9.23	11 te Hennelo	NAC 301	171	27.75	400	9500	3100				1.694	19.040	947 794	58,650	
chem-Hengelo 200 Z	49/T000000000015B	TENNET N	Doellochem	NOTCHE	623	11 ME Mannein	NAC 301	4.79	12.21	400	2500	3100				1.694	19.040	947 794	58,650	
haven - Eemshaven het Hoosland 360 Zwart	49T0000000000105A	TENNET N.	Femshaven	NEEMORY	6.87	33.43 Eemshaven het	F NEHHORI	6.89	38.62	400	4000	4000				0.006	0.133	58.856	0.800	
resen had binopined a Mandan 1991 Zured	49/700000000001008	TENNET N	Camahasan hat	NEUMON	4.99	12.52 Monday	NAKCC104	4.00	20.77	400	4000	4000				0.520	6.823	192,366	37.200	
hauen Oude Schin "Eerschauen 901 W	49/T0000000000177	TENNET N	Camehouse	NECHOL	6.87	sa ca Europhysian Ou	M NEOSSEL	4.00	22.00	400	4000	4000				0.021	0.334	6.922	1.440	
haven Outs Schin - Earnshoven 901.7	ANTOCOCCOCCCCCC	TENNET N	Femshaven	NECHOL	6.87	1141 Femshaven Ou	M NEOSSEL	4.00	22.00	400	4000	4000				0.021	0.334	6.922	1.440	
haven Oude Schip-Doekeoat 380 W	49T0000000000541	TENNET N.	Eemshaven Ou	NEO9381	9.29	stat Dorkegat	NDHG381	170	15.63	400	4000	4000				0.024	0.275	4.147	1.000	
haven Oude Schip-Doekegat 380 Z	49T00000000000000	TENNET N.	Eemshaven Ou	NEO9381	5.25	sses Dorkeget	NDHG381	4.89	15.63	400	4000	4000				0.024	0.275	4.147	1.000	1
haven-Meeden 200 W	49T000000000004G	TENNET N.	Femshaven	NEEMS81	9.87	11.61 Meeden	NASE281	4.00	15.12	400	4000	4000				0.520	8.823	192,366	36.900	1
note 200 W	49T0000000000004A	TENNET N.	Ens	NENSOR1	182	szez Zwole	NZL3901	121	3233	400	2500	3100				0.810	8.747	135.375	32.000	1
Swolle 380 Z	49T00000000000258	TENNET N.	Ens	NENSOR1	1.82	szaz Zwole	N23,3901	6.19	12.11	400	2500	3100				0.810	8.747	135.375	32.000	1
ruidenberg-Eindhoven 380 G	49T0000000000193	TENNET N.	Geertruidenbers	NGT3801	488	1172 Eindhoven	NEHV381	110	11.45	400	2500	3100				1.470	19.006	264,966	63.900	1
ruidenberg-Eindhoven 380 W	4970000000000000	TENNET NL	Geertruidenbers	NGT3801	488	1172 Eindhoven	NEHV381	5.58	11.05	400	2500	2500				1.499	19.030	264.327	63.900	1
udenbero-Eindhoven 380 Z	49T000000000021G	TENNET NL	Geertruidenbers	NGT3801	4.83	11.75 Eindhoven	NEHV381	5.58	11.01	400	2500	3100				1.506	19.121	265.627	63.900	1
en ald Ussel-Bleiswik 380 W	49T00000000000452	TENNET NL	Krimpen aid Us		448	51.95 Eteksylk	NEWKIRI	438	1206	400	4000	4000				0.283	4.521	88.960	18.560	1
nan aid Henal Bisinally 160 7	45770000000000444	TOWNET NO	Wittenson aid He		***	er en Steinwille	NOWWYSH	444	17.54	400	4000	4000				0.283	4.521	88.960	18.560	1
non mid I lancel. Encoderation blooding 1001 W	ASTTOCOCCOCCCCCC	TOWNET NO	Wittenson aid He		***	en en Erseitsber Kom	IN NEWSTAY		17.76	400	2500	2500				0.905	10.599	275.964	37.520	1
en aid Susei-Diemen 200 Z	49T000000000220A	TENNET N.	Krimpen aid Us	NOUSE1	448	5159 Diemen	ND8661	3.00	12.10	400	2500	2500				1.300	15.904	410.263	58.099	1
en ald Ussel-Geertruidenberg 390 W	49T0000000000274	TENNET NL	Krimpen aid Us	NGUS61	444	1110 Geetsüdenbert		4.00	11.70	400	2926	3300				0.796	9313	139.983	34.020	1
sen aid Ussel-Geertruidenberg 390 Z	49T000000000000282	TENNET N.	Krimpen aid Us		448	1110 Geetsüdenber		4.80	11.70	400	2926	3300				0.795	9313	139.983	34.020	1
ted-Ems 380 W	49T0000000000022E	TENNET N.	Lehetad	NLLS381	5.56	3238 Ens	NENGOR1	5.82	1242	400	4000	4000		1		0.492		96.966	21,000	1
tad-Ems 380 Z	49T0000000000023C	TENNET N.	Lehetad	NLLS091	116	1218 Ens	NENGOR1	180	32 62	400	4000	4000				0.492	5723	96.966	21,000	
	45T0000000000007A	TENNET NL	Measbracht	NASTORY	5.52	53.15 Bosmeer	NEMRORI	5.90	11.66	400	2500	2975				1.347	15.658	239.249	\$7.900	
	49T000000000013F	TENNET NL	Measbracht	NASTORY	5.92	53.15 Dodewaard	NDOD381	3.66	11.11	400	2500	2500				2.316	27.291	409.828	99.600	
bracht-Eindhoven 360 W	49T00000000000290	TENNET NL	Measbracht	NASTORY	5.92	1111 Eindhoven	NEHV381	5.58	11.05	400	2826	2200				1.123	13.351	200.550	48.742	1
bracht-Eindhoven 390 Z	49T0000000000000	TENNET N.	Measbracht	NASTORY	5.82	53.15 Eindhoven	NEHV281	3.34	31.65	400	2926	2200				1.133	13.351	200.550	48.742	
rlaide-Simonshaven 380 W	49700000000000271	TENNET N.	Maacytakto	NBNL381	4.02	51 92 Simonshaven	NGMH081	4.27	11.84	400	4000	4000				0.397	6.302	125,659	26,000	
dalde-Gimonshaven 380 Z	49T00000000000099Y	TENNET NL	Massylaide	NBN1381	4.02	1117 Simonshaven	NGM-081	4.27	11.84	400	4000	4000				0.397	6.302	125.659	26,000	
rean-Diamen Will 7	ASTRONOMORO-SW	TENNET N	Contrasa	N07M994	4.00	ster Diamen	NORFOLD ST	9.60	27.00	400	2990	3000				0.362	4.230	62.544	15.451	
aan-Diemen 380 G	49T00000000000525	TENNET N.	Costzaan	NO2N081	4.88	32.61 Diemen	ND8661	3.00	32.86	400	2890	3000				0.362	4.230	62.544	15.451	
nd-Geertruidenberg 380 W	49T0000000000058LI	TENNET NL	Rilland	NRLL381	4.22	1142 Geetsüderbert	NGT3801	4.00	11.70	400	2500	3100				1.573	17.255	259.002	61.213	1
d-Geertruidenberg 380 Z	4970000000000000	TENNET NL	Rilland	NRLL381	4.22	1142 Geetsüderbert	NGT3801	4.80	11.70	400	2500	3100				1.573	17.255	259.002	61.213	
onshaven-Cravestein 380 W	49T00000000000355	TENNET NL	Simonshaven	NGMH081	4.27	51.85 Cravestein	NCST381	479	11.81	400	4000	4000				0.019	9.800	195.400	40.430	
onshaven-Cravestein 380 Z	4970000000000000	TENNET NL	Simonshaven	NGMH081	4.27	53.86 Cravestein	NCST381	479	11.81	400	4000	4000				0.019	9.800	195.400	40.430	
eringen-Bleiswik 200 W	49T00000000000429	TENNET NL	Wateringen	NWTR361	4.81	12.02 Etekwik	NEWKIRI	4.88	32.04	400	2470	2470				0.176	3455	1018.536	22.000	
eringen-Bielswilk 390 Z	4970000000000436	TENNET N.	Wateringen	NWTR361	4.81	12.02 Etekwik	NEWKIRI	4.88	32.04	400	2470	2470				0.176	3,655	1018.530	22.000	
ringen-Westedee 280 W	49T0000000000041A	TENNET N.	Wateringen	NWTR361	4.81	52 02 Westedee	NWL3801	4.22	51.98	400	4000	4000				0.100	1.662	22.490	6.900	
eringen-Westerlee 390 Z	49T0000000000040C	TENNET NL	Wateringen	NWTR361	4.81	32.02 Westedee	NWL3801	4.22	51.98	400	4000	4000				0.100	1.662	32.490	6.800	
terlee-Maanviside 300 W	49T0000000000009P	TENNET NL	Maacytakto	NBN1381	4.02	51 92 Westedee	NWL3801	4.22	51.98	400	4000	4000				0.294	12.007	224.010	20.432	
teries-Meanviside 300 Z	49700000000000703	TENNET NL	Maarytakto	NANL381	4.00	53 92 Westedee	NWL3801	4.22	11.10	400	4000	4000				0.294	12.007	224.010	20.432	1
Libraria MAW	ASTROMOMOMOMO	TENNET N	Zurde	NOV 9804	6.78	ners Mennelo	MAKES SON	4.76	40.00	400	2500	3100				1.530	16.536	253.993	60.310	1
January Mil 7	ASTROCOCCOCCOCC	TENNET N	Zurde	NOV 9804	6.78	ners Mennelo	MAKES SON	4.76	40.00	400	2500	3100				1.530	16.536	253.993	60.310	1
e-Meeden 280 W	49T000000000001M	TENNET NL	Zwole	NZ3.3801	6.29	5238 Meeden	NACE 361	4.95	58 52	400	4000	4000				1.497	25.632	522.360	107.850	1
Meden 380 Z	49T0000000000002K	TENNET NL	Zwole	NZ3.3801	6.29	5238 Meeden	NACE 361	6.95	58.52	400	4000	4000				1.501	25.634	522.305	107.850	1
									1		1			1		1				1
haven-Eemshaven Oost 220 W	4970000000001930	TENNET NL	Eemshaven	NEEM921	6.87	5142 Eemshaven Oc		6.82	38.68	220	600	600				0.075	0.104	135.060	0.930	1
haven-Eemshaven Oost 220 Z	49T000000000194M	TENNET NL	Eemshaven	NEEM921	6.87	11.42 Eemshaven Oc	s NEHA221	6.82	33.41	220 220	4000	4000				0.075	0.104	135.040	0.930	1
haven-Robbenolaat 220 A	49T000000000019SK	TENNET NL	Eemshaven	NEEM921	6.87	sx.cz Robbenplast	NRSR221	6.82	33.41										0.040	1
haven-Robbenolast 220 B	4970000000001969	TENNET NL	Earnshaven	NEEM921	6.87	11 02 Robbenplant	NRSB221	6.87	58-68	220	4000	4000				0.004	0.050	9.224	0.040	1
mweo-Ens 220 W	49T0000000000197G	TENNET NL	Hesserweg	NHSW221	6.29	3238 Ens	NENG221	5.85	1242	220	2500	2500				0.749	8291	139.120	31.410	1
nweo-Era 200 Z	49T000000000199E	TENNET NL	Hessenweg	NHSW221	6.29	3238 Ens	NENS221	5.85	1242	220	2500	2500				0.749	8291	139.120	31.410	1
enweo-Zeverveen 220 W	49T000000000199C	TENNET NL	Hessenweg	NHSW221	6.29	1218 Zeverveen	NZYV221	6 12	1803	220	2500	2790				1.302	19.720	230.906	64.052	1
mun Janes and 1967	ASTRONOMOROUG	TENNET N	Ginerature?	NAVOWOON	4.78	syss Zeenman	N2V5/994	4.11	10.00	220	2500 2500	2790				1.302	19.720	230.906 47.668	64.052 10.047	1
man Berner 99 W	49770000000000044	TENNET N	Lowerman	NE CRIDO!	***	name Description	NBCMOH	4.00	40.77					1		0.259	2.852		10.047	1
umeer-Beroum 220 Z	49T00000000000022	TENNET NL	Louvemeer	NLS1621	5.88	55 18 Beroum	NBCND21	4 08	55.22	220	2500	2500				0.259	2.852	47.000		1
meer-Oudehaske 220 W	49T000000000064Z	TENNET NL	Louwemeer	NLS1621	1.88	5339 Oudebaske	NOHK221	5.87	12.87	220	2500	2790		1		0.661	7.499	125.259	28.485	1
meer-Oudehaske 220 Z	49T00000000000GX	TENNET NL	Louwemeer	NLS1621	1.88	5339 Oudebaske	NOHK221	5.87	12.87	220	2500	2750 2500				0.661	7.499	125.263	28.485	1
r-Weiwerd 200 B	49T000000000201E	TENNET NL	Meeden	NMEE221	4.95		NWFW221	4.96	58.00		2300			1			7.248	139.719	29.600	1
r-Weiwerd 200 O	49T0000000000202C	TENNET NL	Meeden	NMEE221	6.85	5532 Weiwerd	NWFW221	6.96	58.80	220	2300	2500				0.492	7.208	140.388	29.600	1
aske-Ens 220 W	49T00000000000000V	TENNET NL	Oudehaske	NOH0221	5.87	3297 Ens	NENS221	5.85	1242	220	2500	2500				1.047	11.515	192.592	43.798	1
aske-Ens 220 Z	49700000000000077	TENNET NL	Oudehaske	NOH0221	5.87	3297 Ens	NENS221	5.85	1242	220	2500	2790				1.047	11.515	192,592	43.798	1
splast-Weiwerd 220 P	49T000000000203A	TENNET NL	Robbenplast	NR88221	6.87	SLGS Weiwerd	NWFW221	6.96	58.80	220	2300	2500				0.416	5.935	112.126	25,600	1
nplast-Eemshaven het Hooeland 200 G	49T0000000002129	TENNET NL	Robbenplast	NR88221	6.87	53.63 Eemshaven het	F NEH+021	6.86	11.42	220	2300	2500				0.011	0.193	0.000	0.800	1
aven het Hoosland-Weiwerd 220G	4970000000002191	TENNET NL	Earnahaven bet	NEHH021	6.96	5542 Weiwerd	NWFW221	6.96	58.90	220	2300	2500				0.404	5791	0.000	23.200	1
Istan-Camehouse 999.G	ASTTOCOCCOCCCCCC	TOWNET NO	Vienwisten	MAKE 994	***	sem Eamahauan	NEEMON.	444	10.07	220	2300	2500				0.990	11.441	160.480	40.020	1
ristan, Drinksanninan 100 W	4570000000000000	TENNET N	Vanadatas	MAA 994	***	seem Dishbusinised	NG00394	444	10.00	220	2300	2500				1.009	11.195	0.000	28.930	1
rtation-Zeverveen 220 W	497000000000000004	TENNET N.	Vienwitten	NV4221	6.67	55.25 Zeverveen	N2Y5021	612	1000	220	2500	2790				0.400	6.970	90.840	22.710	1
	49T00000000002072	TENNET N.	Vienwisten	NAVL221	9.67	11.22 Zeveryeen	NZYV221	6.12	35.03	220	2500	2790				0.400	6.970	90.840	22.710	1
n-Vervedates 220 W	49T0000000000008R	TENNET N.	Beroum	NBGM921	9.01	33.22 Venerates	MWI221	5.67	15.22	220	2500	2500				0.726	8.276	153.305	32.490	1
	49700000000001076	TENNET N.	Sergum	NBGM921	9.01	11.22 Robbenplast	NR98221	187	33.61	220	2300	2500				1.713	19.691	313.823	72.410	1
m - Robbenolast 220 Z																				

Location				Longitude	Latitude	Maximum Curre	int Imax (A) primary	Voltage_			Electrical Paramete						ase Shifting Properties				
	oort Name		TSO			Min			Seconda	Resistance Rit	Ω) Reactance X/Ω	Susceptance B (s					netrical/Asymmetrical	Phase Regulation 5u		Comment	
PST Meeden PST W MEE F	PST W	49T00000000000780	D TENNET NL	6.95	53.12	1520	1520	400	400	0.1	30 10.00	6 -5.89	2.770	-5/5	90	.000 Svmm	etrical		4.549 Connec	sted to tile lie 10T-D	E-NL-00002T and 10T-DE-NL-00001\
PST Meeden PST Z MEE F		49100000000000770		6.95	53.12	1520	1520	400	400	0.1			2.770		90	.000 Symm	etrical		4.549 Connec	cted to tie-lie 10T-D	E-NL-00002T and 10T-DE-NL-00001V
TR Eemshaven Hopeland 380kV EHHS		49T0000000000184F		6.86	53.42	1140	1140	400	220	0.0				d .							
TR Eemshaven 380kV TR 423 EEM3	80 TR423	49T0000000000183F	TENNET NL	6.87	53.43	1140	1140	400	220	0.0	91 31.52	9 -10.34	0.970	d .							
TR Eemshaven 380kV TR 401 EEM3				6.87	52.43	1140	1140	400	220	0.0				1							
TR Eemshaven 380kV TR 402 EEM3				6.87	53.43	1140	1140	400	220	0.0											
TR Ems 380kV TR 404 ENS3	80 TR404	49T0000000000187J	TENNET NL	5.81	52.62	1140	1140	400	220	0.1	12 42.93	3 -6.88	0.741	4							
		49T00000000001858		5.81	52.62	760	760	400	220	0.0				1							
		49T0000000000186E		5.81	52.62	760	760	400	220	0.2											
TR Meeden 380kV TR 402 MEE3	80 TR402	49T0000000000188F	1 TENNET NL	6.95	53.12	1140	1140	400	220	0.0	63 30.65	3 -10.34	0.949	d .							

Location	l	
Name of RA	TSO	Description
TOP_2N_Lelystad	TENNET NL	Opening of busbar coupler in 380kV substation Lelystad (Normal operation: one-node)
TOP_2N_Ens	TENNET NL	Opening of busbar coupler in 380kV substation Ens (Normal operation: one-node)
TOP_2N_Doetinchem	TENNET NL	Opening of busbar coupler in 380kV substation Doetinchem (Normal operation: one-node)
TOP_2N_Hengelo	TENNET NL	Opening of busbar coupler in 380kV substation Hengelo (Normal operation: one-node)
TOP_2N_Geertruidenberg	TENNET NL	Opening of busbar coupler in 380kV substation Geertruidenberg (Normal operation: one-node)
TOP_2N_Diemen	TENNET NL	Opening of busbar coupler in 380kV substation Diemen (Normal operation: one-node)
TOP_2N_Eindhoven	TENNET NL	Opening of busbar coupler in 380kV substation Eindhoven (Normal operation: one-node)
TOP_2N_Zwolle	TENNET NL	Opening of busbar coupler in 380kV substation Zwolle (Normal operation: one-node)
TOP_2N_1_Maasbracht	TENNET NL	Opening of busbar coupler 1 in 380kV substation Maasbracht (Normal operation: one-node)
TOP_2N_2_Maasbracht	TENNET NL	Opening of busbar coupler 2 in 380kV substation Maasbracht (Normal operation: one-node)
TOP_2N_Krimpen	TENNET NL	Opening of busbar coupler in 380kV substation Krimpen a/d IJssel (Normal operation: one-node)
TOP_2N_Rilland	TENNET NL	Opening of busbar coupler in 380kV substation Rilland (Normal operation: one-node)
PST_Meeden_W	TENNET NL	Change of tap position of phase shifting transformer in 380kV substation Meeden
PST_Meeden_Z	TENNET NL	Change of tap position of phase shifting transformer in 380kV substation Meeden