

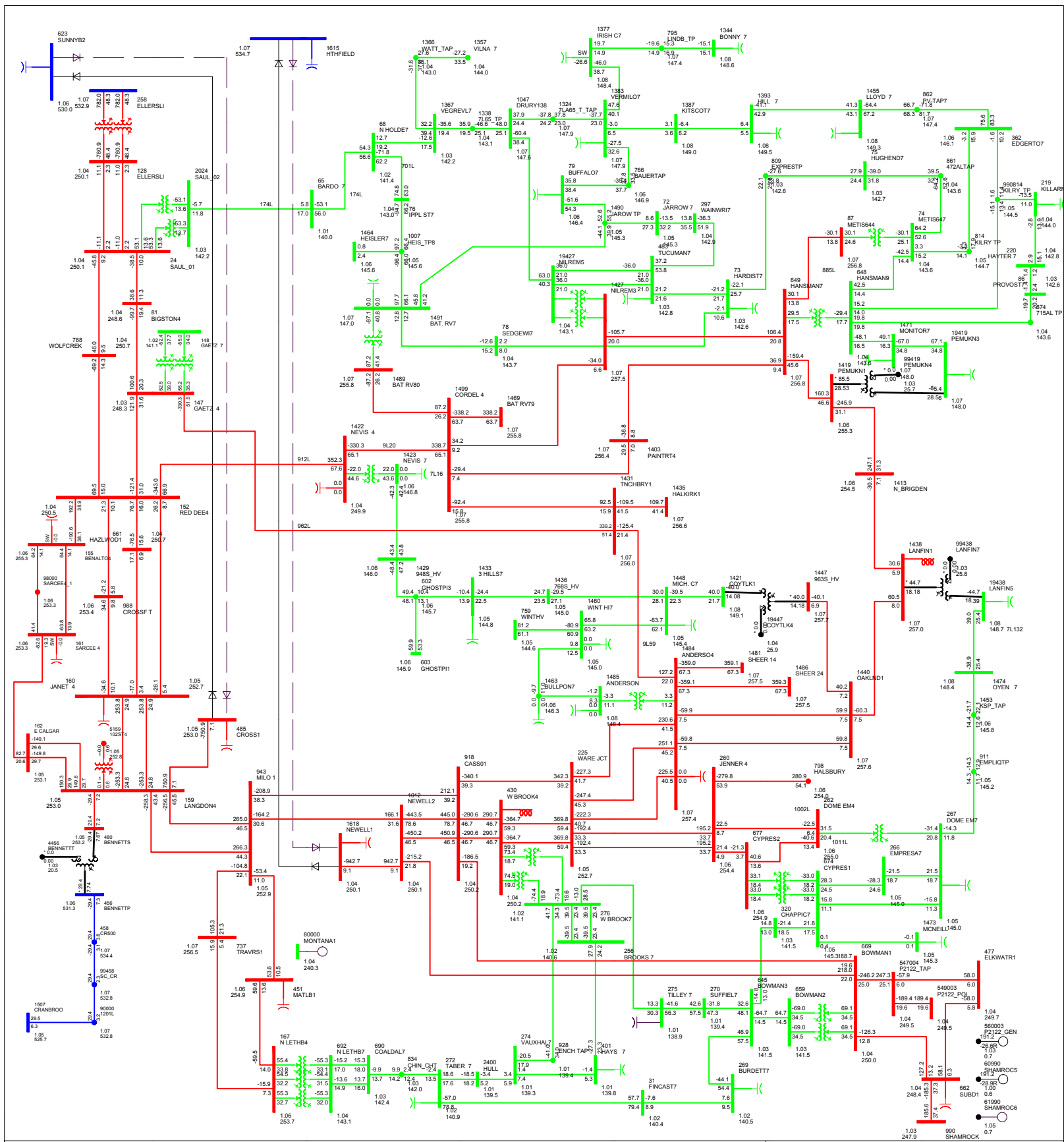
Attachment C: Power Flow SLDs –
Preferred Transmission Development
Capability

Attachment C Summary

No.	Capability Category	Scenario	Option	Case	Contingency	Figure No.
1	B	1	CETO Stage 1	M4	Base	Fig. C-1
2	B	1	CETO Stage 1	M4	EATL	Fig. C-2
3	B	1	CETO Stage 1	M4	923L	Fig. C-3
4	B	1	CETO Stage 1	M4	935L	Fig. C-4
5	B	1	CETO Stage 1	M4	962L_9L962	Fig. C-5
6	B	1	CETO Stage 1	M4	1035L	Fig. C-6
7	B	1	CETO Stage 1	M5	Base	Fig. C-7
8	B	1	CETO Stage 1	M5	EATL	Fig. C-8
9	B	1	CETO Stage 1	M5	923L	Fig. C-9
10	B	1	CETO Stage 1	M5	935L	Fig. C-10
11	B	1	CETO Stage 1	M5	1035L	Fig. C-11
12	B	1	CETO Stage 1&2	M4	Base	Fig. C-12
13	B	1	CETO Stage 1&2	M4	766S901T	Fig. C-13
14	B	1	CETO Stage 1&2	M4	EATL	Fig. C-14
15	B	1	CETO Stage 1&2	M4	923L	Fig. C-15
16	B	1	CETO Stage 1&2	M4	935L	Fig. C-16
17	B	1	CETO Stage 1&2	M4	7L233	Fig. C-17
18	B	1	CETO Stage 1&2	M4	912L	Fig. C-18
19	B	1	CETO Stage 1&2	M4	1035L	Fig. C-19
20	B	1	CETO Stage 1&2	M5	Base	Fig. C-20
21	B	1	CETO Stage 1&2	M5	EATL	Fig. C-21
22	B	1	CETO Stage 1&2	M5	923L	Fig. C-22
23	B	1	CETO Stage 1&2	M5	935L	Fig. C-23
24	B	1	CETO Stage 1&2	M5	1035L	Fig. C-24
25	B	1	CETO Stage 1&2	M8	Base	Fig. C-25
26	B	1	CETO Stage 1&2	M8	766S901T	Fig. C-26
27	B	1	CRPC, CETO Stage1	M4	Base	Fig. C-27
28	B	1	CRPC, CETO Stage1	M4	7L205	Fig. C-28
29	B	1	CRPC, CETO Stage1	M4	EATL	Fig. C-29
30	B	1	CRPC, CETO Stage1	M5	Base	Fig. C-30
31	B	1	CRPC, CETO Stage1	M5	EATL	Fig. C-31
32	B	1	CRPC, CETO Stage1	M5	962L_9L962	Fig. C-32
33	B	1	CRPC, CETO Stage1	M5	WATL	Fig. C-33
34	B	1	CRPC, CETO Stage 1&2	M4	Base	Fig. C-34
35	B	1	CRPC, CETO Stage 1&2	M4	7L205	Fig. C-35
36	B	1	CRPC, CETO Stage 1&2	M4	EATL	Fig. C-36
37	B	1	CRPC, CETO Stage 1&2	M4	1035L	Fig. C-37
38	B	1	CRPC, CETO Stage 1&2	M5	Base	Fig. C-38
39	B	1	CRPC, CETO Stage 1&2	M5	EATL	Fig. C-39
40	B	1	CRPC, CETO Stage 1&2	M5	1035L	Fig. C-40
41	B	2	CETO Stage 1	H2	Base	Fig. C-41
42	B	2	CETO Stage 1	H2	962L_9L962	Fig. C-42
43	B	2	CETO Stage 1	H3	Base	Fig. C-43
44	B	2	CETO Stage 1	H3	EATL	Fig. C-44
45	B	2	CETO Stage 1	H5	Base	Fig. C-45
46	B	2	CETO Stage 1	H5	EATL	Fig. C-46

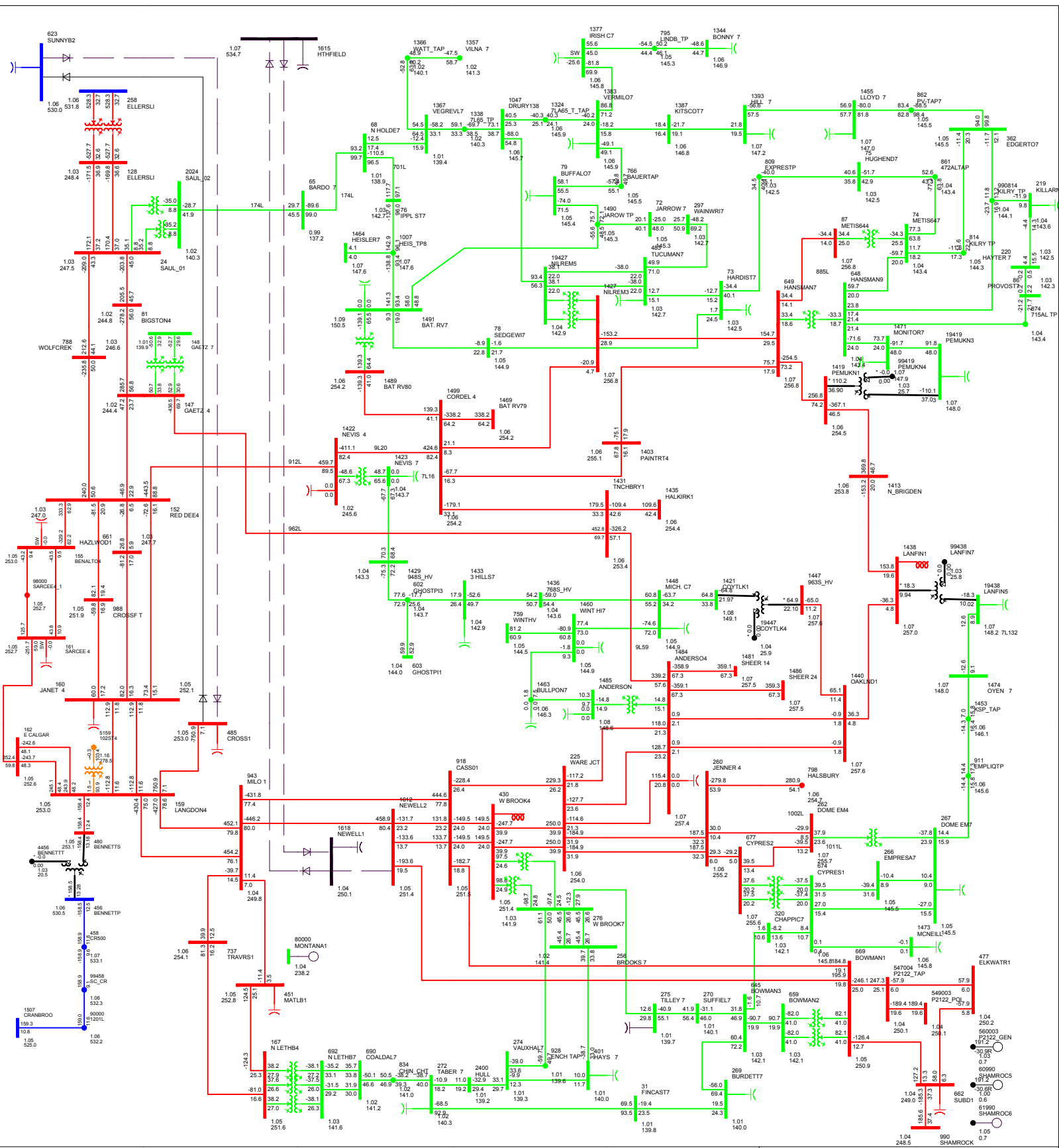
No.	Capability Category	Scenario	Option	Case	Contingency	Figure No.
47	B	2	CETO Stage 1	H5	1035L	Fig. C-47
48	B	2	CETO Stage1&2	H2	Base	Fig. C-48
49	B	2	CETO Stage1&2	H2	766S901T	Fig. C-49
50	B	2	CETO Stage1&2	H2	1035L	Fig. C-50
51	B	2	CETO Stage1&2	H5	Base	Fig. C-51
52	B	2	CETO Stage1&2	H5	EATL	Fig. C-52
53	B	2	CETO Stage1&2	H5	1035L	Fig. C-53
54	B	2	CRPC, CETO Stage1	H5	Base	Fig. C-54
55	B	2	CRPC, CETO Stage1	H5	EATL	Fig. C-55
56	B	2	CRPC, CETO Stage1	H5	966L	Fig. C-56
57	B	2	CRPC, CETO Stage 1&2	H5	Base	Fig. C-57
58	B	2	CRPC, CETO Stage 1&2	H5	EATL	Fig. C-58
59	B	2	CRPC, CETO Stage 1&2	H5	966L	Fig. C-59
60	A	1	CETO Stage1	M4	Base	Fig. C-60
61.01	A	1	CETO Stage1	M4	EATL	Fig. C-61.01
61.02	A	1	CETO Stage1	M4	EATL	Fig. C-61.02
62	A	1	CETO Stage1&2	M5	Base	Fig. C-62
63.01	A	1	CETO Stage1&2	M5	EATL	Fig. C-63.01
63.02	A	1	CETO Stage1&2	M5	EATL	Fig. C-63.02
64	A	1	CRPC, CETO Stage1	M4	Base	Fig. C-64
65.01	A	1	CRPC, CETO Stage1	M4	EATL	Fig. C-65.01
65.02	A	1	CRPC, CETO Stage1	M4	EATL	Fig. C-65.02
66	A	1	CRPC, CETO Stage1&2	M5	Base	Fig. C-66
67.01	A	1	CRPC, CETO Stage1&2	M5	EATL	Fig. C-67.01
67.02	A	1	CRPC, CETO Stage1&2	M5	EATL	Fig. C-67.02
68	A	2	CETO Stage1	H5	Base	Fig. C-68
69.01	A	2	CETO Stage1	H5	EATL	Fig. C-69.01
69.02	A	2	CETO Stage1	H5	EATL	Fig. C-69.02
70	A	2	CETO Stage1&2	H5	Base	Fig. C-70
71.01	A	2	CETO Stage1&2	H5	EATL	Fig. C-71.01
71.02	A	2	CETO Stage1&2	H5	EATL	Fig. C-71.02
72	A	2	CRPC, CETO Stage1	H2	Base	Fig. C-72
73.01	A	2	CRPC, CETO Stage1	H2	EATL	Fig. C-73.01
73.02	A	2	CRPC, CETO Stage1	H2	EATL	Fig. C-73.02
74	A	2	CRPC, CETO Stage1	H5	Base	Fig. C-74
75.01	A	2	CRPC, CETO Stage1	H5	EATL	Fig. C-75.01
75.02	A	2	CRPC, CETO Stage1	H5	EATL	Fig. C-75.02
76	A	2	CRPC, CETO Stage1&2	H2	Base	Fig. C-76
77.01	A	2	CRPC, CETO Stage1&2	H2	EATL	Fig. C-77.01
77.02	A	2	CRPC, CETO Stage1&2	H2	EATL	Fig. C-77.02
78	A	2	CRPC, CETO Stage1&2	H5	Base	Fig. C-78
79.01	A	2	CRPC, CETO Stage1&2	H5	EATL	Fig. C-79.01
79.02	A	2	CRPC, CETO Stage1&2	H5	EATL	Fig. C-79.02

For Category A Single Line Diagrams: The XX.01 extension represent the post contingency conditions and the XX.02 extension represents the post-contingency and post-generation curtailment conditions.



P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 531.9 MW Central East: 483.9 MW South West: 353.0 MW
 FIG. C-1 VPR2020SP-Case: M4; GEN SCEN 1
 PROJECT: P210 STAGE1
 CAP: MAXIMIZE
 RUN: JUL 12 2020 23:10
 Contingency: Base, Trip Action: None

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading

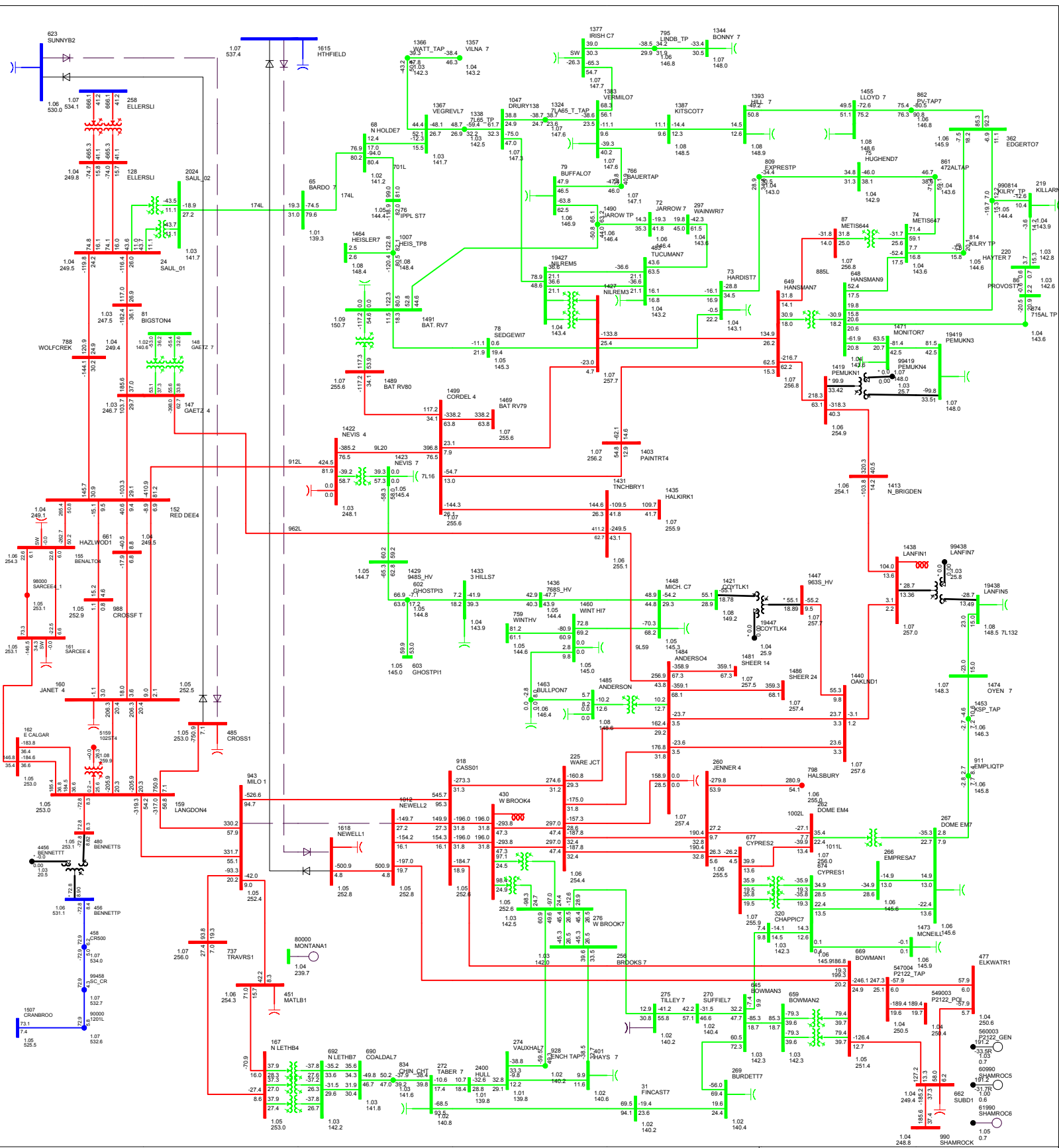


P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 531.9 MW Central East: 483.9 MW South West: 353.0 MW

FIG. C-2 - VR2003SP - CASE M4; GEN SCEN 1
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 RUN: JUL 12 2009 23:11
 Contingency: EATL; Trip Action: None

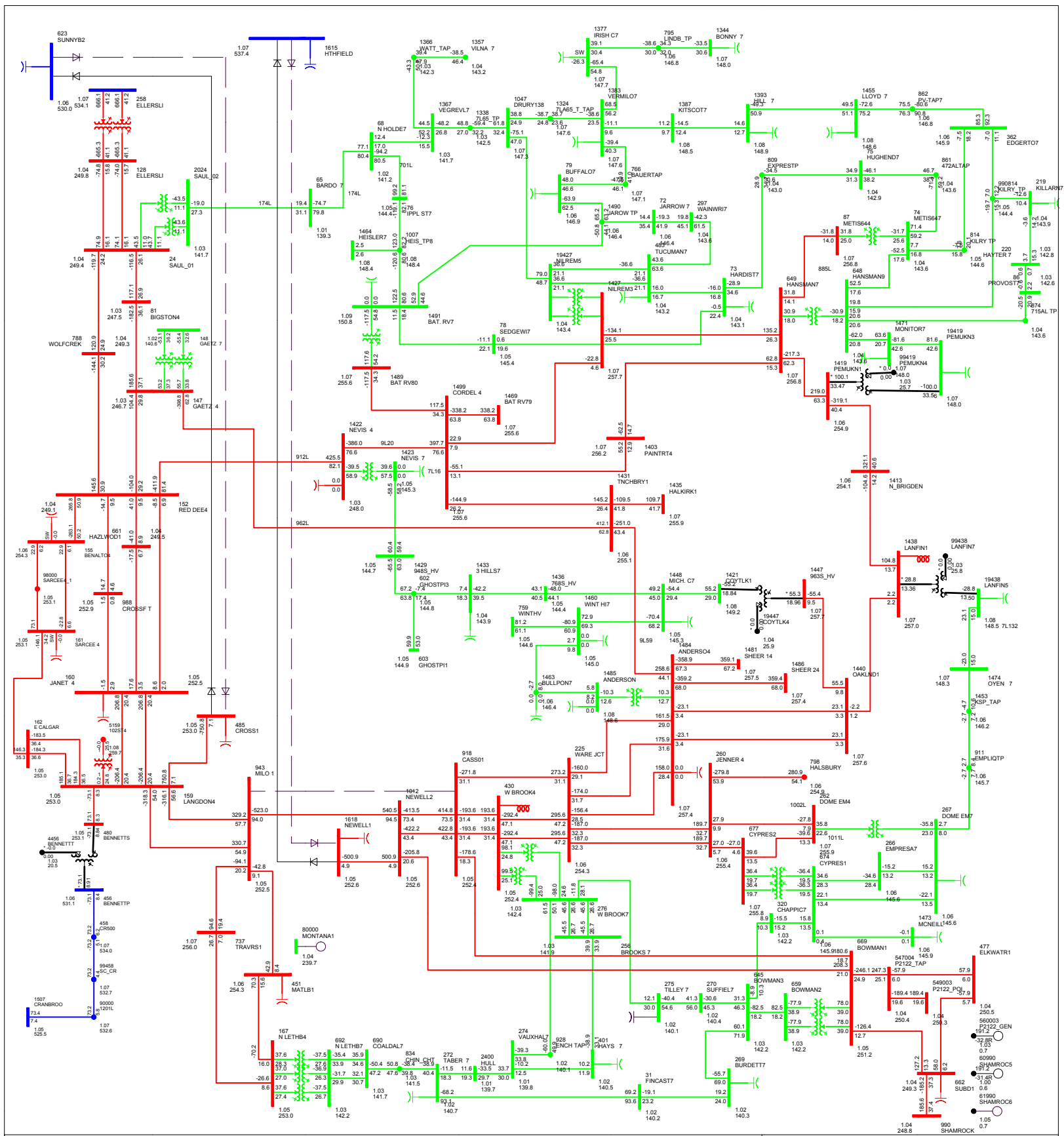
Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000

Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



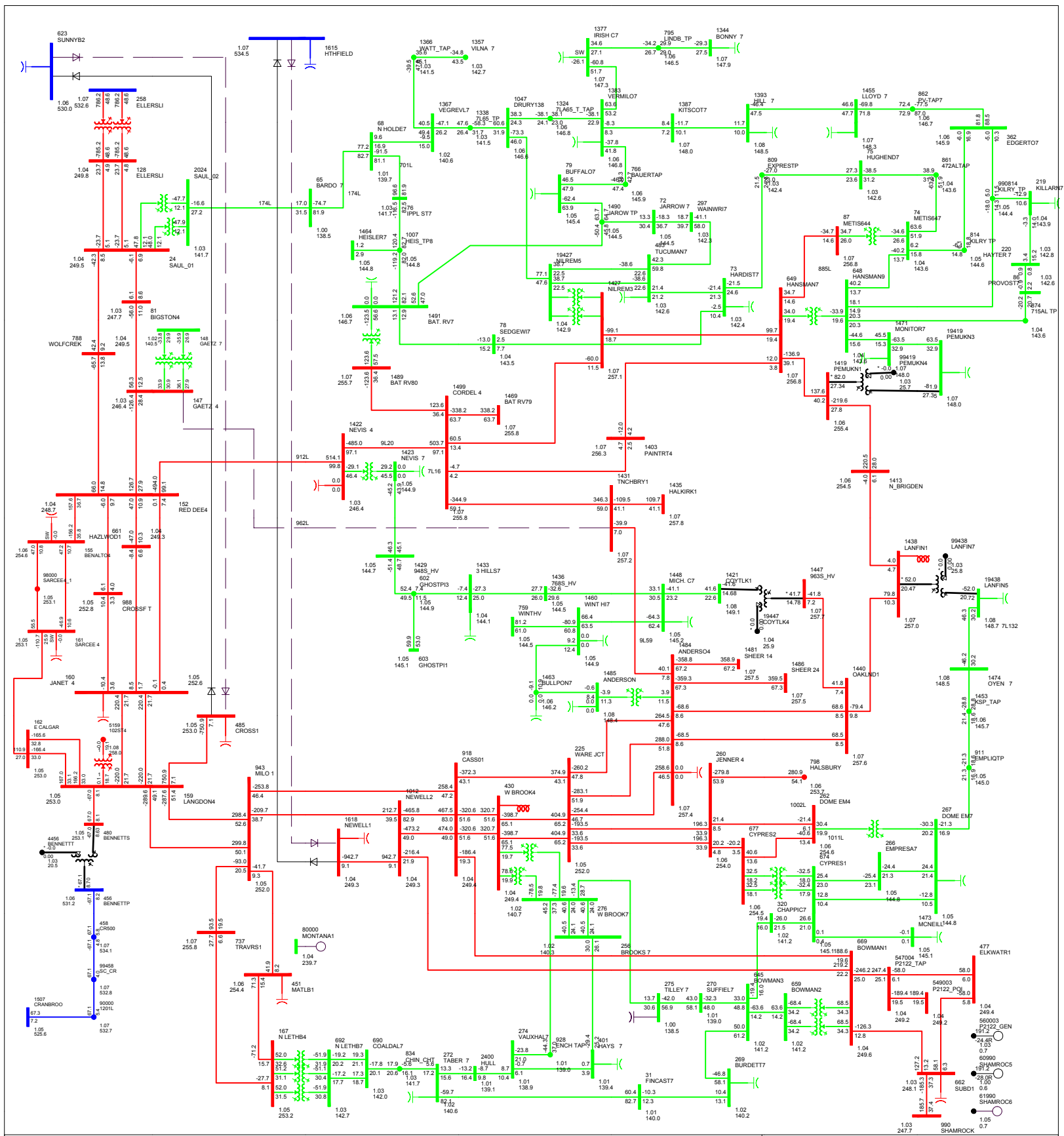
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 531.9 MW Central East: 483.9 MW South West: 353.0 MW
 FIG. C-3 | VR2020SP-Case: M4; GEN SCEN 1
 PROJECT: CETO STAGE2
 CAP: MAXIMIZE
 RUN: JUL 12 2020 23:12
 Contingency: S2L3; Trip Action: None

Branch Loading: **>=100.0%**
 kV: **<=25.00** **<=69.00** **<=138.00** **<=240.00** **<=500.000**
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



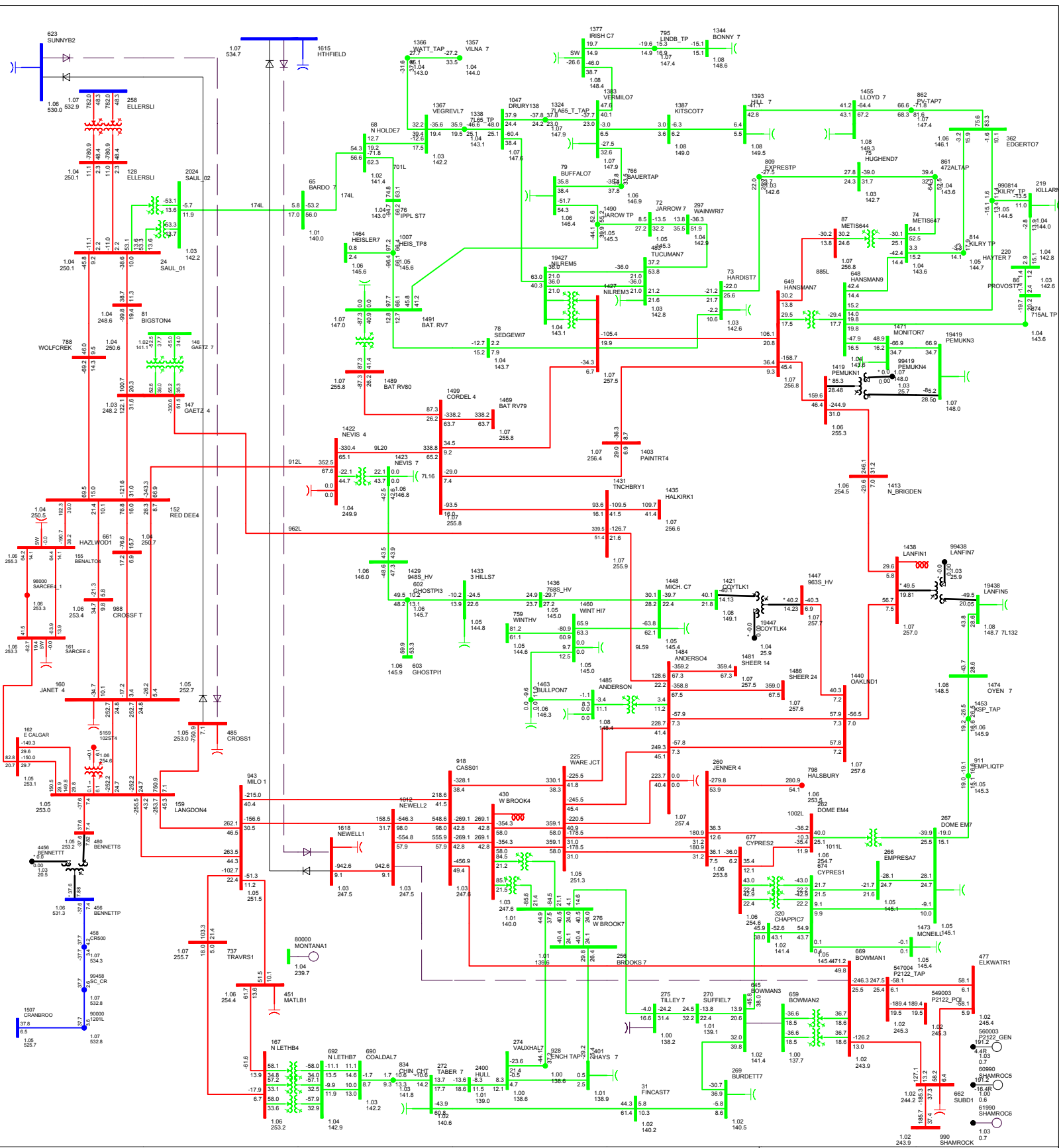
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 531.9 MW Central East: 483.9 MW South West: 353.0 MW
 FIG. C-4 - VR2020SP - CASE: M4, GEN SCEN 1
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 RUN: JUL 12 2020 23:12
 Contingency: 53SL; Trip Action: None

Branch Loading: >=100.0%
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



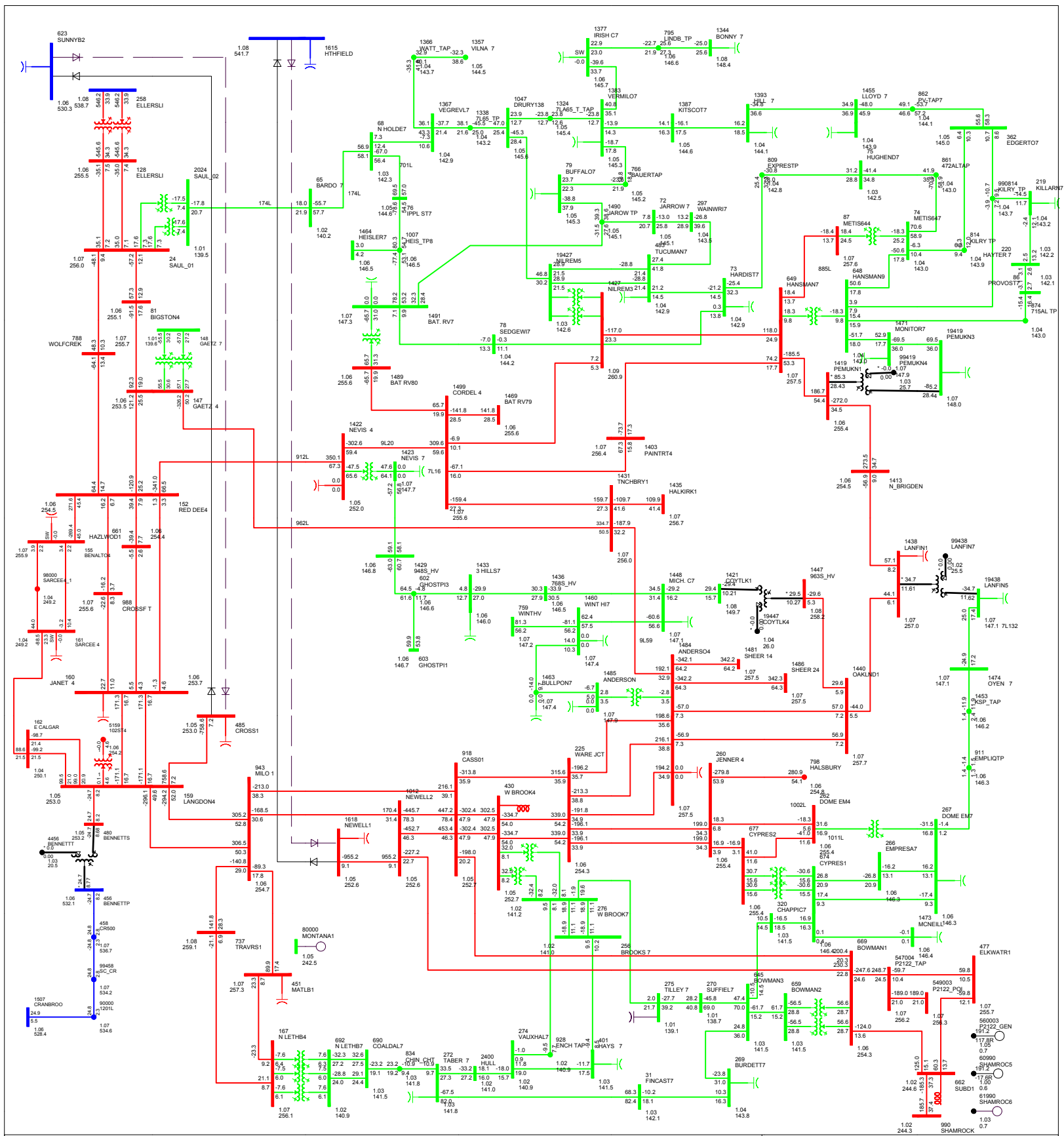
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 531.9 MW Central East: 483.9 MW South West: 353.0 MW
 FIG. C-5 - VR2020SSP - CASE: M4; GEN: SCN 1
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 RUN: JUL 12 2020 23:12
 Contingency: 962L_RL962; Trip Action: None

Branch Loading: **>=100.0%**
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00
 Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW/Loading



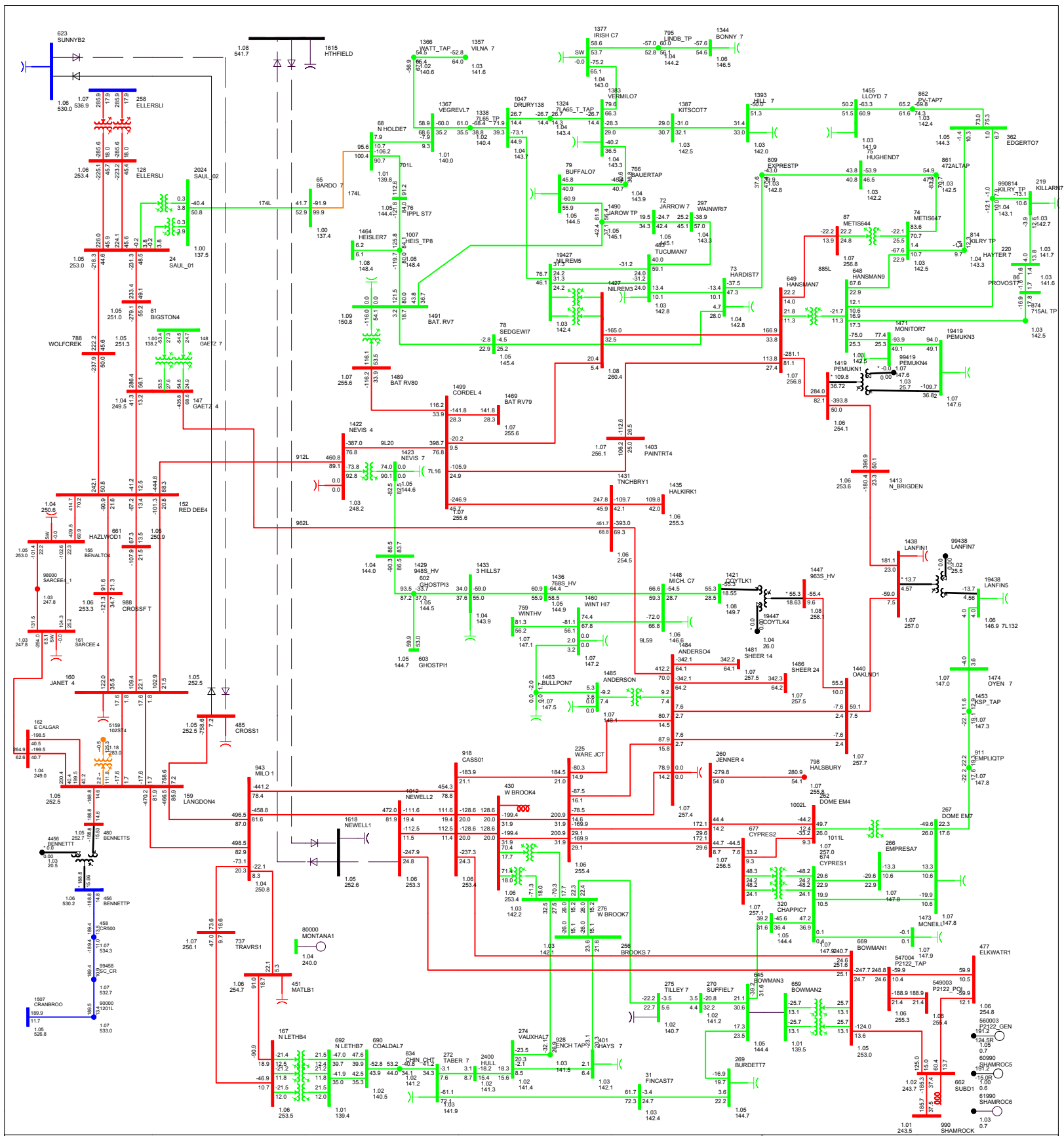
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 531.9 MW Central East: 483.9 MW South West: 353.0 MW
 FIG. C-6: VR2203SP-CASE M4: GEN SCN 1
 PROJECT: P210 STAGE1
 CAP: MAXIMIZE
 SUN: JUL 12 2020 23:12
 Contingency: 103SL; Trip Action: Bowman2 240/139kV split

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW/Loading



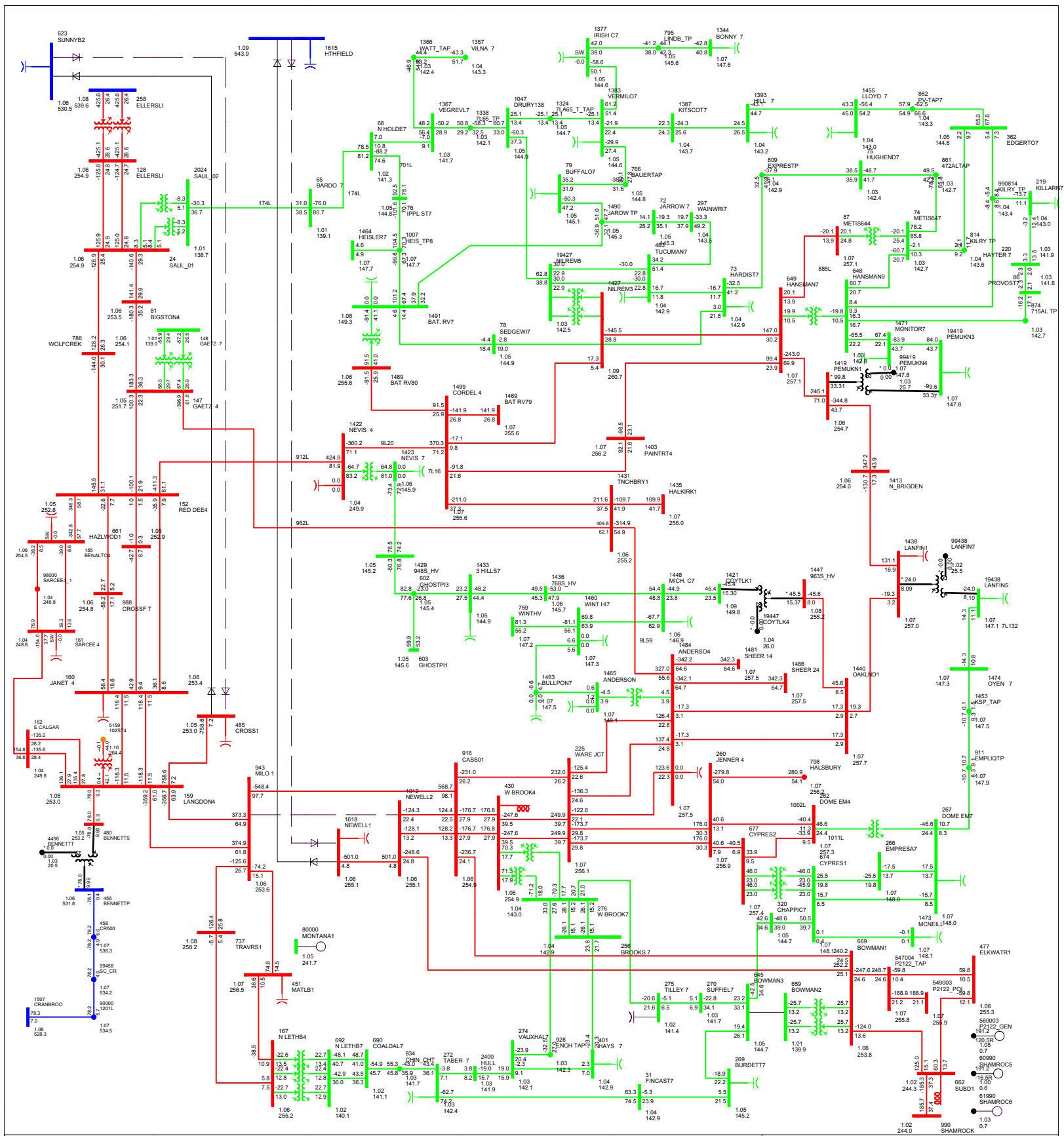
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 531.9 MW Central East: 483.9 MW South West: 353.0 MW
 FIG. C-7: VR2003SS; CASE: M5; GEN: SCN 1
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 RUN: JUL 12 2009 23:10
 Contingency: Base, Trip Action: None

Branch Loading: >=100.0%
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



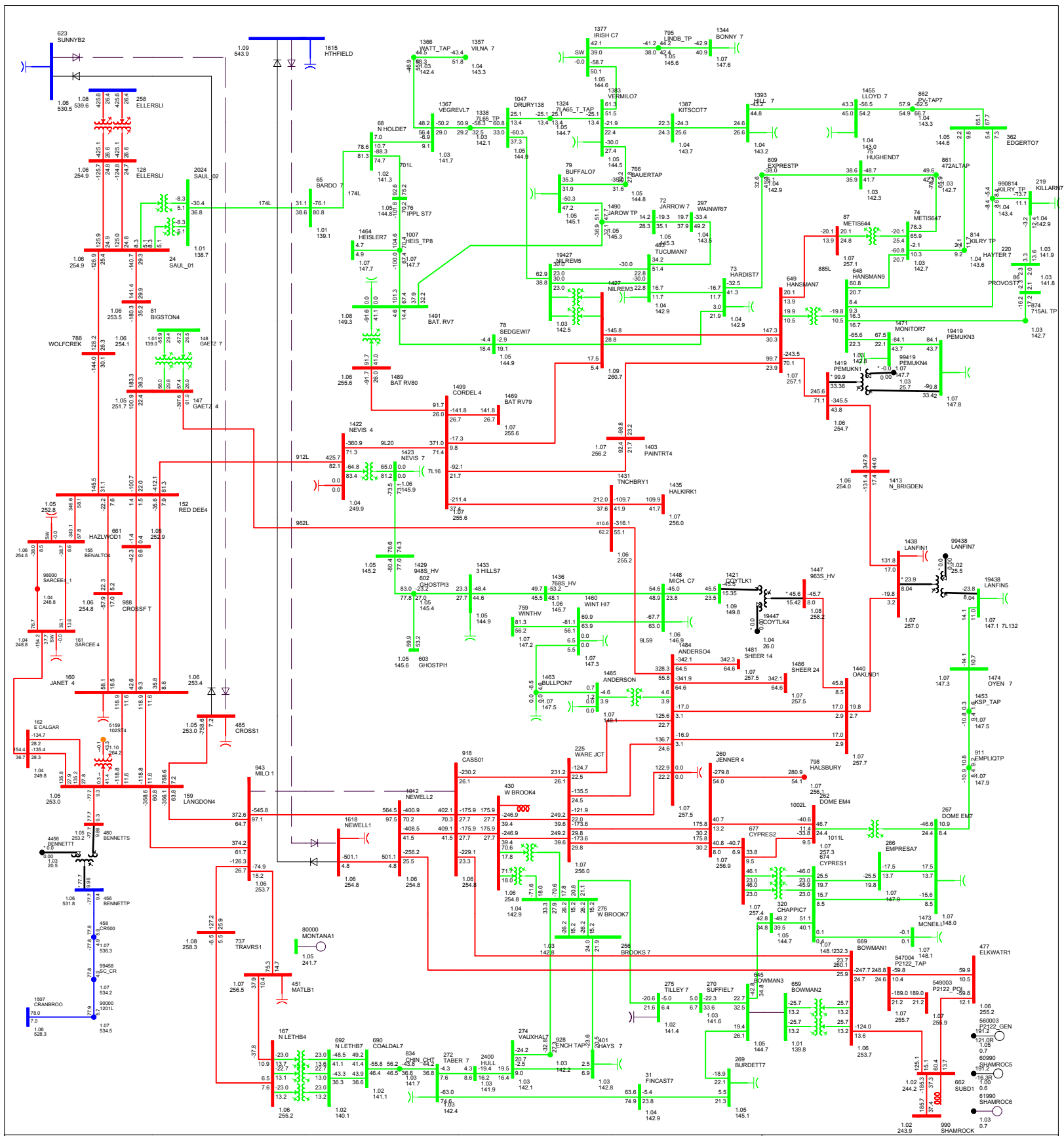
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 531.9 MW Central East: 483.9 MW South West: 353.0 MW
 FIG. C-8 VR2003SS; CASE; MS; GEN SCN 1
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 RUN: JUL 12 2007 23:11
 Contingency: EATL; Trip Action: L274 BC 138kV T, Bowmanton 240/138kV split

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000 Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW/Loading



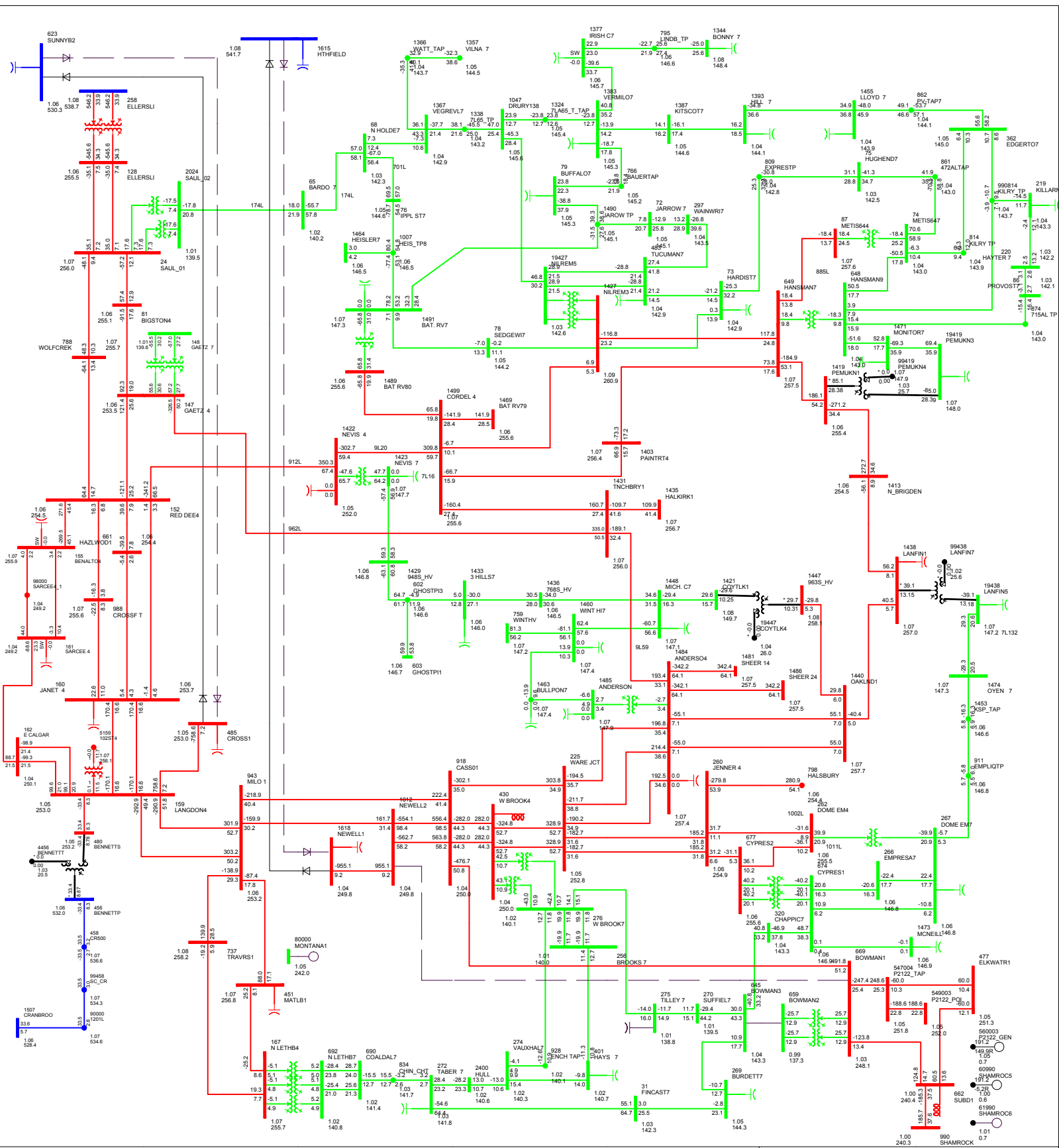
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 531.9 MW Central East: 483.9 MW South West: 353.0 MW
 FIG. C-9 - VR2020SS; CASE; MW; GEN SCN 1
 PROJECT: CETO STAGET
 CAP: MAXIMIZE
 RUN: JUL 12 2020 23:10
 Contingency: 52%; Trip Action: Bowmanston 240138RW split

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000 Bus - Voltage (kV/pu)
 Branch - MW/Loading Equipment - MW/Loading



P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 531.9 MW Central East: 483.9 MW South West: 353.0 MW
 FIG. C-10-VR-2023SL-CASE: MS: GEN SCEN 1
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:10
 Contingency: 53SL; Trip Action: Bowman201348W split

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading

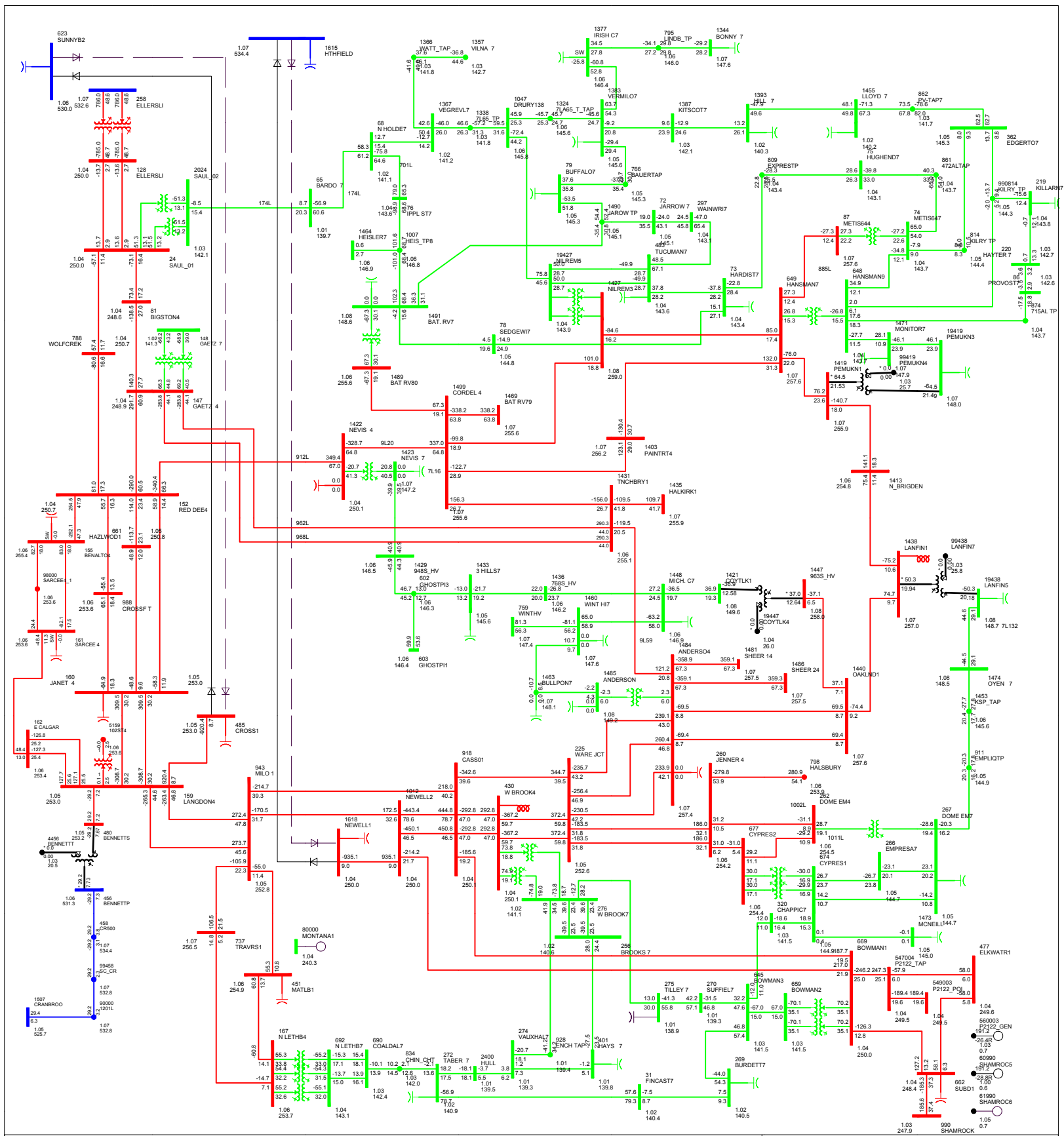


P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 531.9 MW Central East: 483.9 MW South West: 353.0 MW

FIG. C-11_VR2023SL_CASE: MS_GEN SCEN 1
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:12
 Contingency: 103SL; Trip Action: Bowmanman 240/138kV split

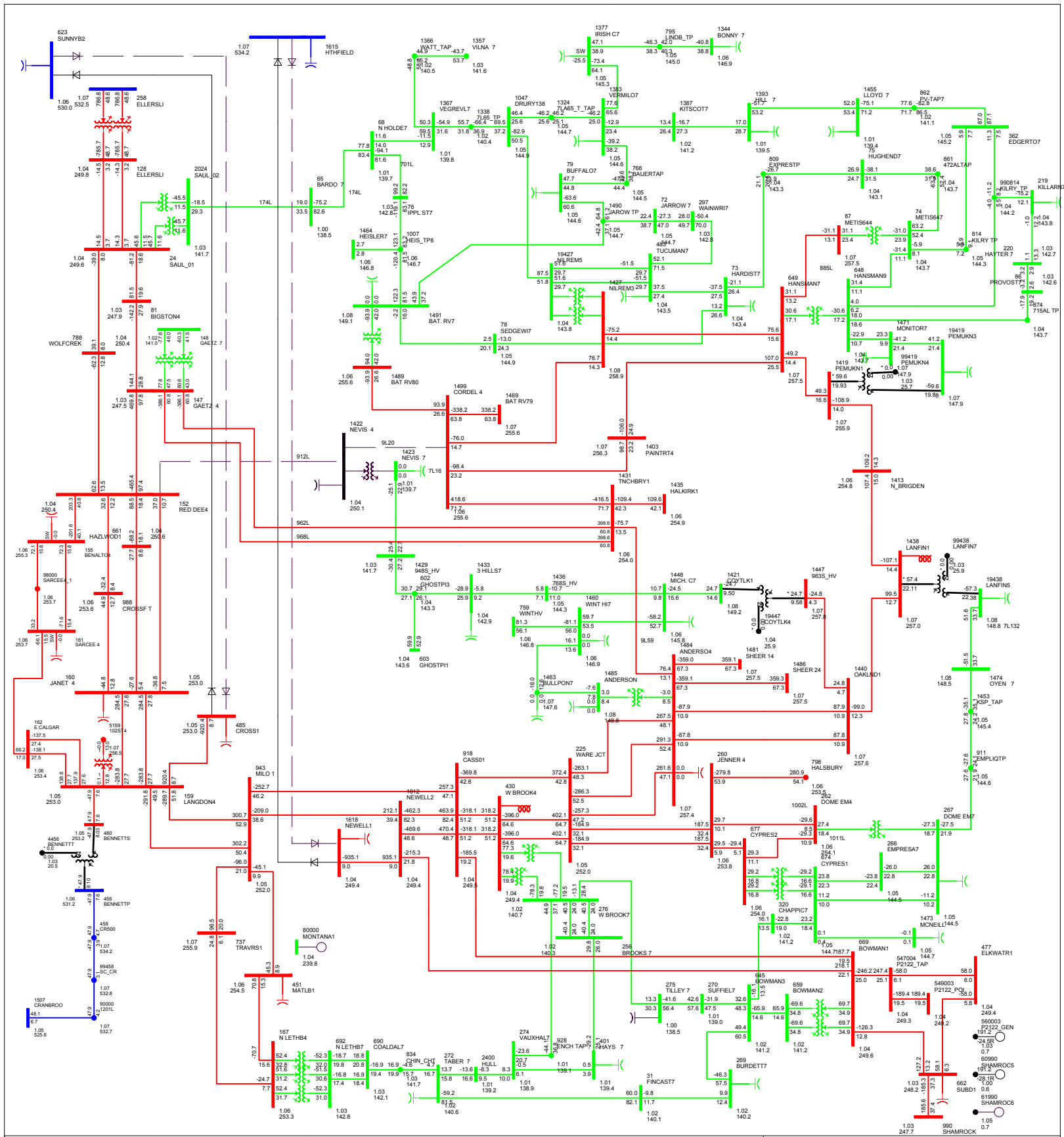
Branch Loading: >=100.0%
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00

Bus - Voltage (kV/pu) Branch - MW/Loading
 Equipment - MW/Loading



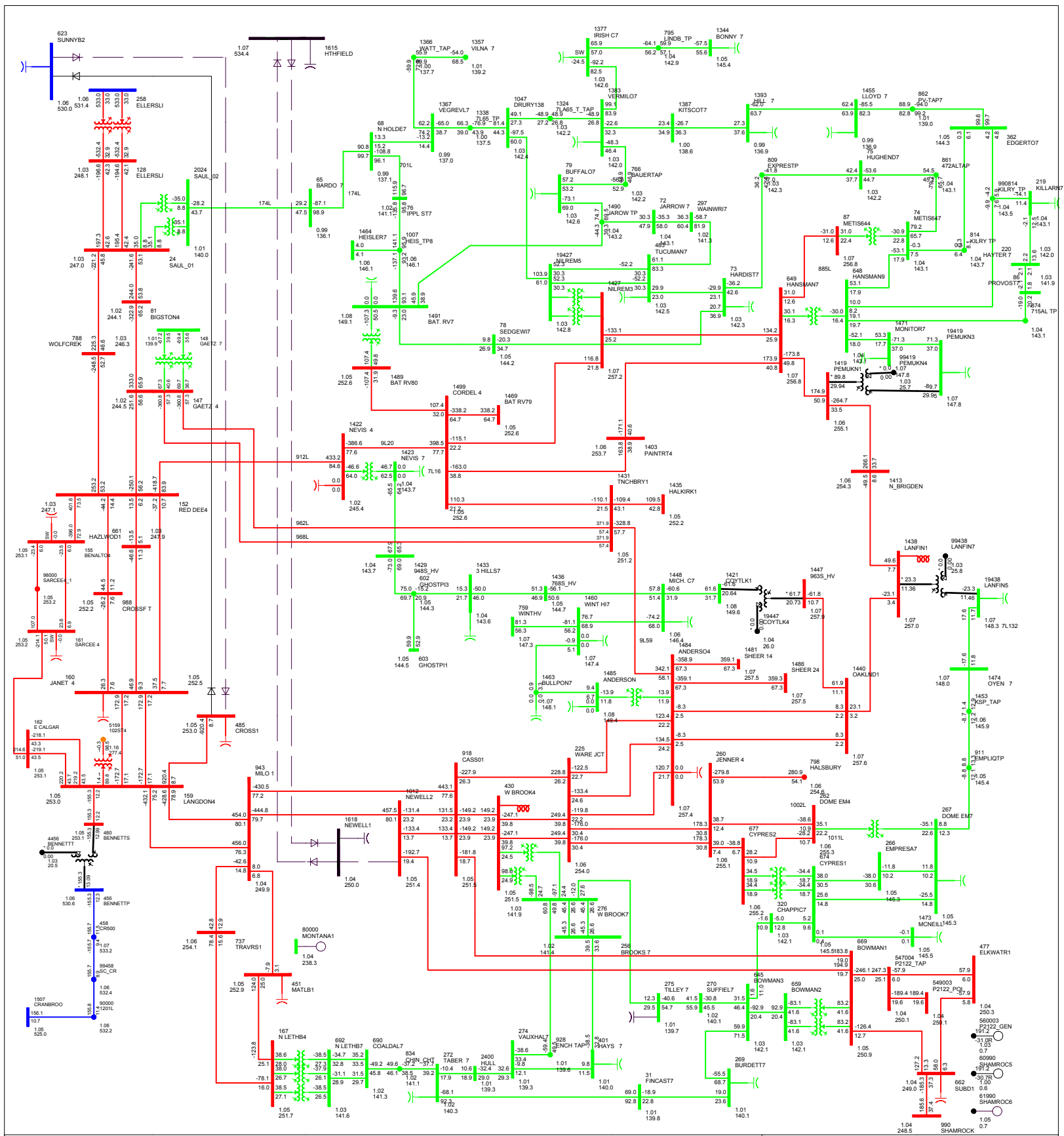
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 507.1 MW Central East: 788.8 MW South West: 356.0 MW
 FIG. C-12_VR-2023SP-CASE: MA: GEN S01
 PROJECT: CETO STAGE162
 CAP: MAXIMUM
 SUN: JUL 12 2023 23:13
 Contingency: Base, Trip Action: None

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



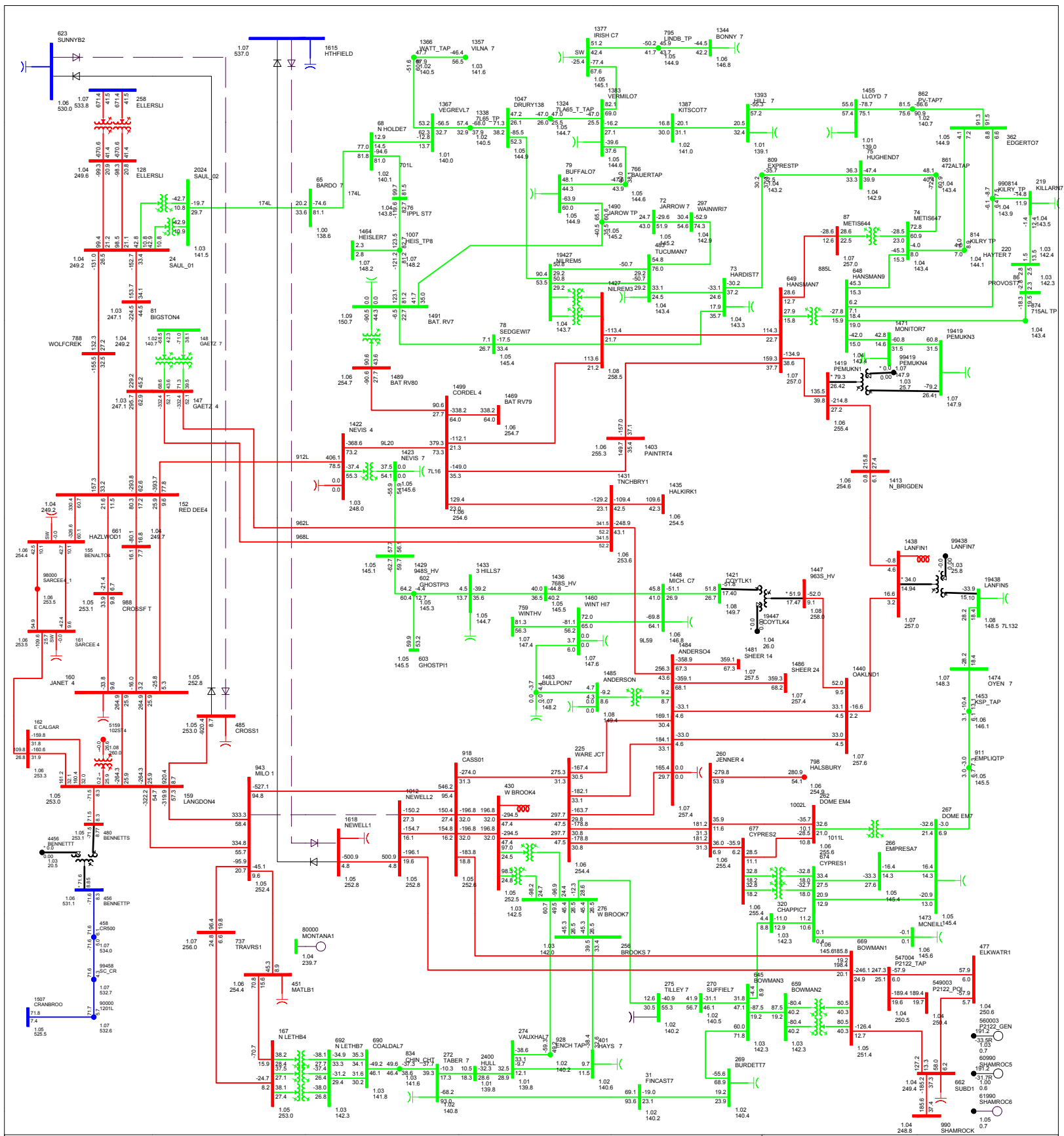
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 507.1 MW Central East: 788.8 MW South West: 356.0 MW
 FIG. C-13_VR-2023SP-CASE: MW GEN SON 1
 PROJECT: CETO STAGE 1A2
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:15
 Contingency: 7685901T; Trip Action: None

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



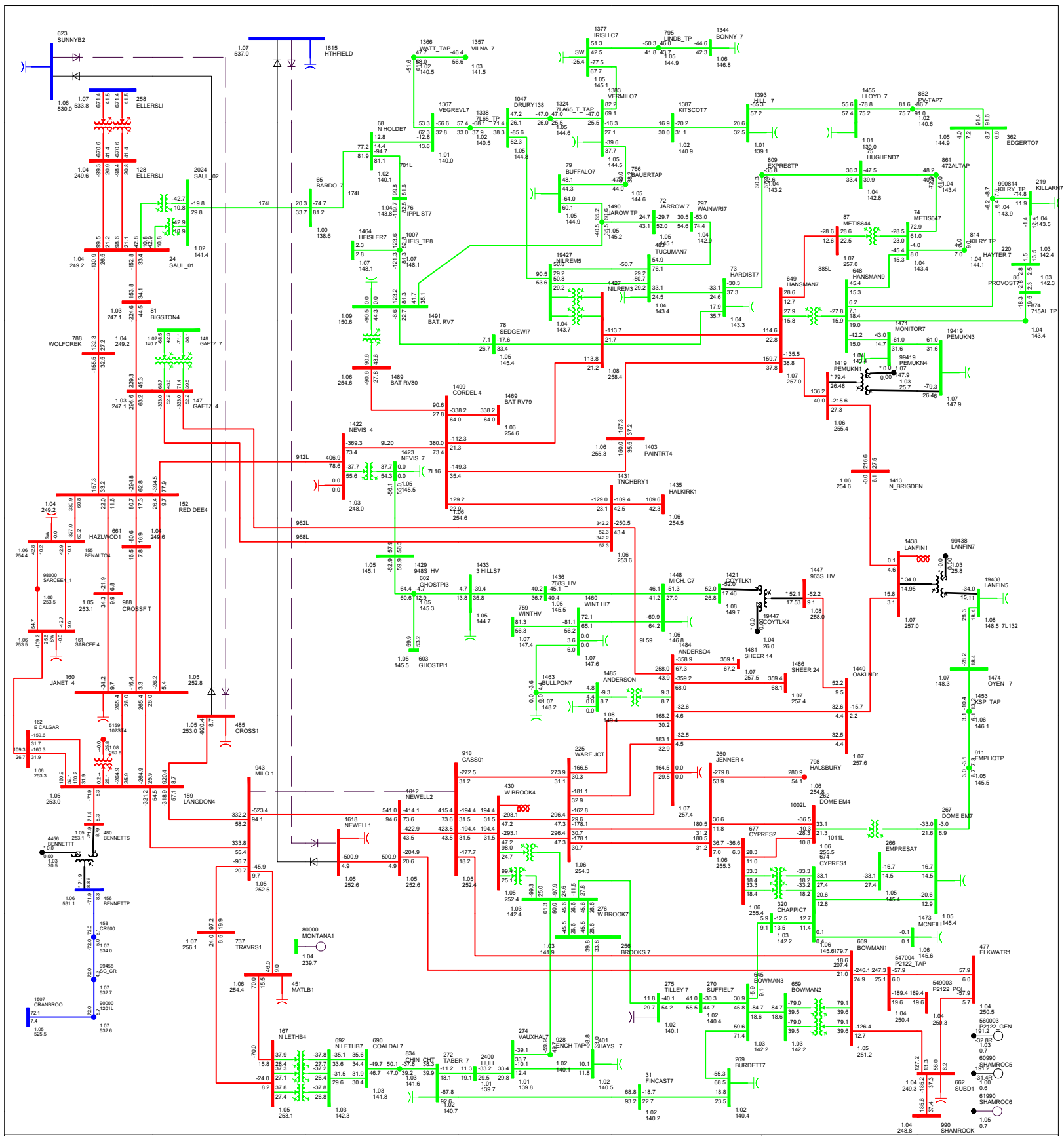
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 507.1 MW Central East: 788.8 MW South West: 356.0 MW
 FIG. C-14, IYR2023SP, CASE: MA, GEN SON 1
 PROJECT: CETO STAGE162
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:15
 Contingency: EATL, Trip Action: None

Branch Loading: >=100.0% <=25.0% <=9.0% <=6.0% <=3.0%
 Bus - Voltage (kV/pu) <=25.0% <=9.0% <=6.0% <=240.0% <=500.0%
 Branch - MW/Loading
 Equipment - MW/Loading



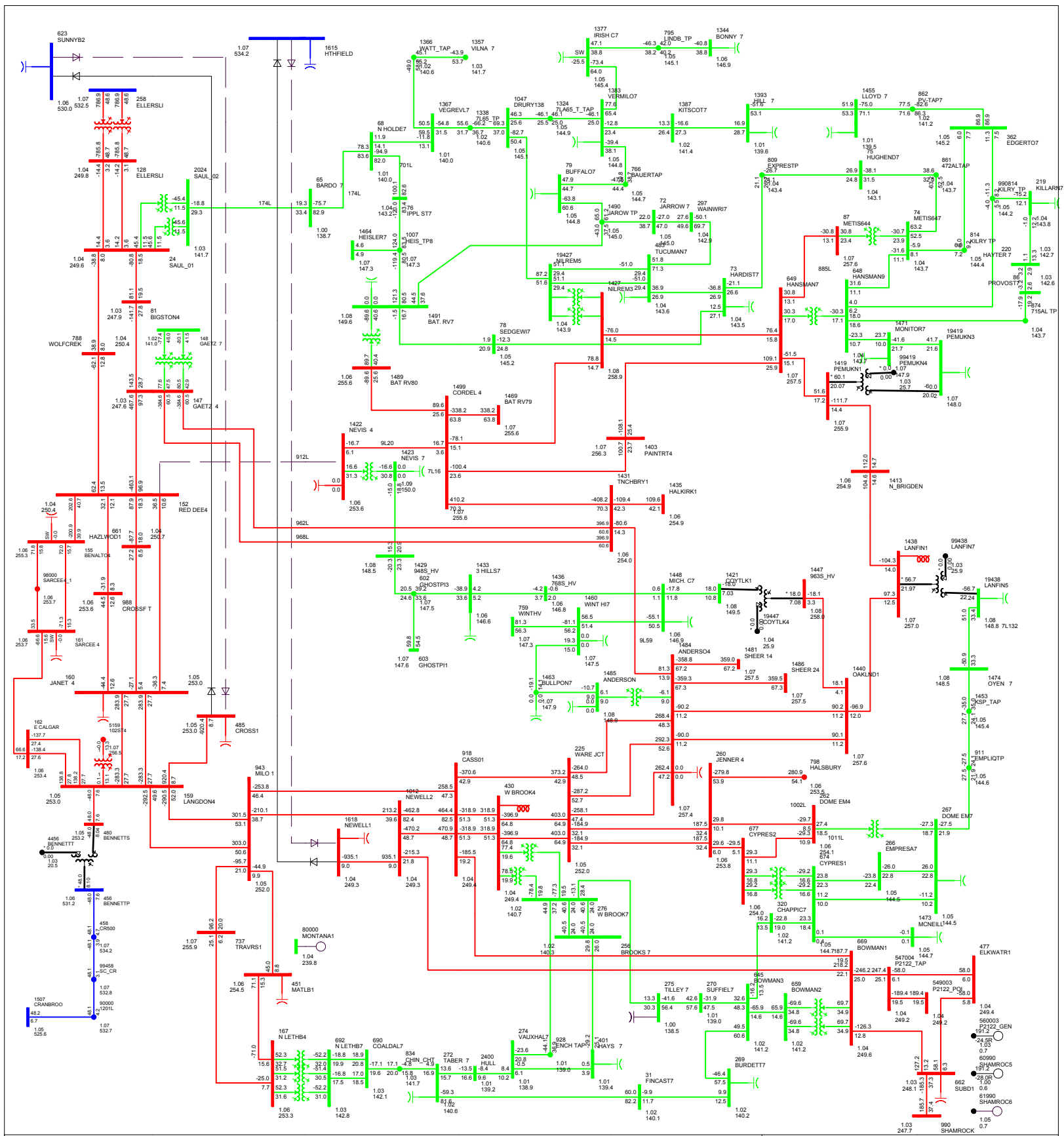
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 507.1 MW Central East: 788.8 MW South West: 356.0 MW
 FIG. C-15-VR-2023SP-CASE: MA: GEN SON 1
 PROJECT: CETO STAGE162
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:15
 Contingency: 52%; Trip Action: None

Branch Loading: >=100.0% >=99.0% >=98.0% <=97.0% <=96.0%
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



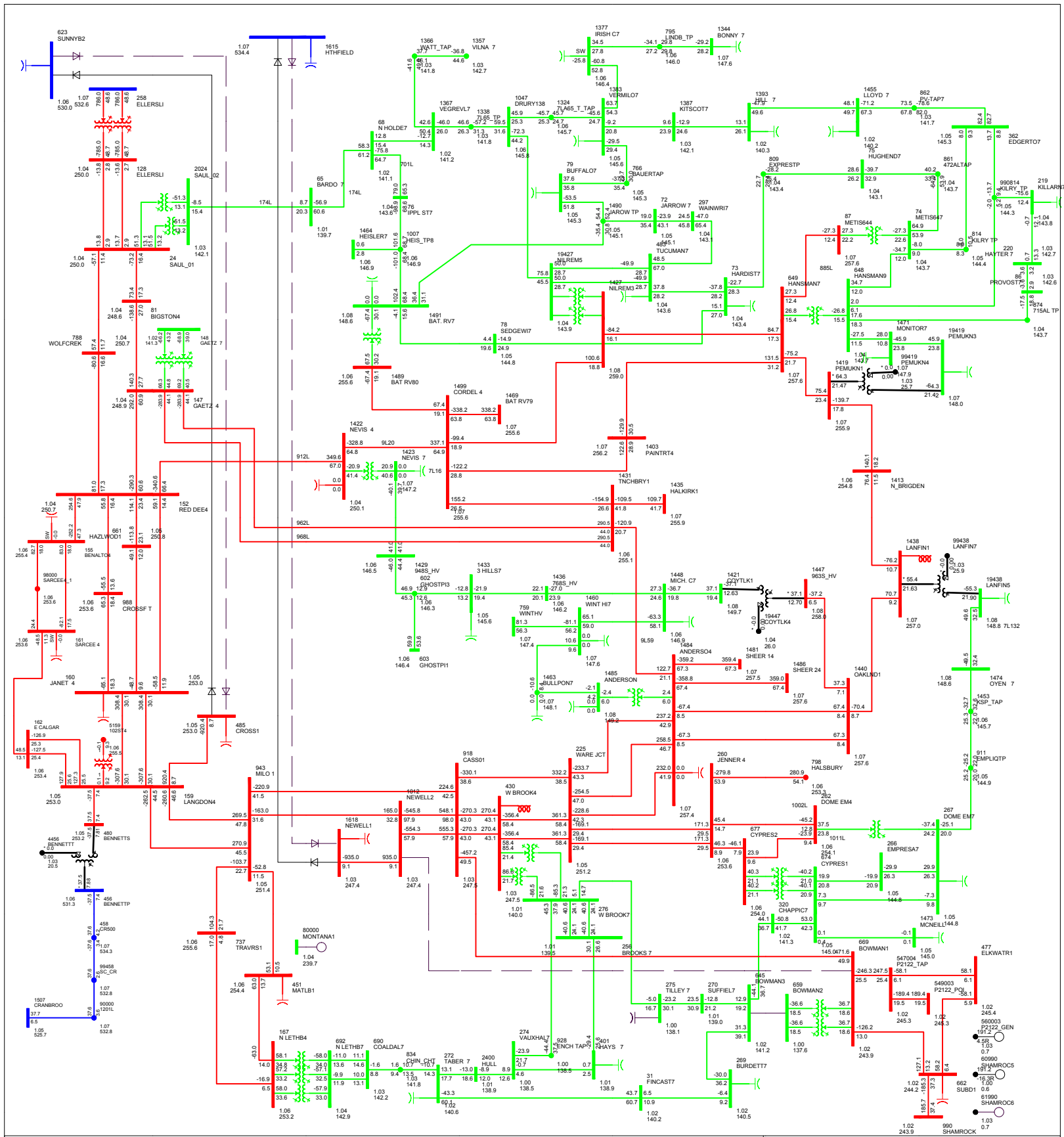
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 507.1 MW Central East: 788.8 MW South West: 356.0 MW
 FIG. C-16_VR2023SP_CASE: MA: GEN SON 1
 PROJECT: CETO STAGE162
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:14
 Contingency: 53SL; Trip Action: None

Branch Loading: >=100.0%
<=25.0% <=9.0% <=138.0% <=240.0% <=500.0% Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



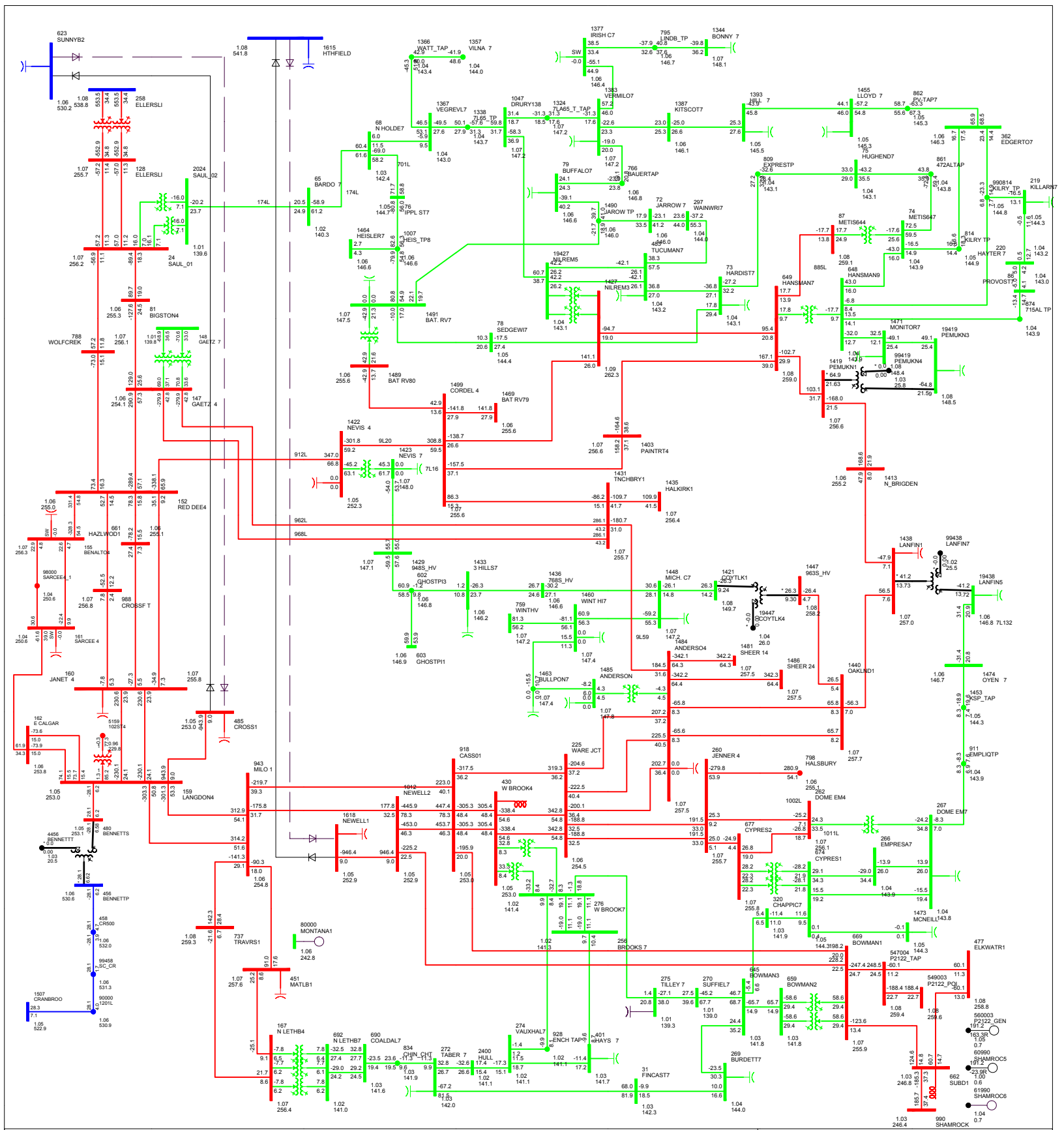
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 507.1 MW Central East: 788.8 MW South West: 356.0 MW
 FIG. C-18_VR2023SP_CASE: MA: GEN SON 1
 PROJECT: CETO STAGES1&2
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:14
 Contingency: 912L, Trip Action: None

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



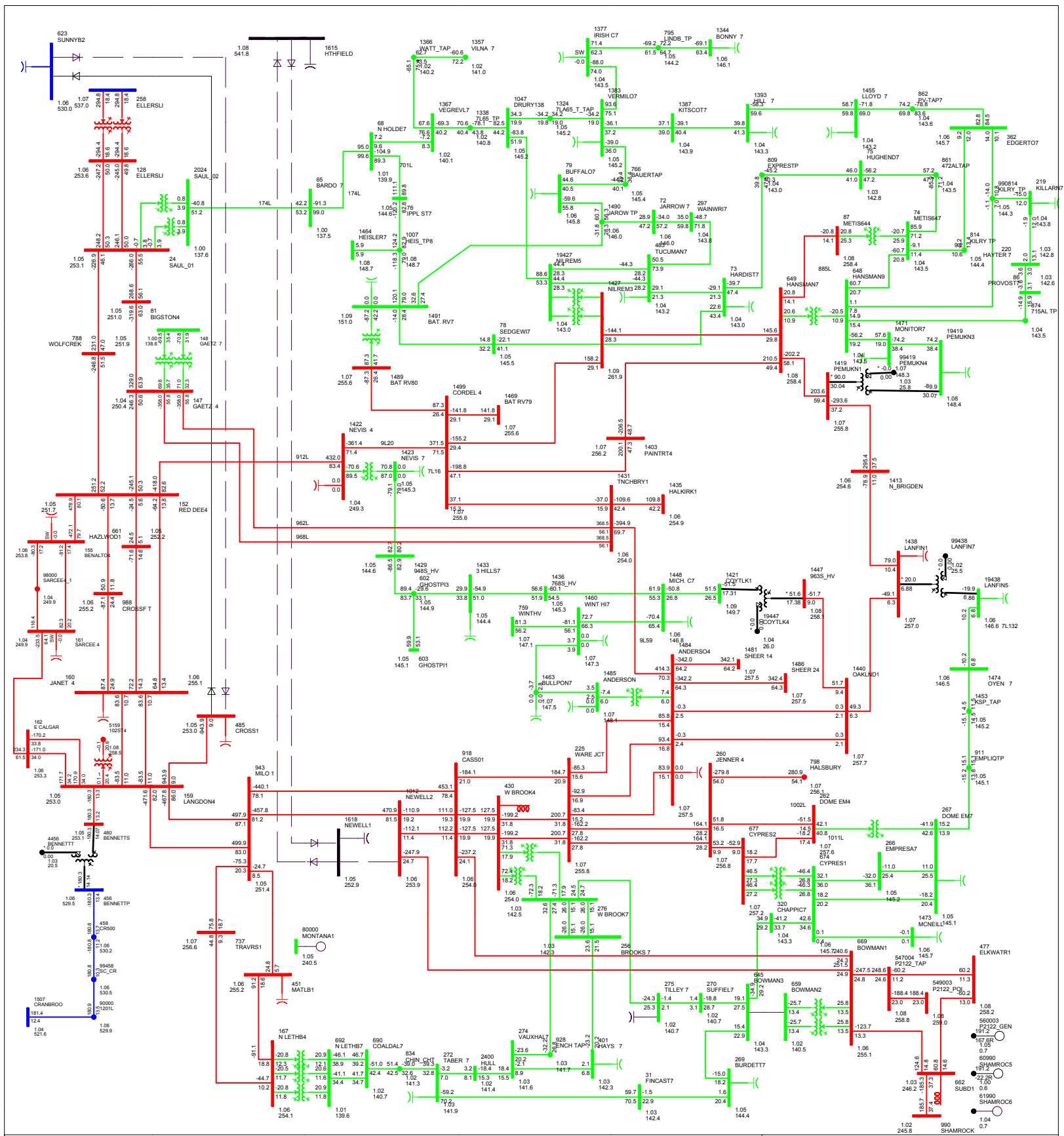
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 507.1 MW Central East: 788.8 MW South West: 356.0 MW
 FIG. C-19-VR-2023SP-CASE: MA: GEN SCN 1
 PROJECT: CETO STAGE162
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:13
 Contingency: 103SL; Trip Action: Bowman2 240/138kV split

Branch Loading: **>=100.0%**
 kV: <=25.0 **<=9.0** <=138.0 <=240.0 <=500.0
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



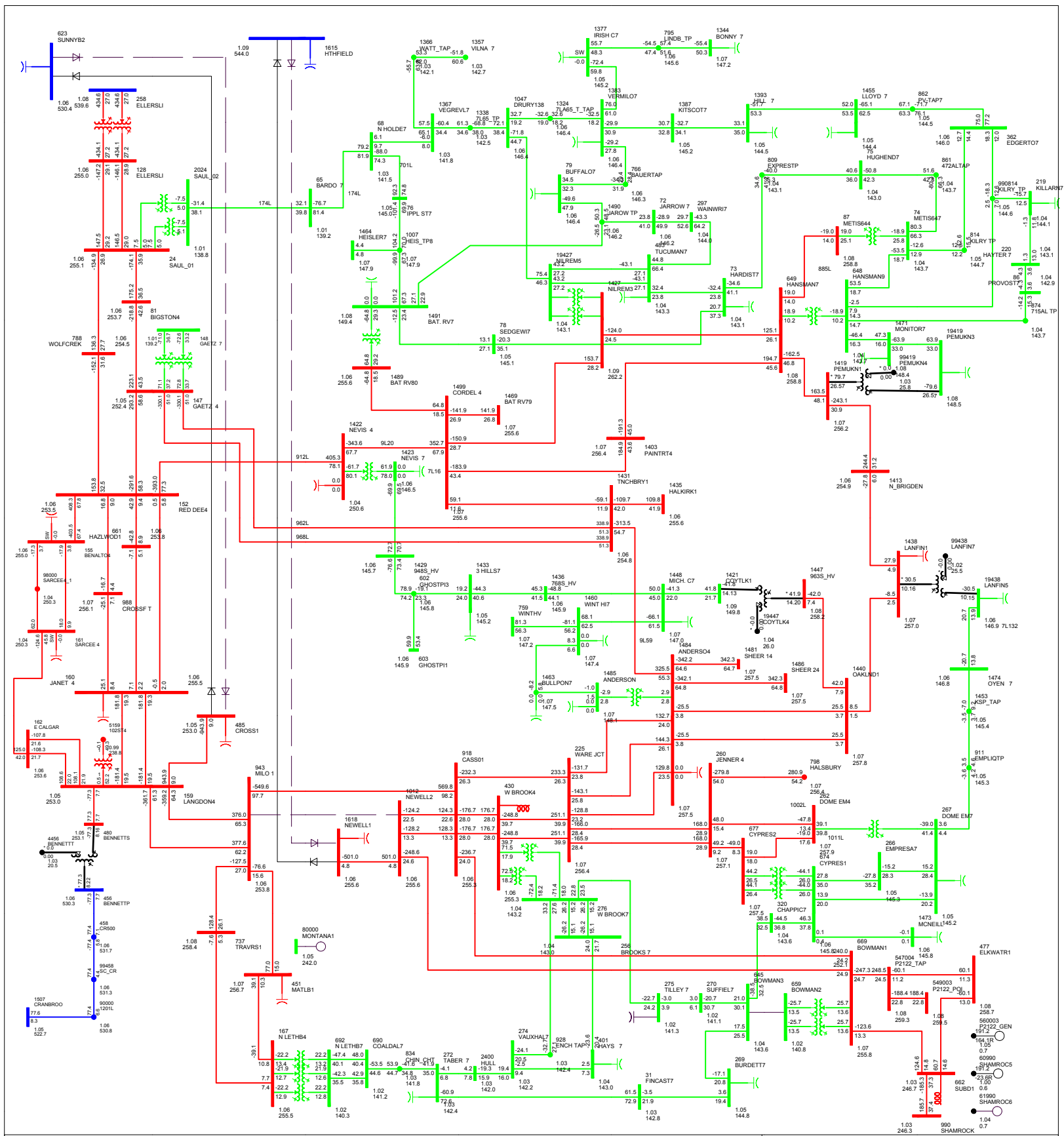
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 507.1 MW Central East: 788.8 MW South West: 356.0 MW
 FIG. C-20_VR-2023SL CASE: MS: GEN SCN 1
 PROJECT: CETO STAGE 1A2
 CAP: MAXIMIZE
 SUN: JUL 12 2023 23:13
 Contingency: Base, Trip Action: None

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW/Loading



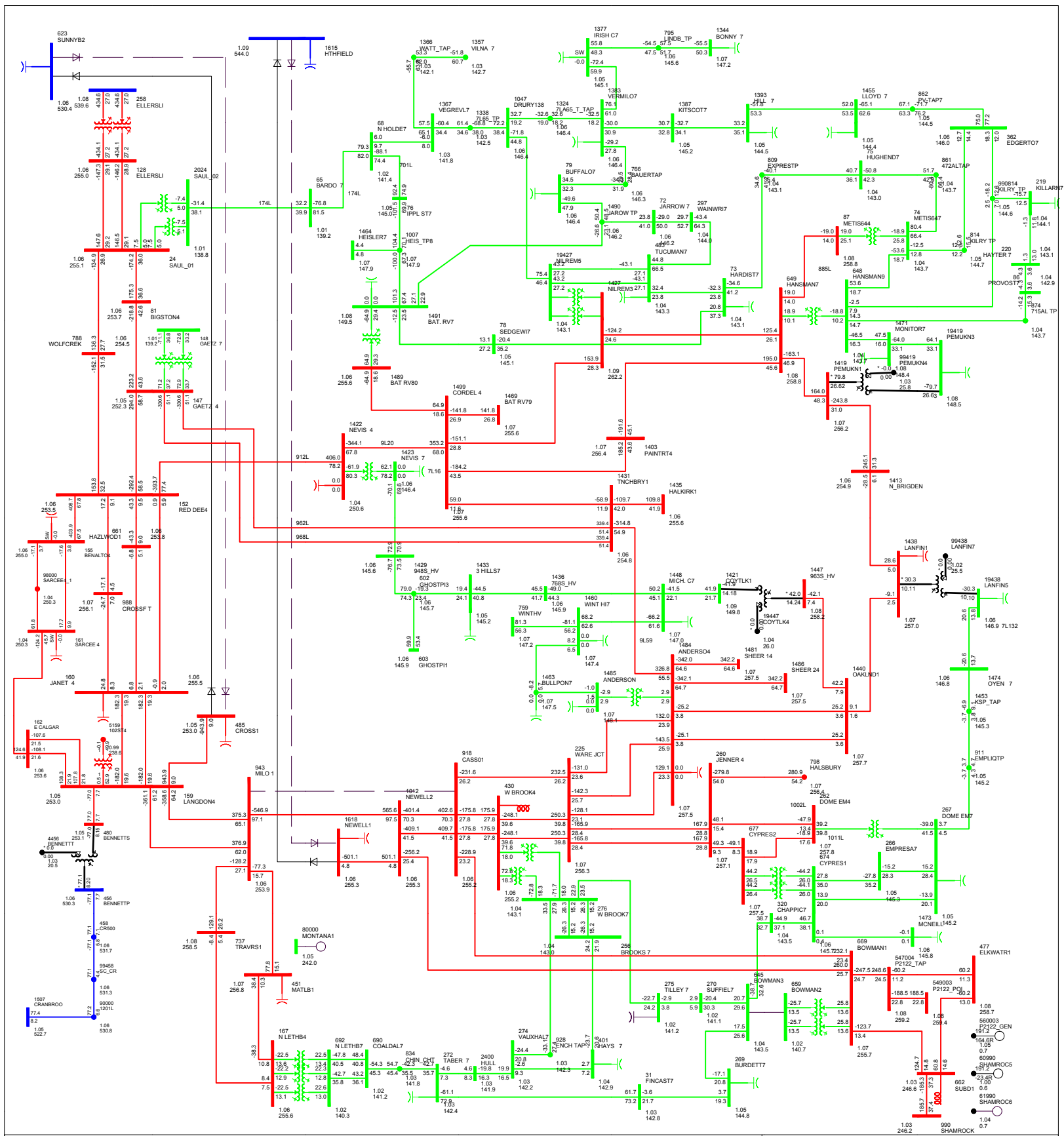
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 507.1 MW Central East: 788.8 MW South West: 356.0 MW
 FIG. C-21_VR-2023SL CASE: MS_GEN SCN 1
 PROJECT: CETO STAGE 1A2
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:13
 Contingency: EATL; Trip Action: L274 BC 138kV T, Bowmann 240/138kV split

Branch Loading: **>=100.0%**
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW%/Loading



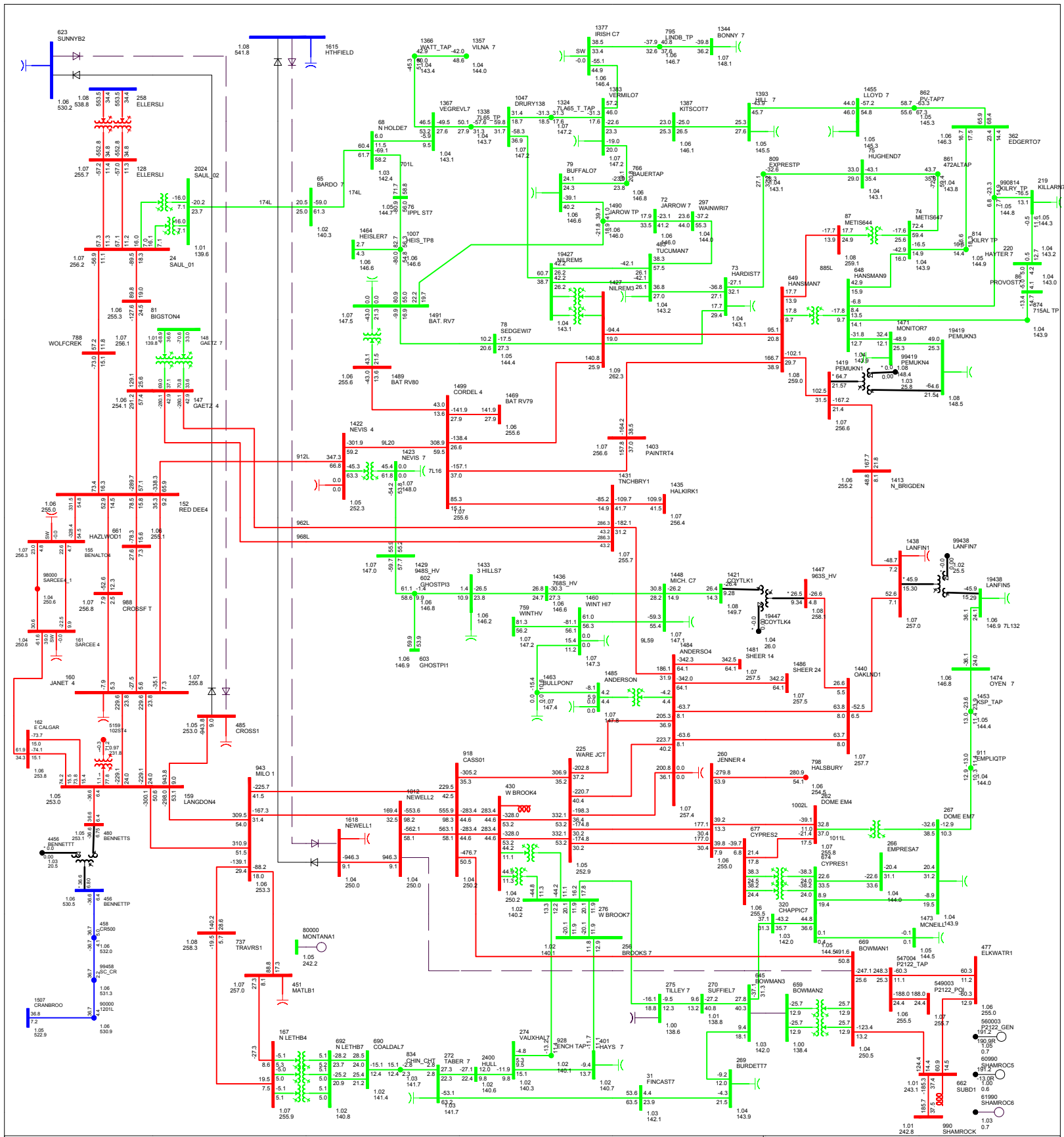
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 507.1 MW Central East: 788.8 MW South West: 356.0 MW
 FIG. C-22_VR-2023SL_CASE: MS_GEN_SCN1
 PROJECT: CETO STAGE162
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:13
 Contingency: 52%; Trip Action: Bowmanston 2401/389W split

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW%/Loading



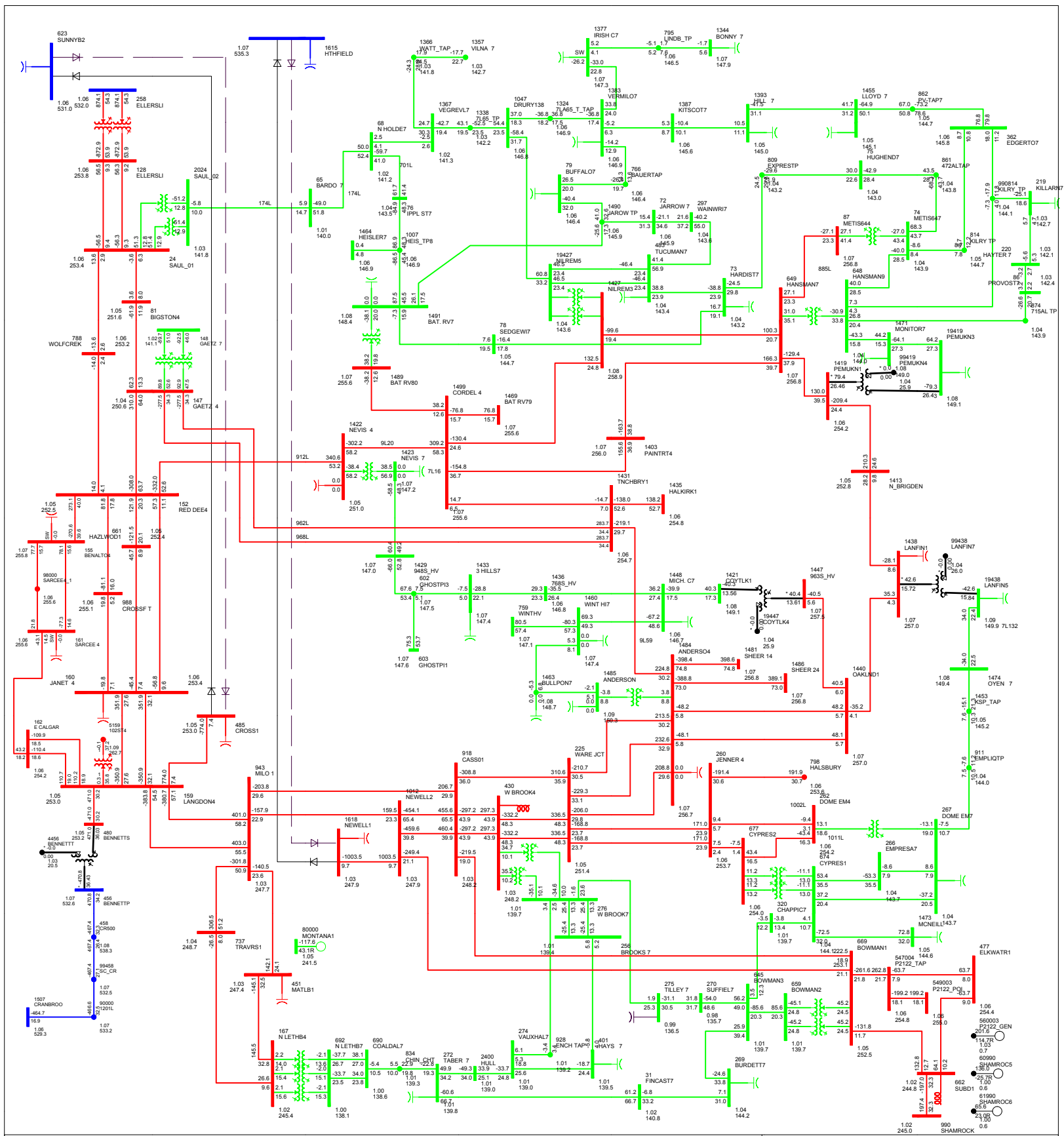
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 507.1 MW Central East: 788.8 MW South West: 356.0 MW
 FIG. C-23_VR-2023SL CASE: MS_GEN SCN 1
 PROJECT: CETO STAGE 1A2
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:13
 Contingency: 53SL; Trip Action: Bowmanston 240138RW split

Branch Loading: >=100.0%
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



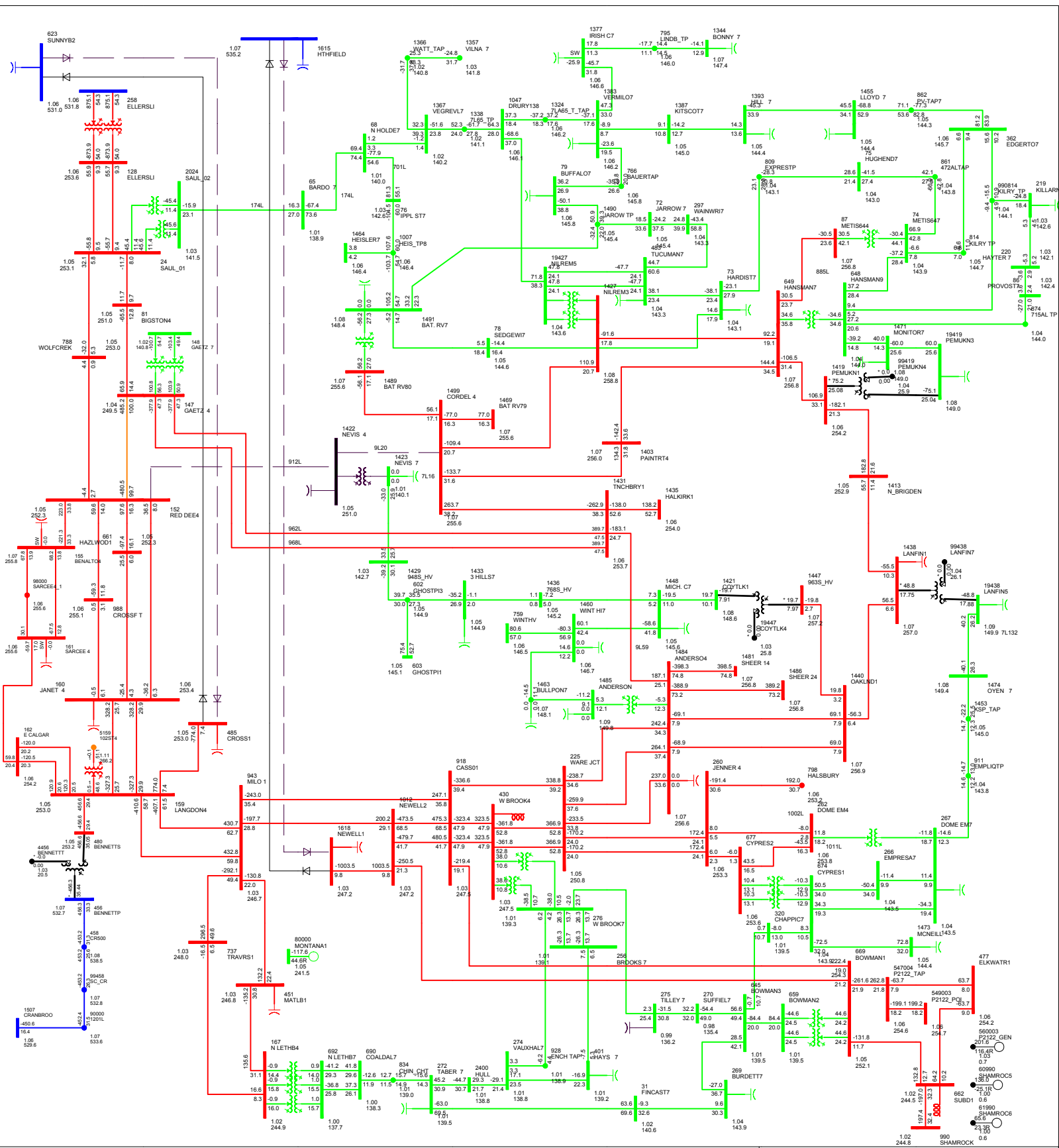
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 507.1 MW Central East: 788.8 MW South West: 356.0 MW
 FIG. C-24_YR2023SL_CASE: MS_GEN_SCN1
 PROJECT: CETO STAGE162
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:12
 Contingency: 103SL; Trip Action: Bowman2 240/138kV split

Branch Loading: >=100.0%
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00
 Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW/Loading



P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 507.1 MW Central East: 788.8 MW South West: 356.0 MW
 FIG. C-25 - YR 2023; CASE: MS; GEN SCN 1
 PROJECT: CETO STAGES 1&2
 CAP: MAXIMIZE
 RUN: JUL 12 2020 23:12
 Contingency: Base, Trip Action: None

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading

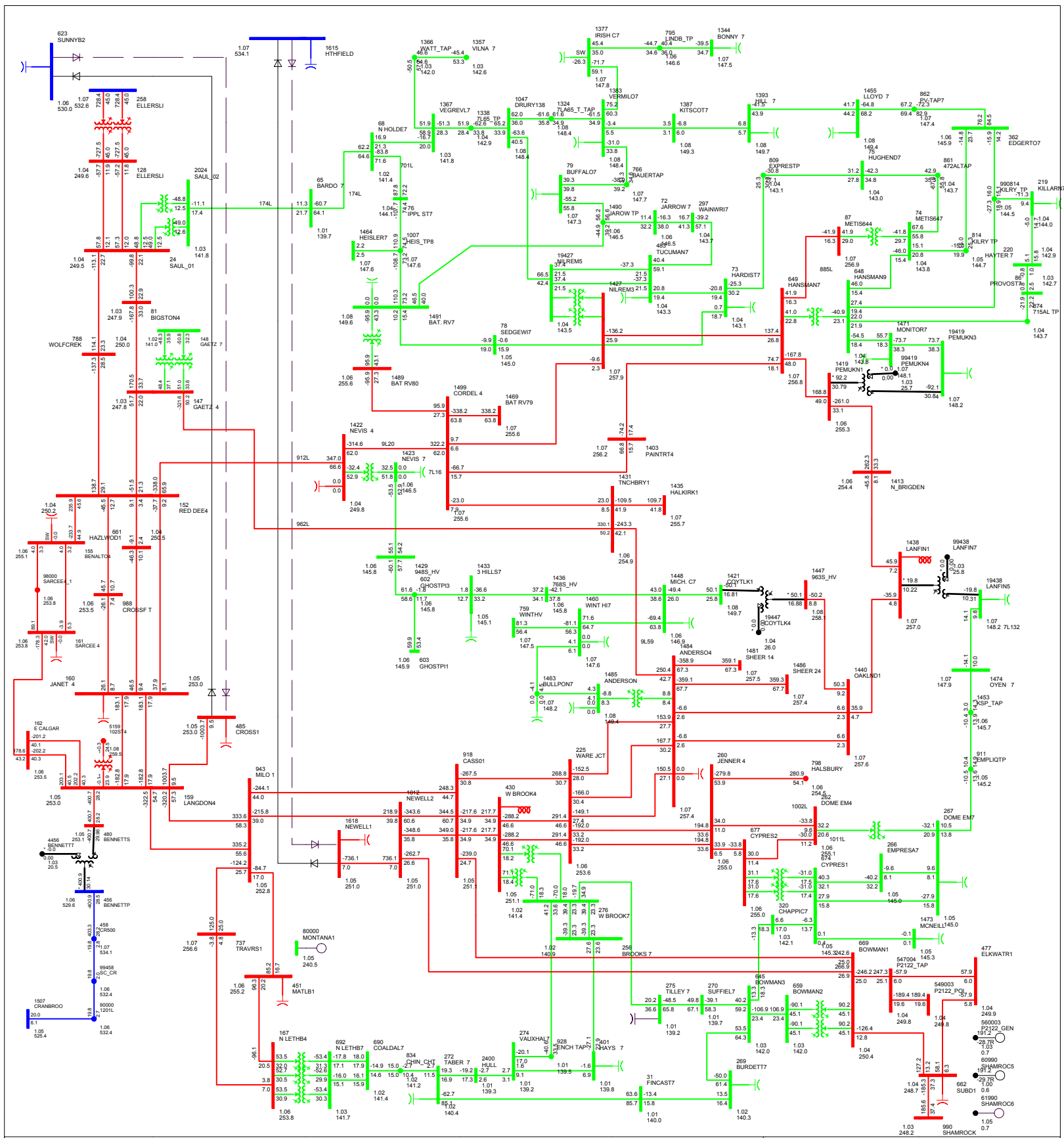


P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 507.1 MW Central East: 788.8 MW South West: 356.0 MW

FIG. C-26 - YR 2023; CASE: MS; GEN SEN 1
 PROJECT: CETO STAGES 1&2
 CAP: MAXIMIZE
 SUN JUL 12 2023 23:13
 Contingency: 7685901T; Trip Action: None

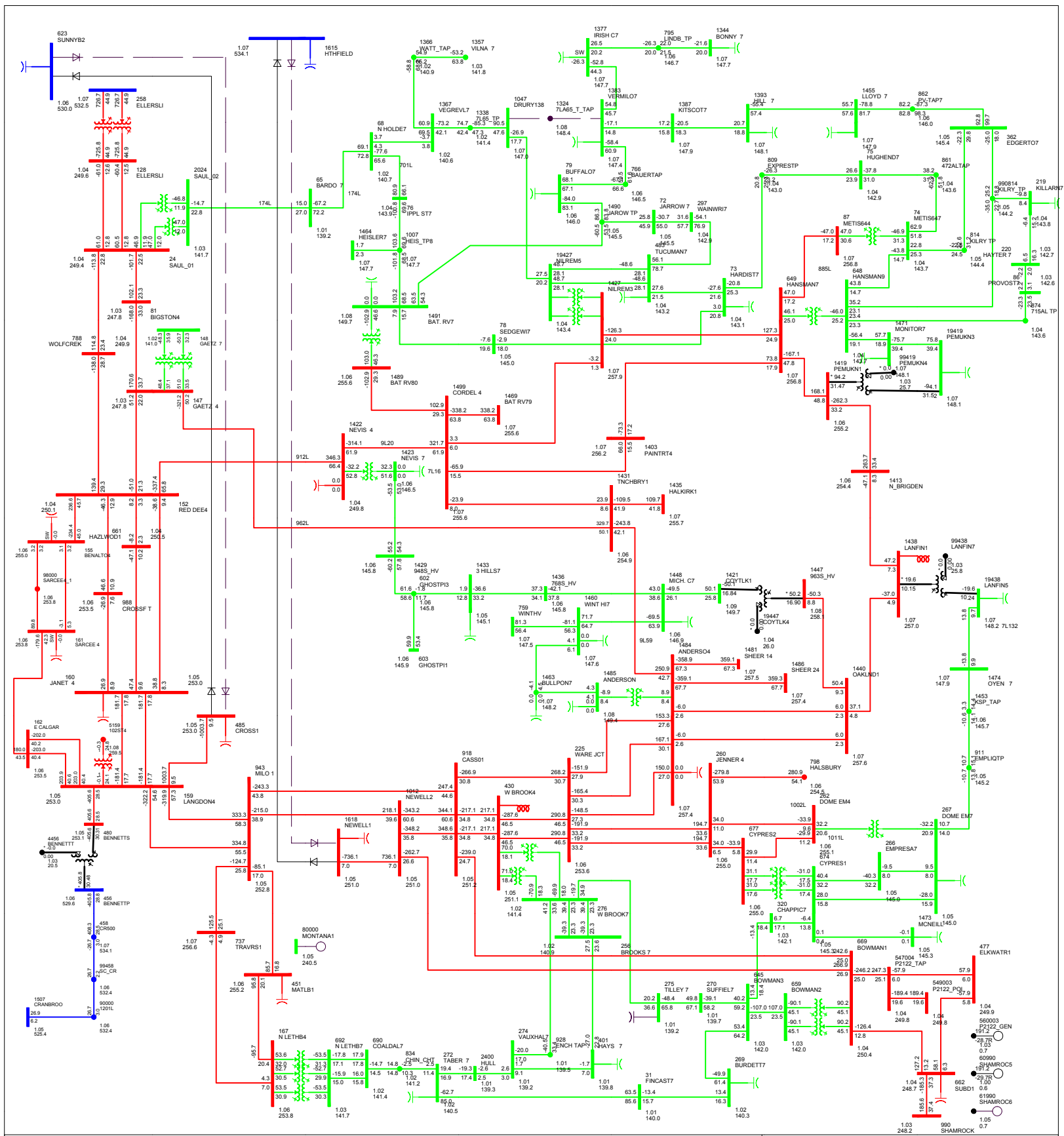
Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000

Bus - Voltage (kV/pu) Branch - MW/Loading
 Equipment - MW/Loading



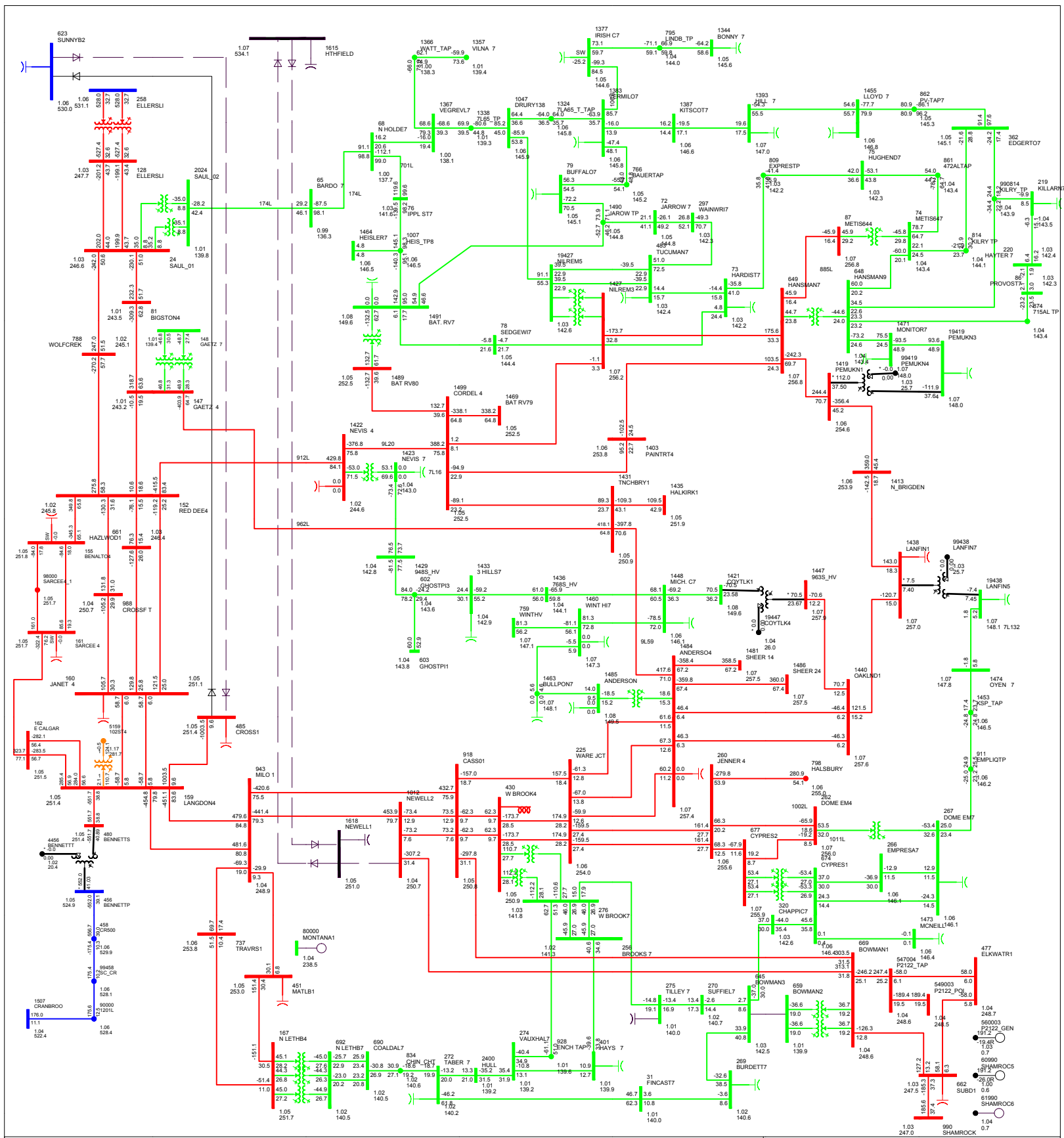
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 674.6 MW Central East: 275.6 MW South West: 936.2 MW
 FIG. C-27-VR-2023SP-CASE_MK_GEN_SCN 1
 PROJECT: CRPC (R-CR) (DPL) GEN STAGE 1
 CAP: MAXIMIZE
 SUN JUL 12 2023 23:01
 Contingency: Base, Trip Action: L274 BC 138kV TE

Branch Loading: >=100.0%
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW%/Loading



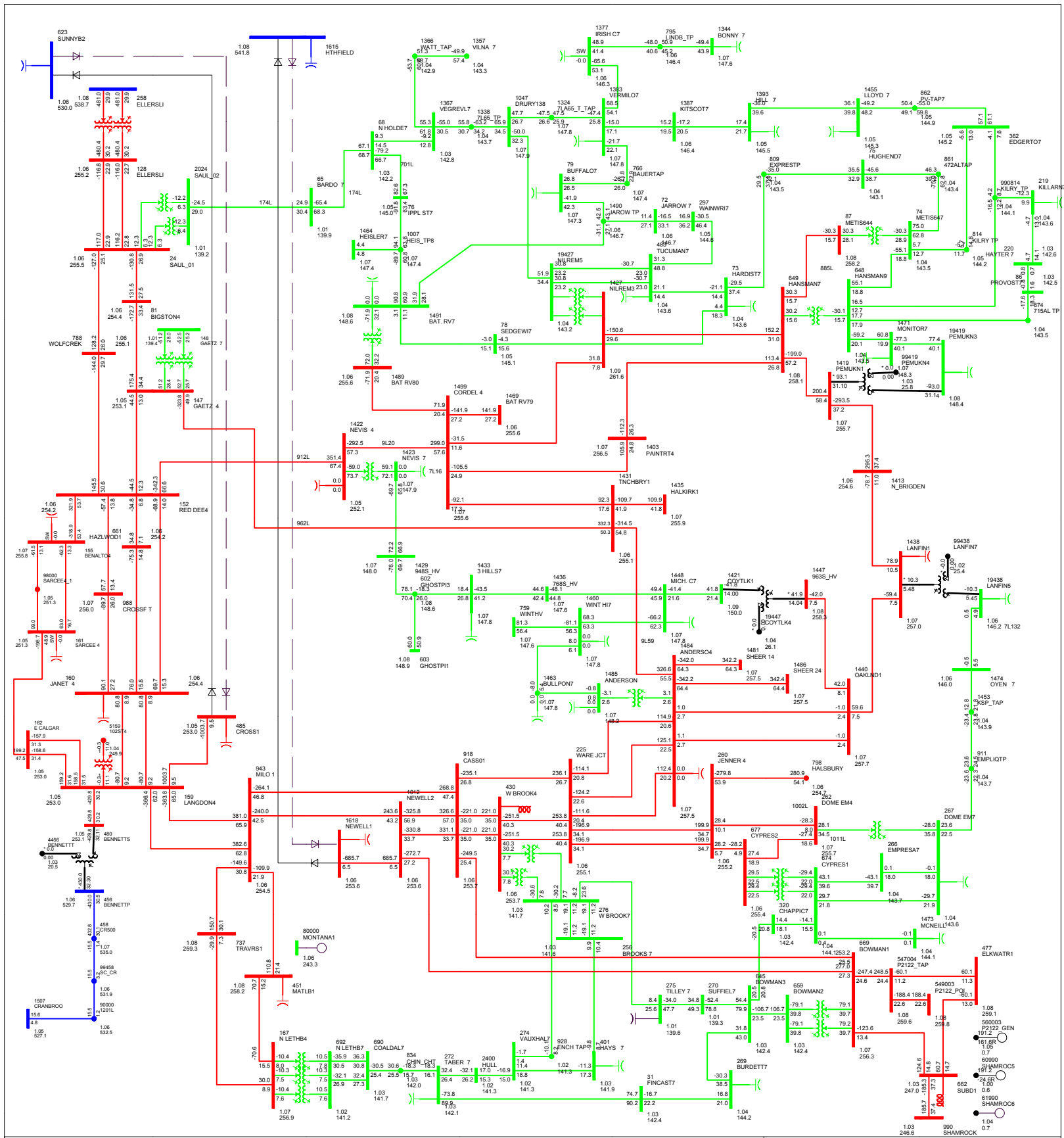
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 674.6 MW Central East: 275.6 MW South West: 936.2 MW
 FIG. C-28_VR2023SP_CASE_MK_GEN SCN 1
 PROJECT: CRPC (R-CR) (DPL) GEN0 STAGE1
 CAP: MAXIMUM
 RUN: JUL 12 2023 23:02
 Contingency: 7L205; Trip Action: L274 BC 198W Tie

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW%/Loading



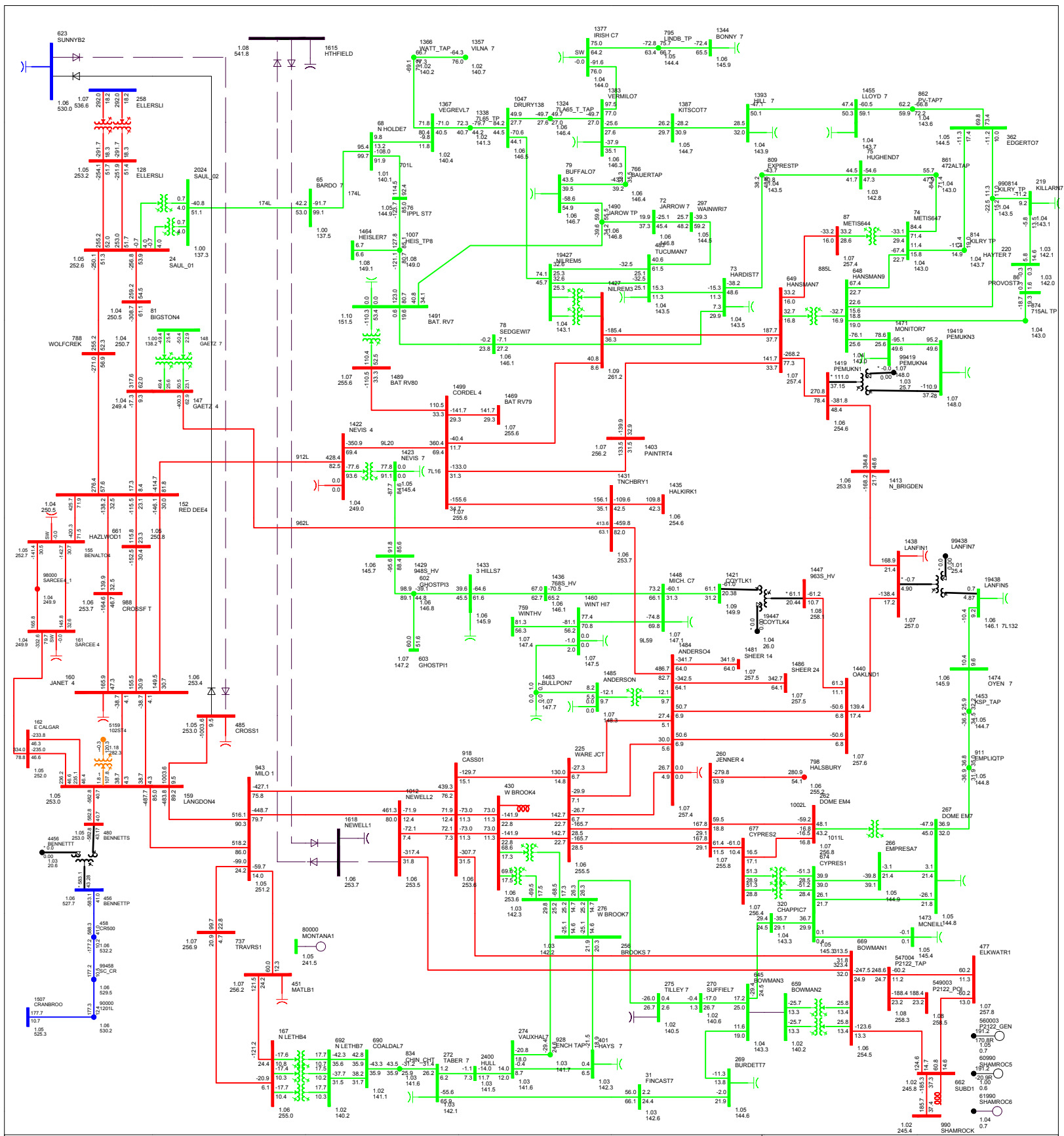
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 674.6 MW Central East: 275.6 MW South West: 936.2 MW
 FIG. C-29-VR-2023SP-CASE_MK_GEN SCN 1
 PROJECT CRPC (R-CR) OPTI_CASE1 STAGE1
 CAP. MAXIMIZE
 RUN DATE: 12/20/23 22:02
 Contingency: EATL, Trip Action: L274 BC 138kV T, Bowmanman 240/138kV split

Branch Loading: >=100.0%
 kV: <=25.00V <=69.00V <=138.00V <=240.00V <=500.00V
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW%/Loading



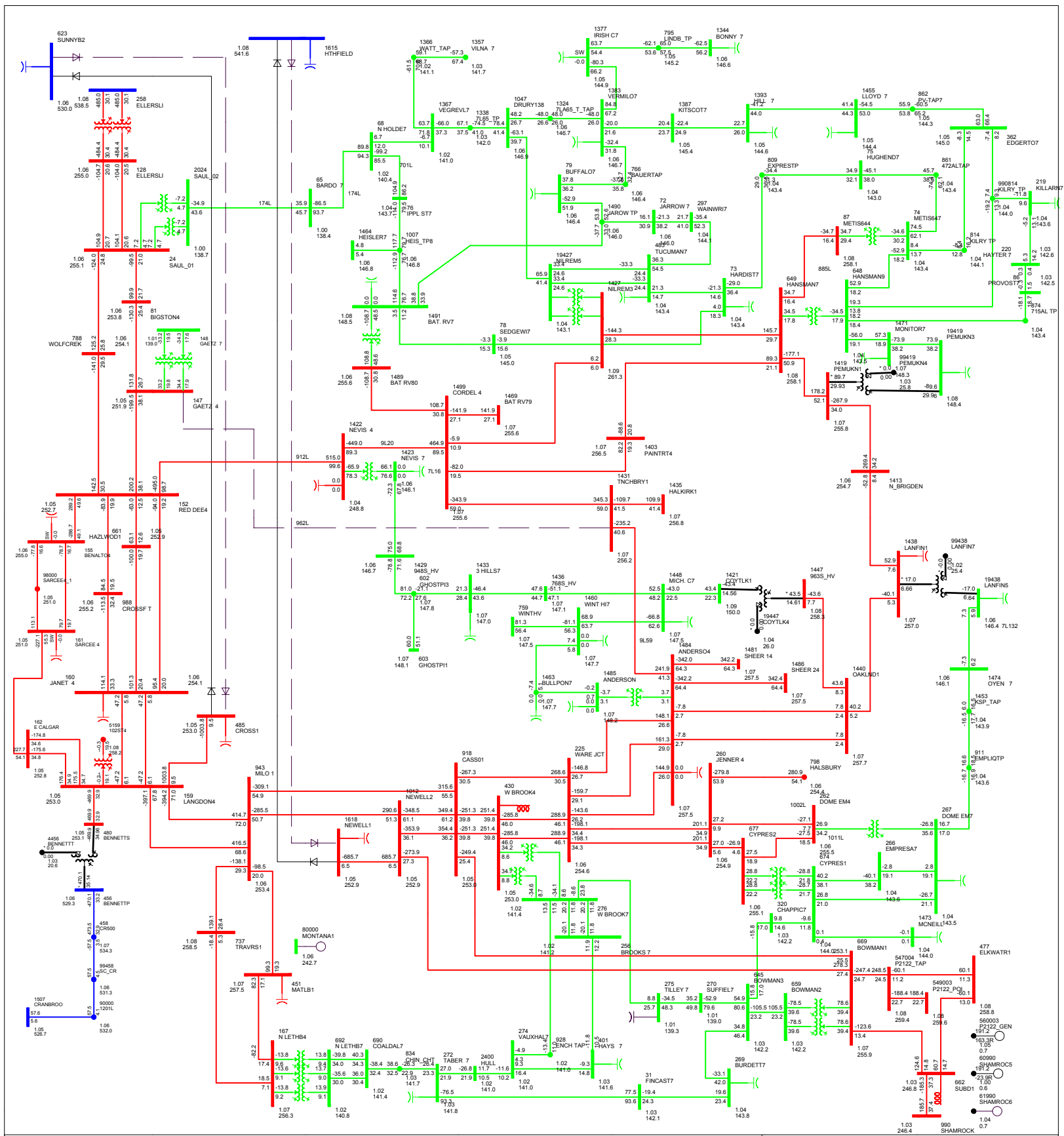
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 674.6 MW Central East: 275.6 MW South West: 936.2 MW
 FIG. C-30_VR2023SL CASE-M: GEN SCEN 1
 PROJECT: CRPC (R-CR) (RPT) GEN STAGE 1
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:02
 Contingency: Base, Trip Action: L274 BC 138kV TE

Branch Loading: **>=100.0%**
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW/Loading



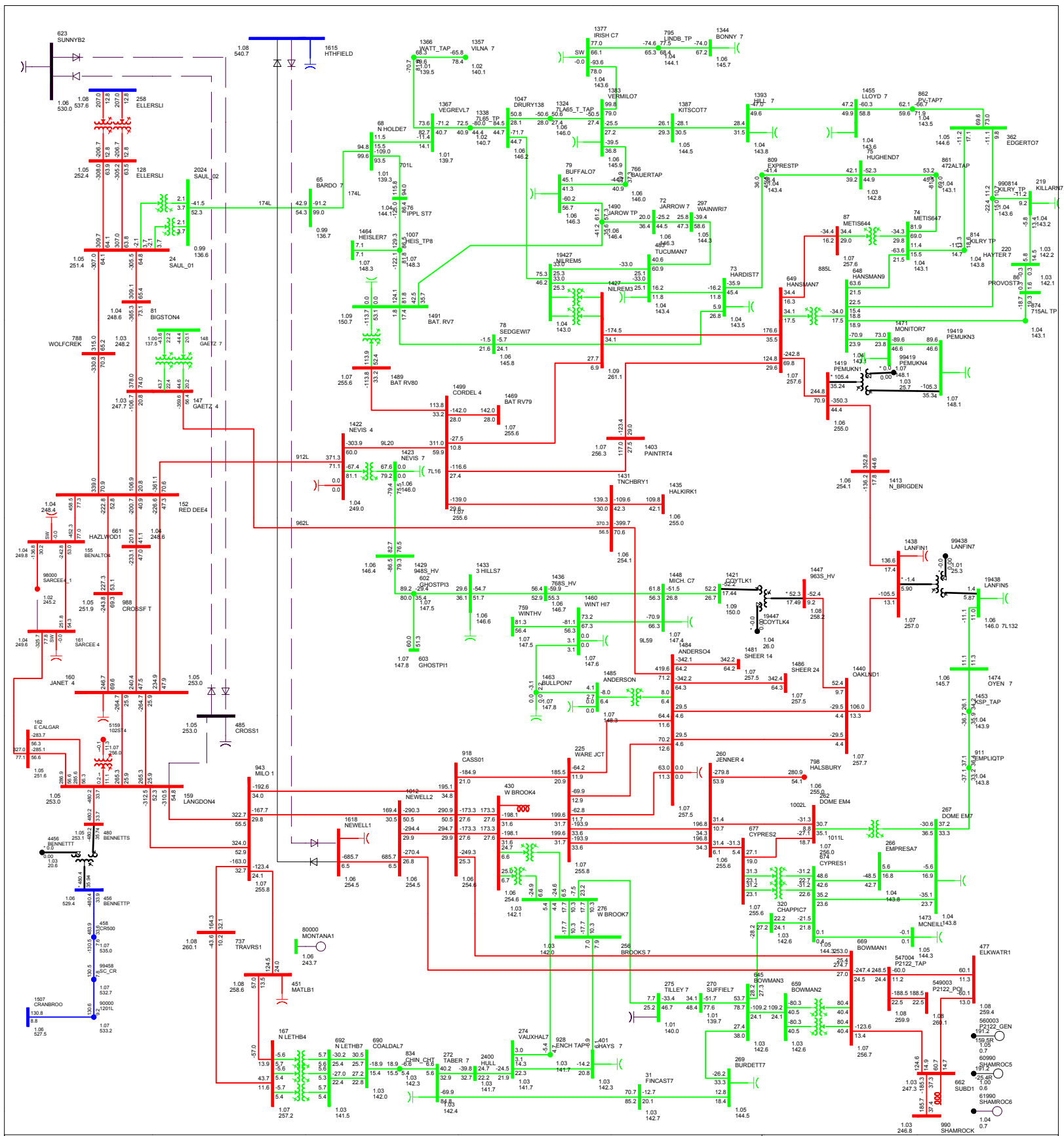
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 674.6 MW Central East: 275.6 MW South West: 936.2 MW
 FIG. C-31_YR2025SL CASE_ML_GEN SCN 1
 PROJECT CRPC (R-CR) (RPT) GEN1 STAGE 1
 CAP. MAXIMIZE
 SUN JUL 12 2023 22:02
 Contingency: EATL, Trip Action: L274 BC 138V TP, Bowmanman 240138V split

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW/Loading



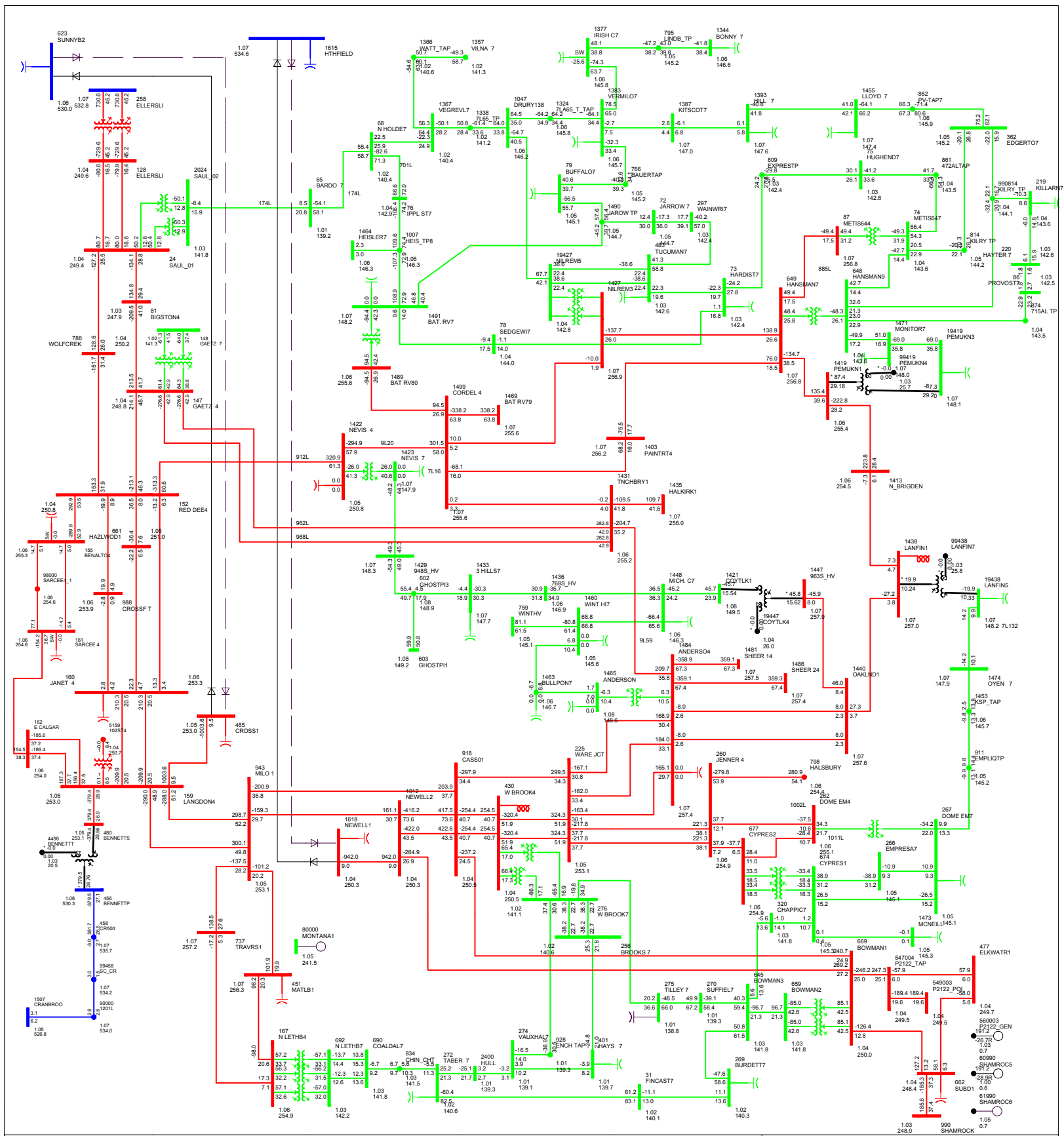
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 674.6 MW Central East: 275.6 MW South West: 936.2 MW
 FIG. C-32-VR-2023SL CASE-M: GEN SCV1
 PROJECT: CRIC (RGR OPT) CETO STAGE1
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:02
 Contingency: 962L_RL962; Trip Action: L274 BC 138K Vte

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW/Loading



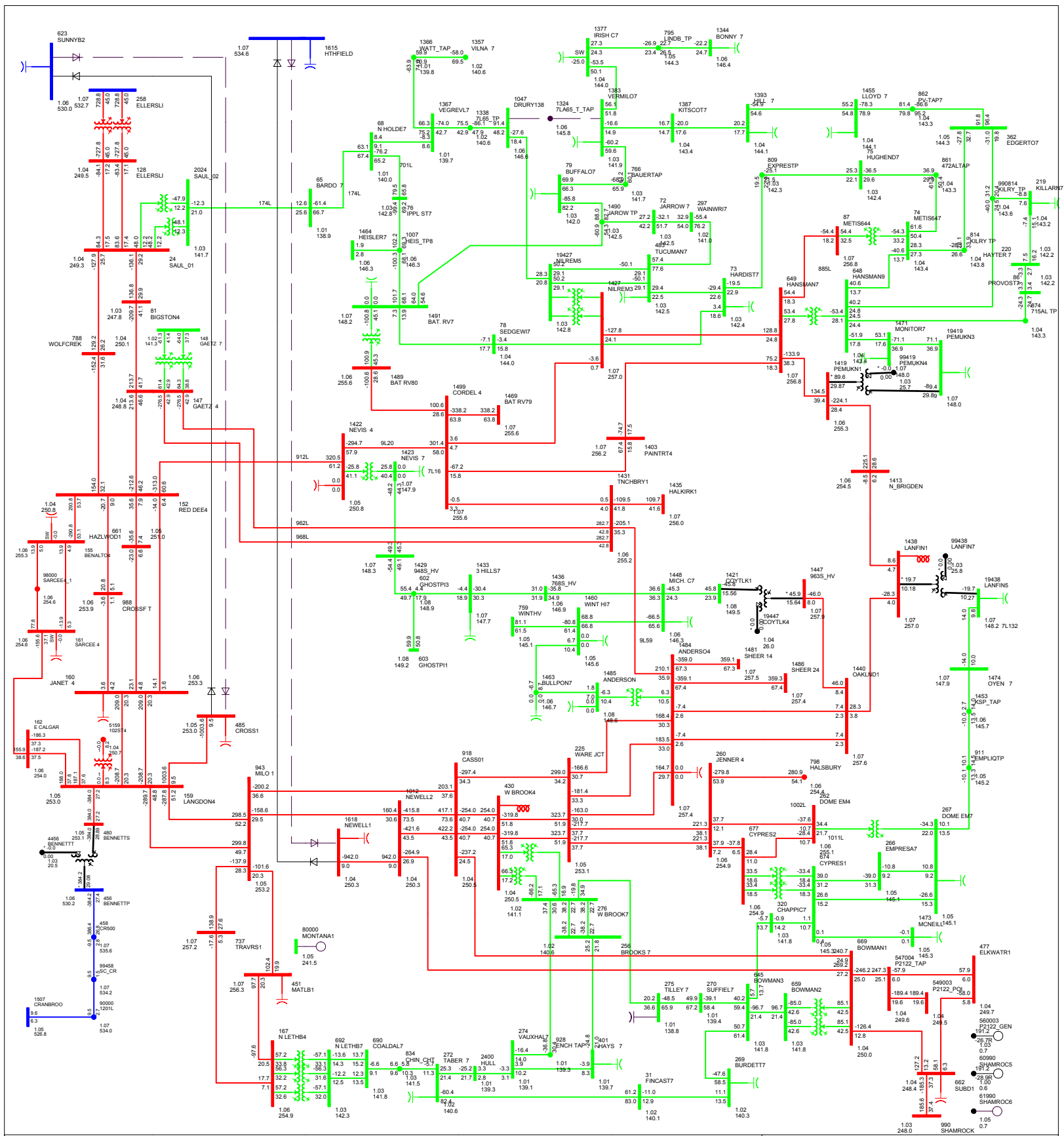
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 674.6 MW Central East: 275.6 MW South West: 936.2 MW
 FIG. C-33_VR-202302 CASE_ML_GEN SCV1
 PROJECT CRPC (R-CR) OPTI_CSTO_STAGE1
 CAP_MAXIMIZE
 RUN_AJL_12-2022_23-02
 Contingency: WATL; Trip Action: L274 BC 138kV, E 916L overload, Sarcee bus split

Branch Loading: >=100.0%
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



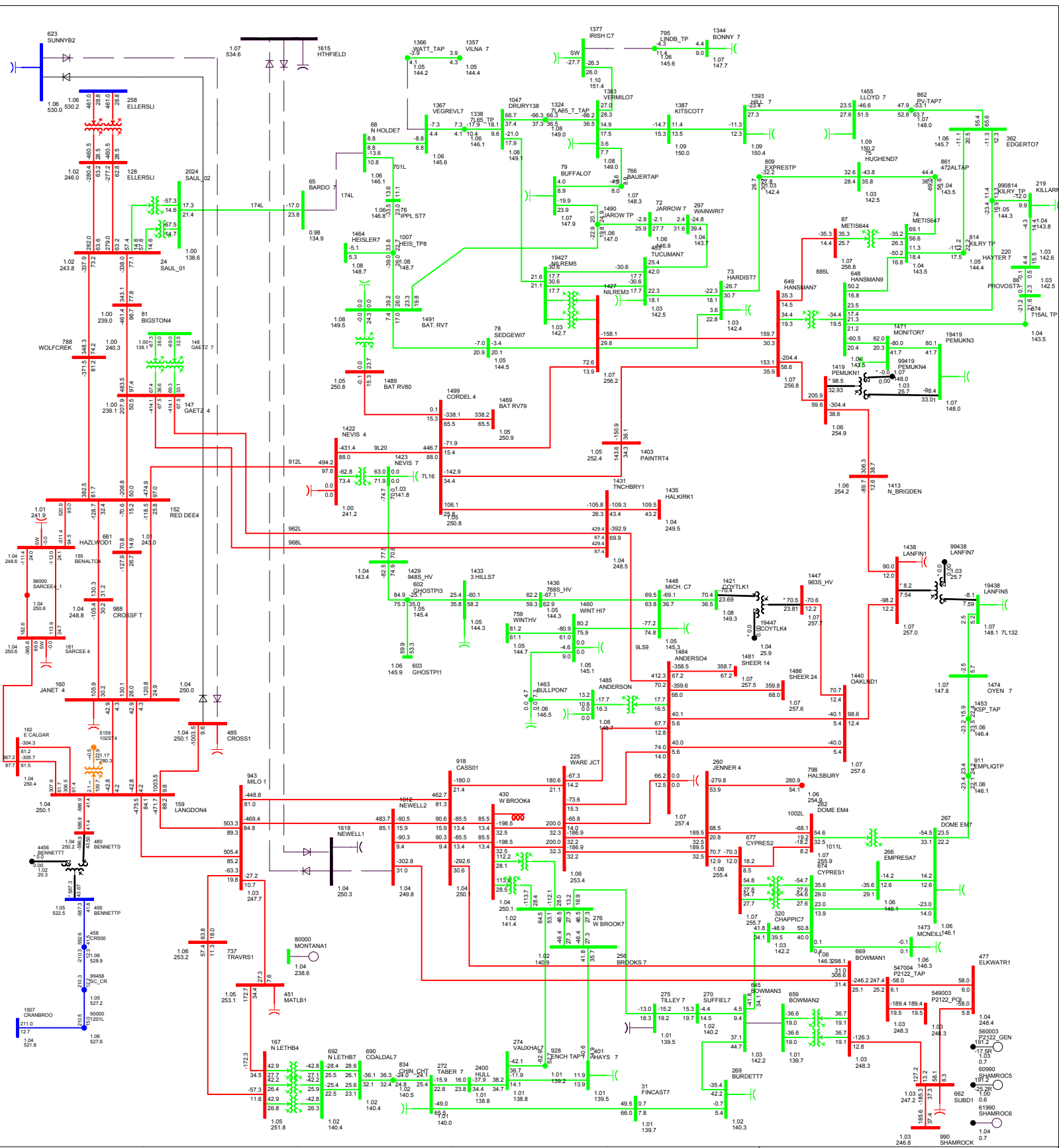
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 715.0 MW Central East: 540.1 MW South West: 935.2 MW
 FIG. C-34_VR-2023SP_CASE_MX_GEN_SON_1
 PROJECT: CRPC (R-CR) (DPL) CETO STAGE1&2
 CAP: MAXIMUM
 SUN JUL 12 2023 23:02
 Contingency: Base, Trip Action: None

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 715.0 MW Central East: 540.1 MW South West: 935.2 MW
 FIG. C-35_VR2023SP_CASE_MX_GEN_SCN1
 PROJECT: CRPC (R-CR) (DPL) CETO STAGE1&2
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:02
 Contingency: 7L205; Trip Action: None

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading

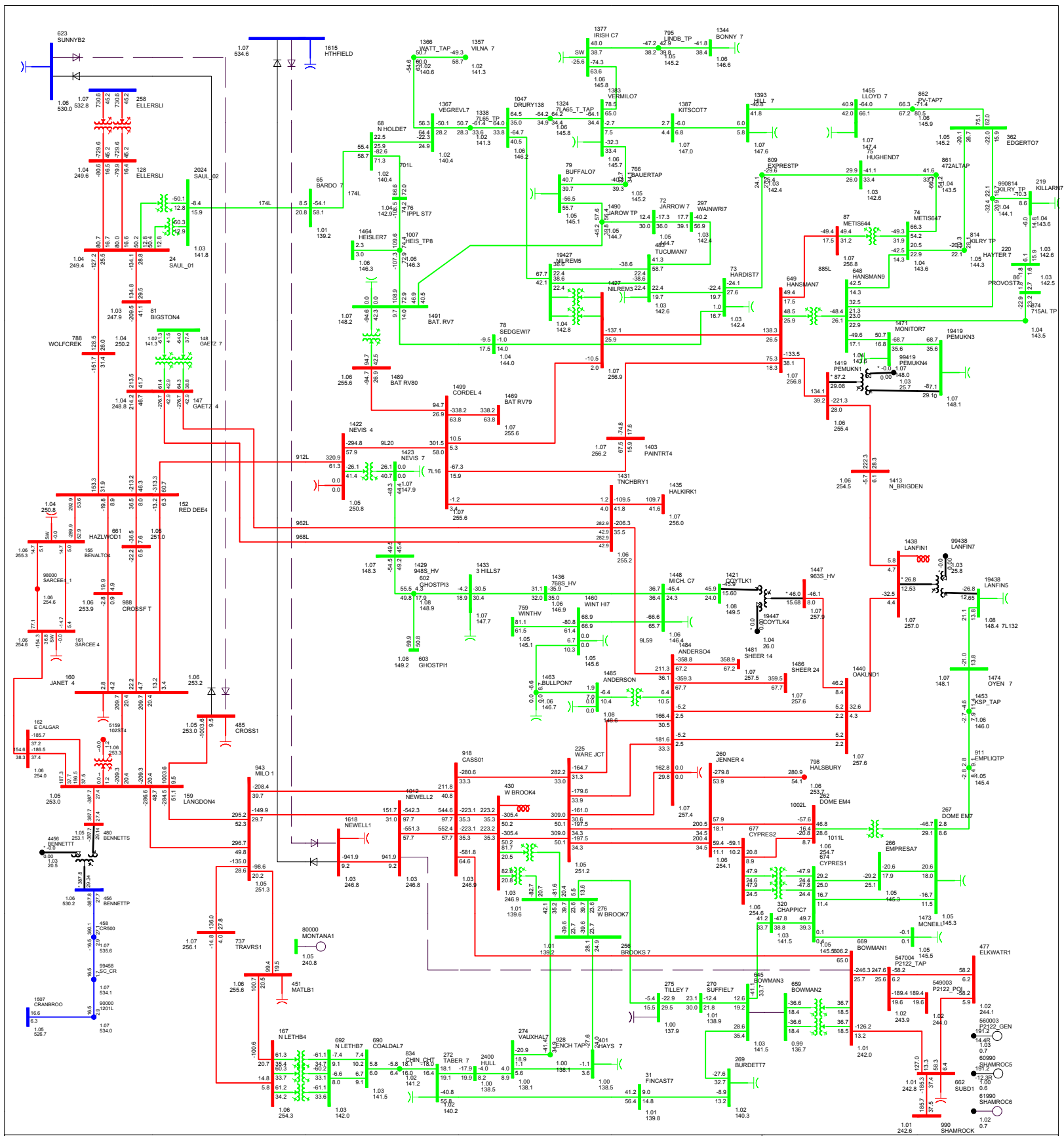


P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 715.0 MW Central East: 540.1 MW South West: 935.2 MW

FIG. C-36_VR-2023SP_CASE_MK_GEN_SCN 1
 PROJECT: CPEC (R-CR) (DPL) CETO STAGE1&2
 CAP: MAXIMIZE
 SUN_Alt: 12/20/23 23:01
 Contingency: EATL1, Trip Action: 174L overload trip, 7L53 overload trip, L274 BC 138kV Tie, Bowmann 240/138kV split

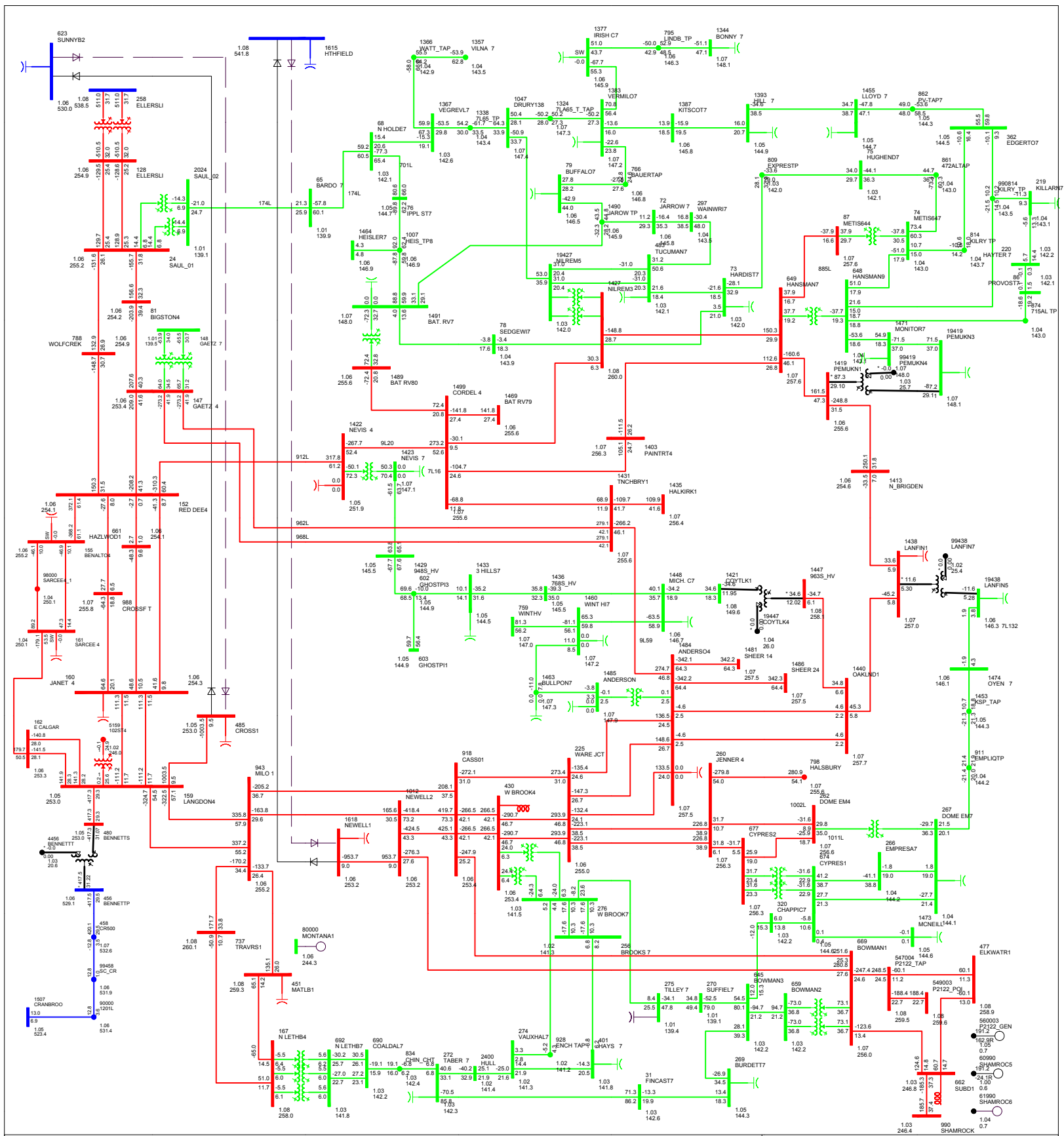
Branch Loading: >=100.0%
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00

Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



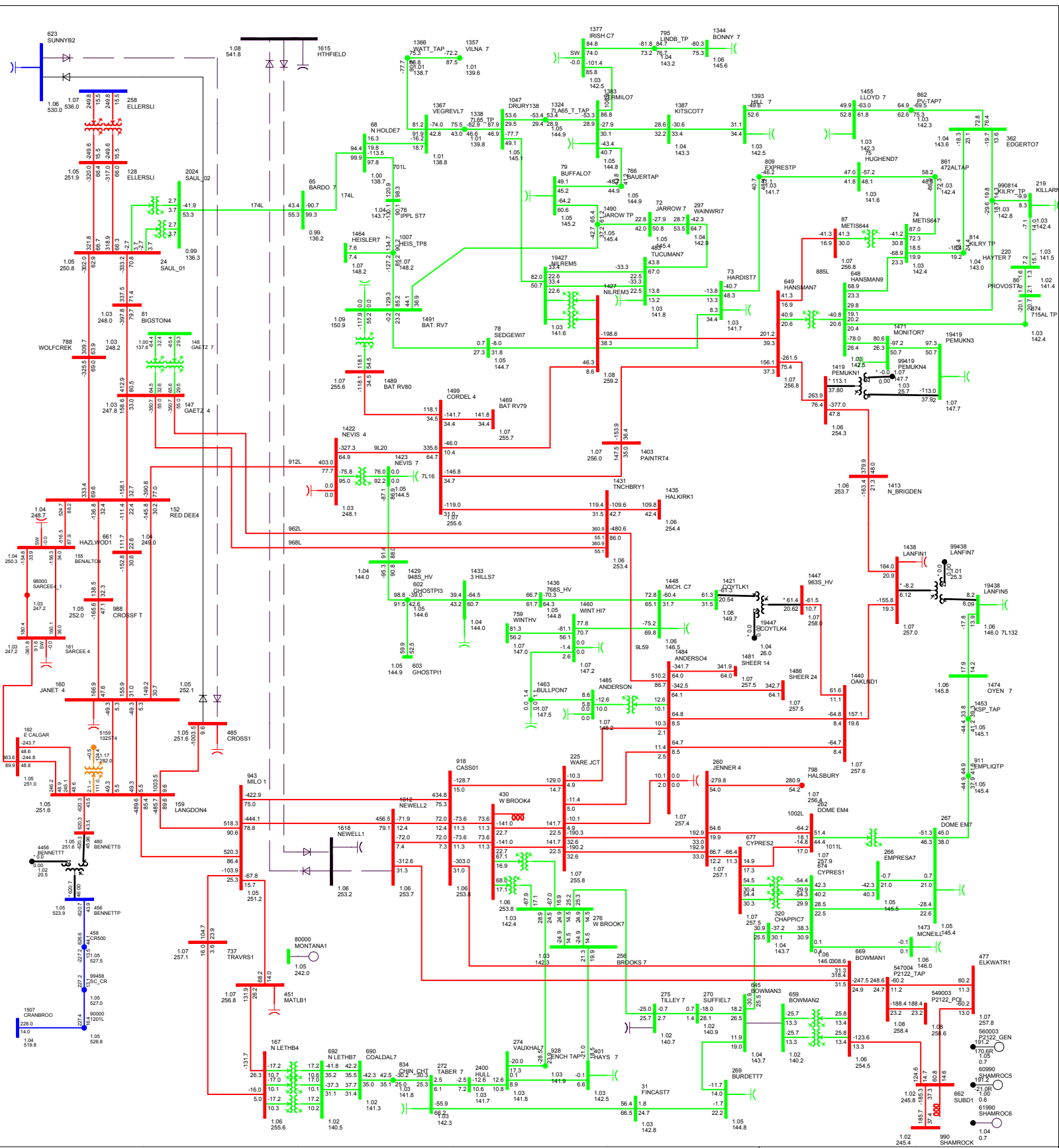
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 715.0 MW Central East: 540.1 MW South West: 935.2 MW
 FIG. C-37-VR-2023SP-CASE_MK_GEN SEN 1
 PROJECT: CRPC (R-CR) (DPL) CETO STAGE1&2
 CAP: MAXIMIZE
 SUN JUL 12 2023 23:01
 Contingency: 103SL; Trip Action: Bowman2 240/138kV split

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 715.0 MW Central East: 540.1 MW South West: 935.2 MW
 FIG. C-38_VR-2023SL CASE-M: GEN SCEN 1
 PROJECT: CRPC (R-CR) (RPT) CASE STAGE 1A2
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:01
 Contingency: Base, Trip Action: L274 BC 138kV Tie

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW%/Loading

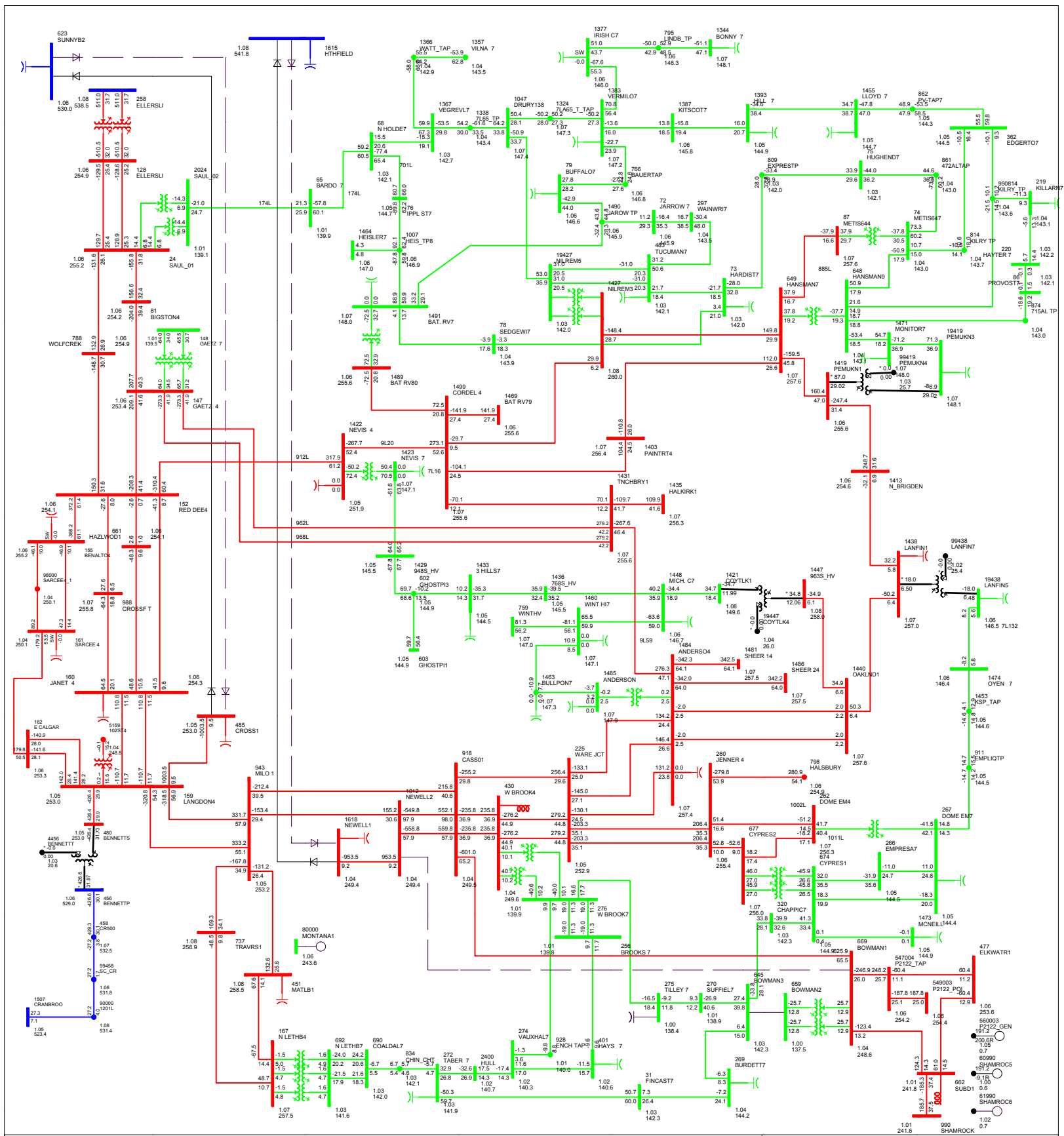


P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 715.0 MW Central East: 540.1 MW South West: 935.2 MW

FIG. C-39-VR-2023SL CASE-M: GEN SCN 1
 PROJECT: CRIC (CR-GR) OPTI, GEN1, STAGE142
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:01
 Contingency: EATL, Trip Action: L274 BC 138kV T, Bowmanman 240138kV split

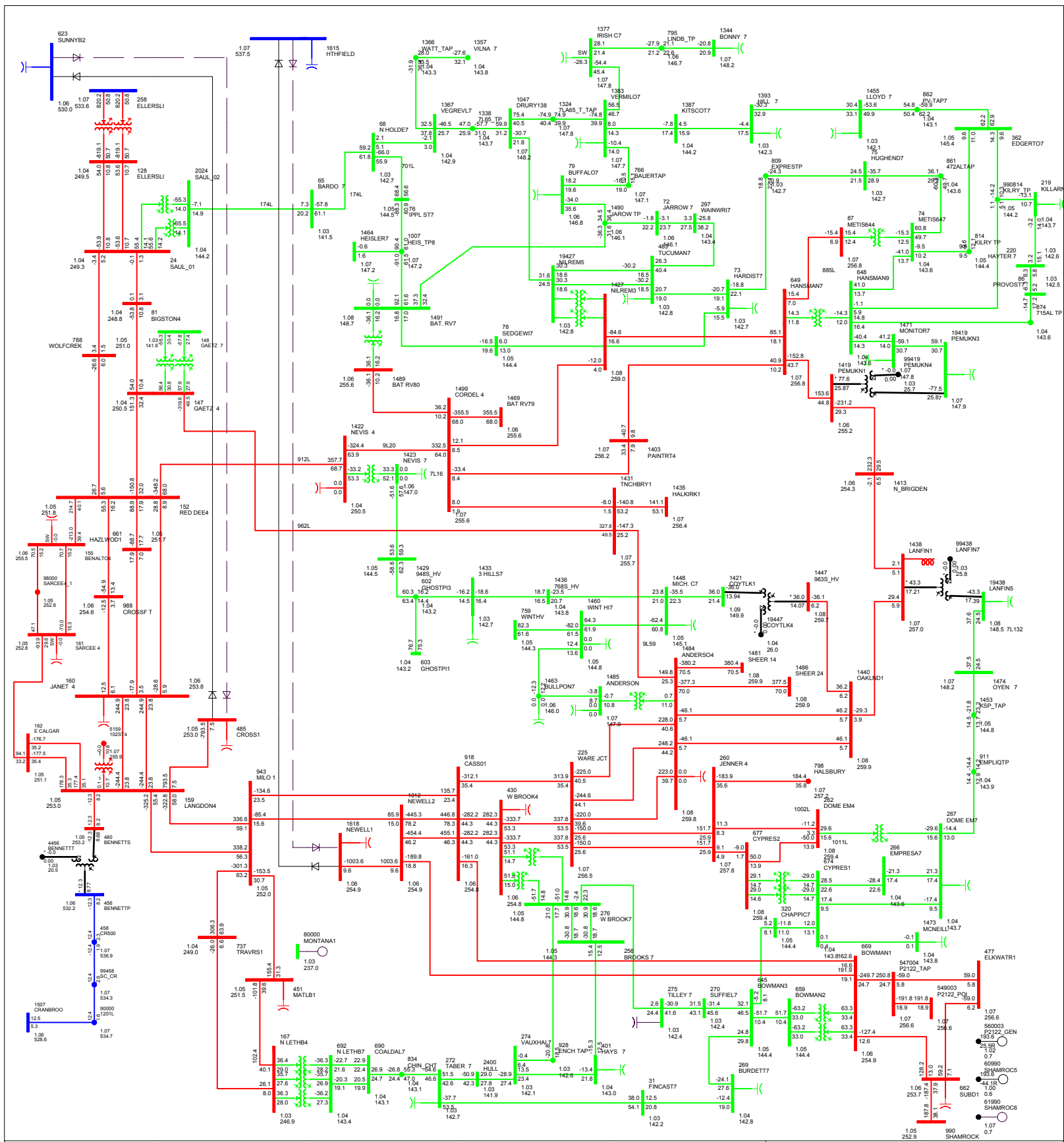
Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000

Bus - Voltage (kV/pu) Branch - MW/Loading
 Equipment - MW%/Loading



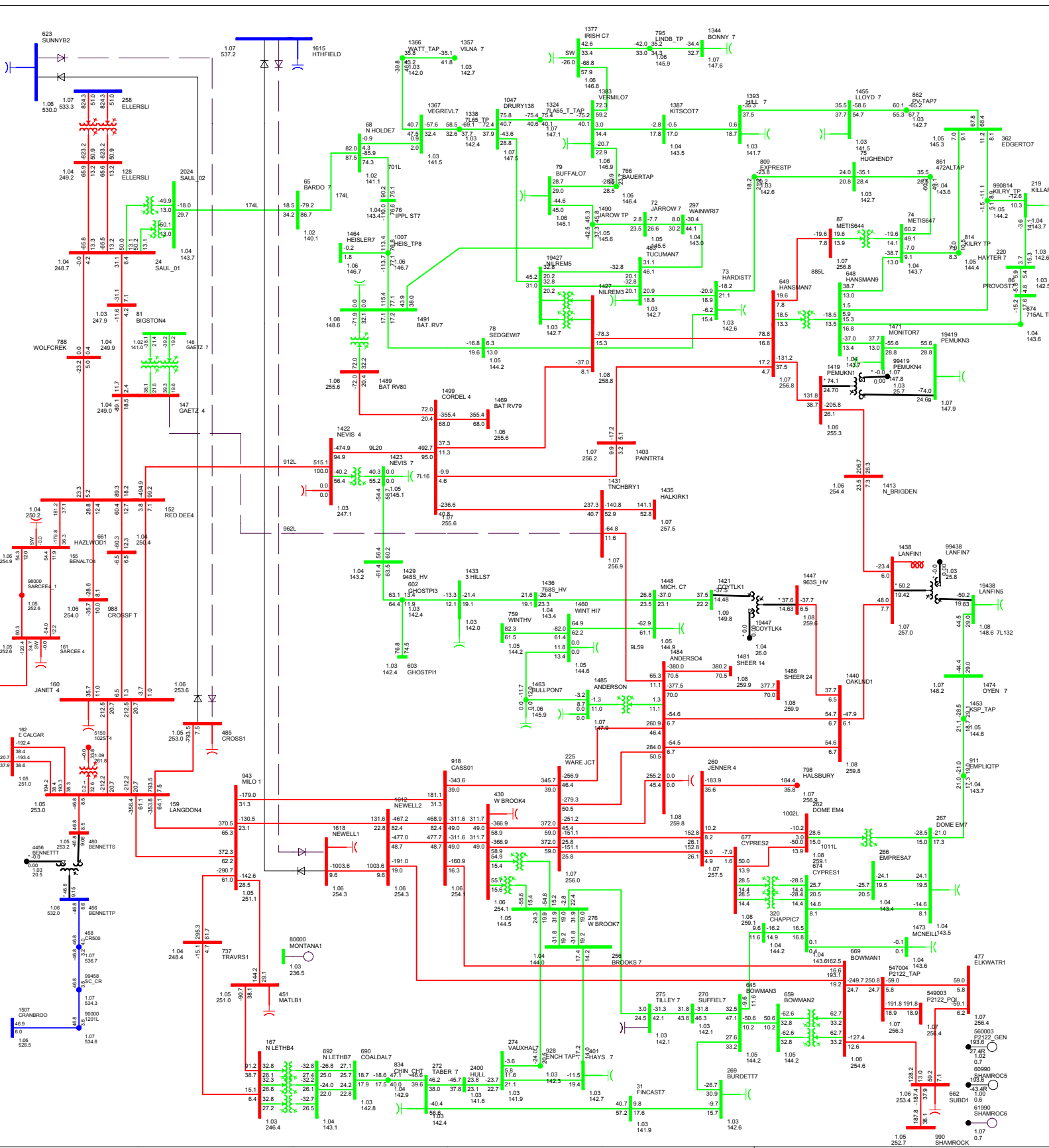
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 715.0 MW Central East: 540.1 MW South West: 935.2 MW
 FIG. C-40_VR-2023SL CASE-M: GEN SCN 1
 PROJECT: CRPC (R-CRGR OPT), GEN TO STAGE1&2
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:01
 Contingency: 103SL; Trip Action: L274 BC 138KV T, Bowmanston 240/138KV split

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



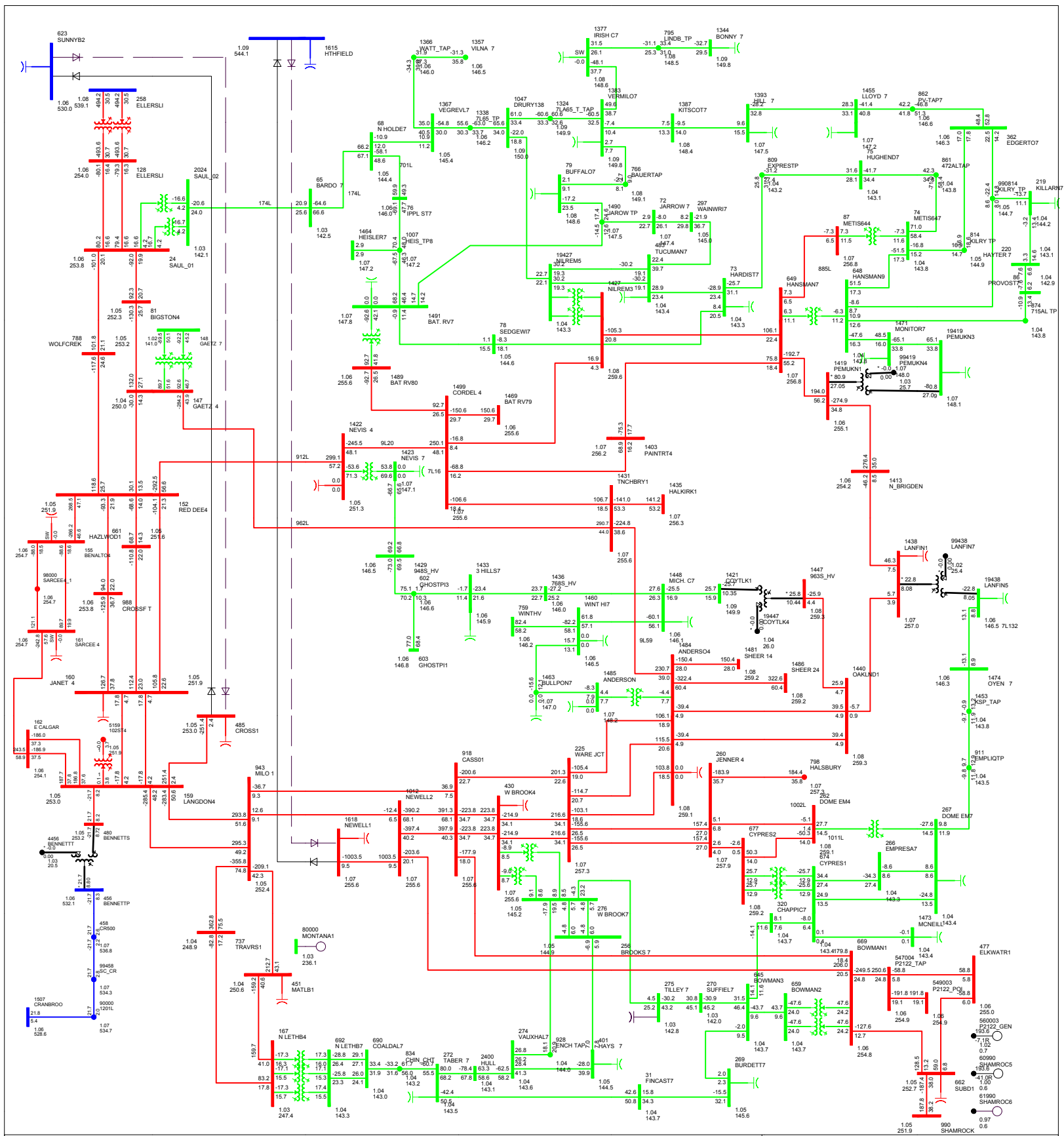
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 459.5 MW Central East: 309.7 MW South West: 324.0 MW
 FIG. C-41_VR2023SP_CASE: H2: GEN SCN 2
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:12
 Contingency: Base, Trip Action: None

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW%/Loading



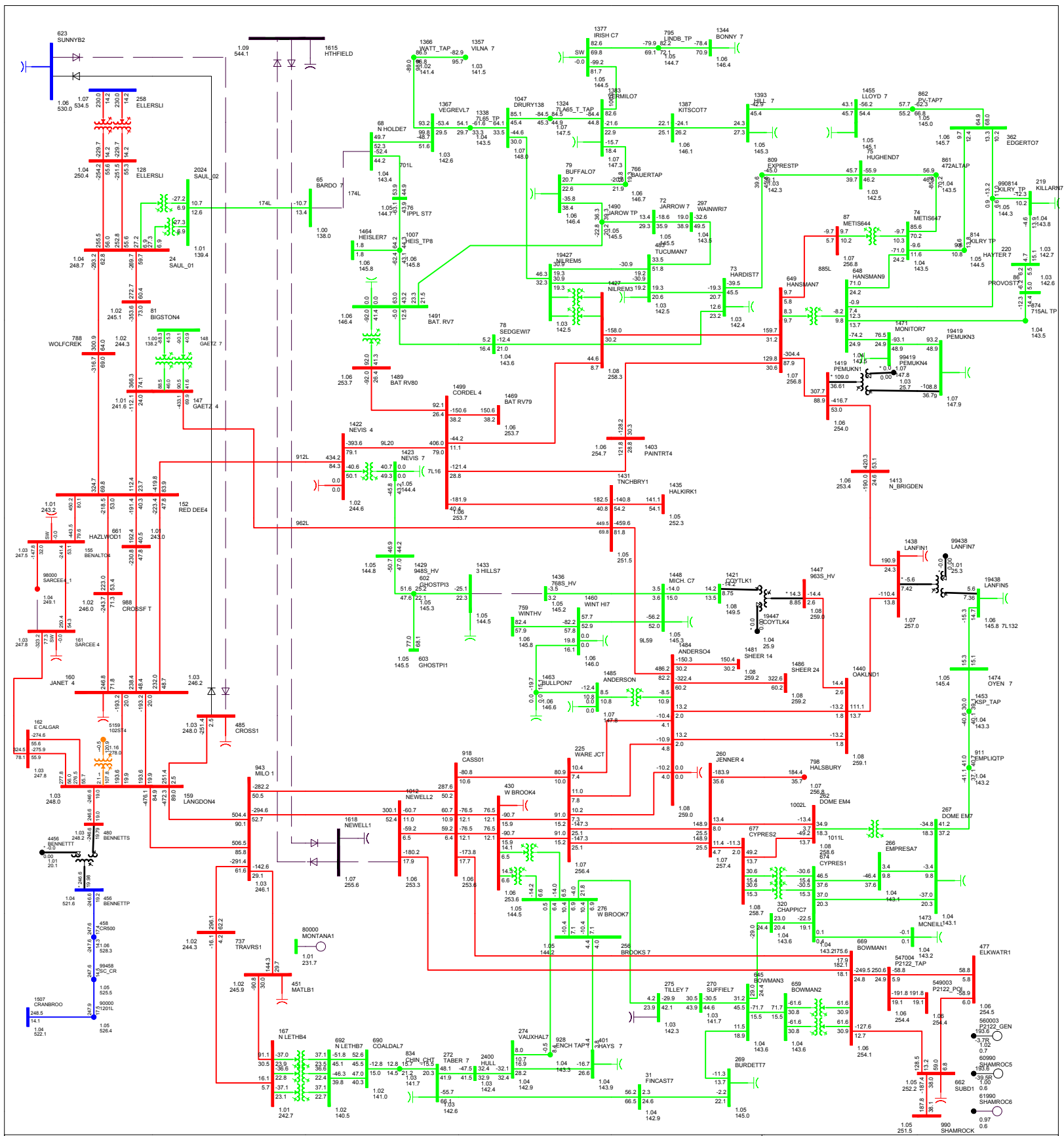
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 459.5 MW Central East: 309.7 MW South West: 324.0 MW
 FIG. C-42_VR-2023SP_CASE: H2: GEN SCN 2
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:11
 Contingency: 9623_RL962: Trip Action: None

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000 Bus - Voltage (kV/pu)
 Branch - MW/Loading Equipment - MW/Loading



P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 459.5 MW Central East: 309.7 MW South West: 324.0 MW
 FIG. C-43_VR-2023SL_CASE_H3_GEN SEN 2
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 SUN JUL 12 2023 23:11
 Contingency: Base, Trip Action: None

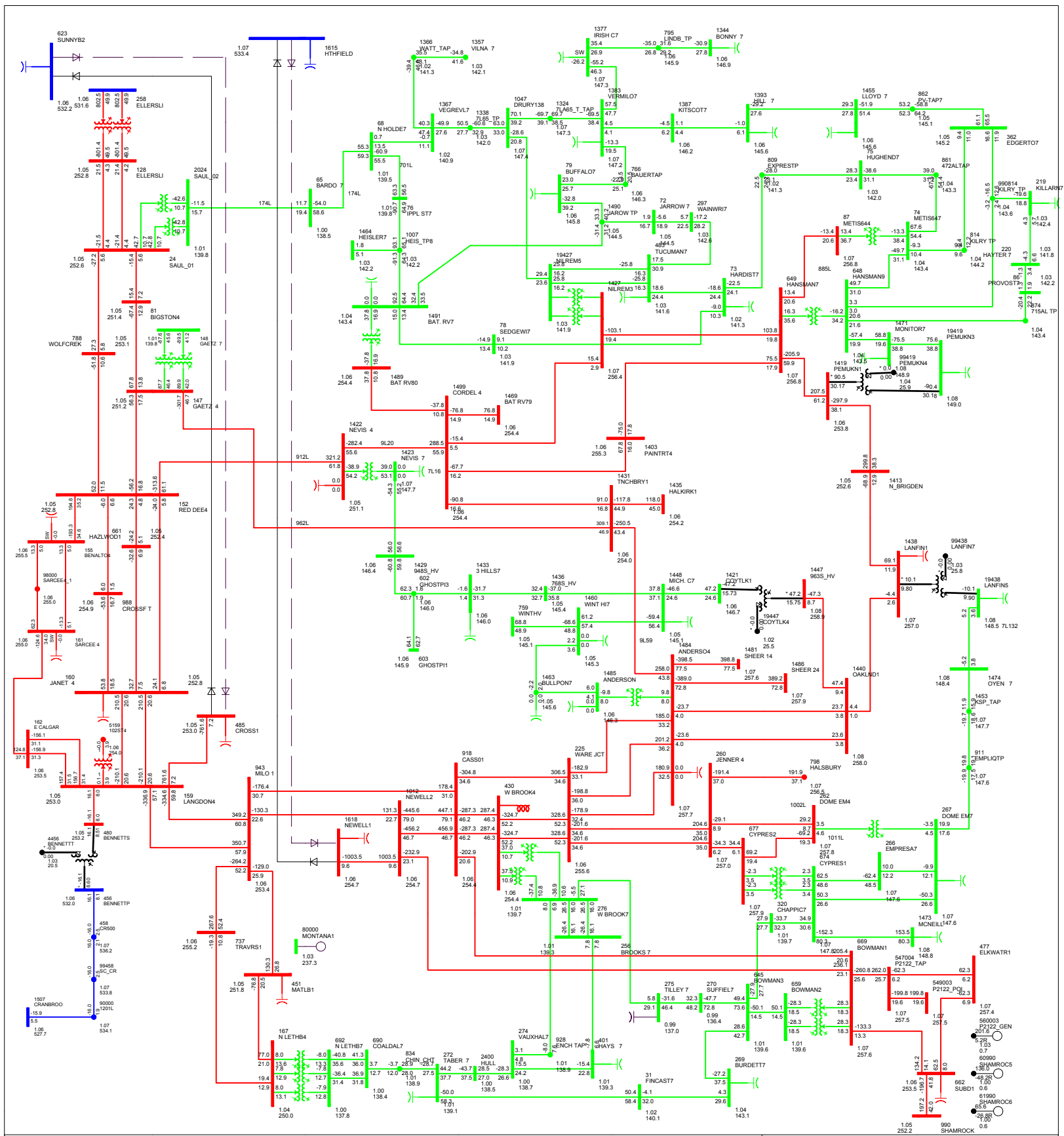
Branch Loading: **>=100.0%**
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW/Loading



P7001 Central East Transfer Out Transmission Development

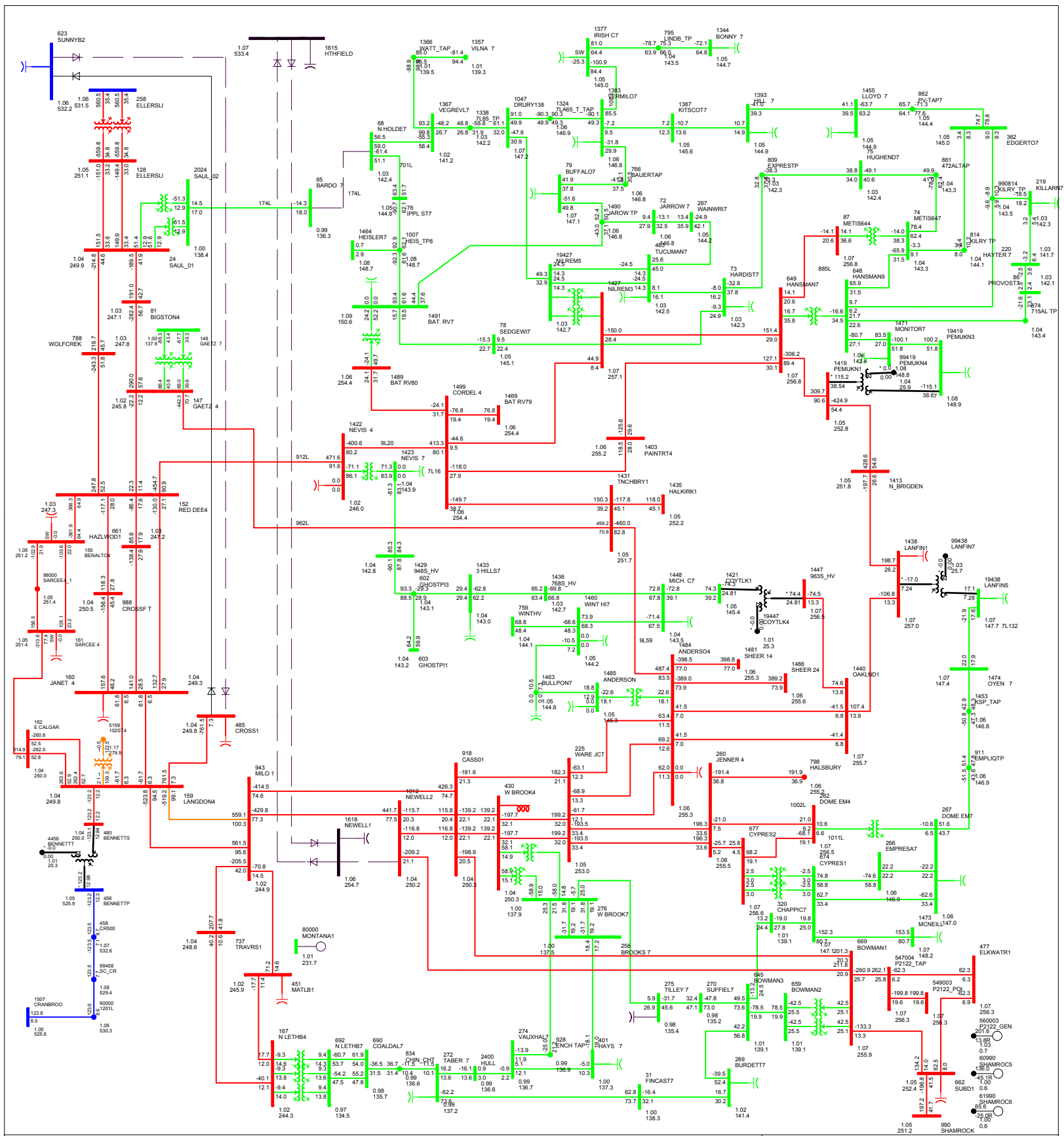
New Generation in Study Area and SW Sub-region
 South East: 459.5 MW Central East: 309.7 MW South West: 324.0 MW
 FIG. C-44_VR2023S_CASE_H3_GEN_SCN 2
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:11
 Contingency: EATL; Trip Action: 174L overload trip, L274 BC 138kV Tie, R166, overload, Sarcee bus split, Nevis 7 overload RAS

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW%/Loading



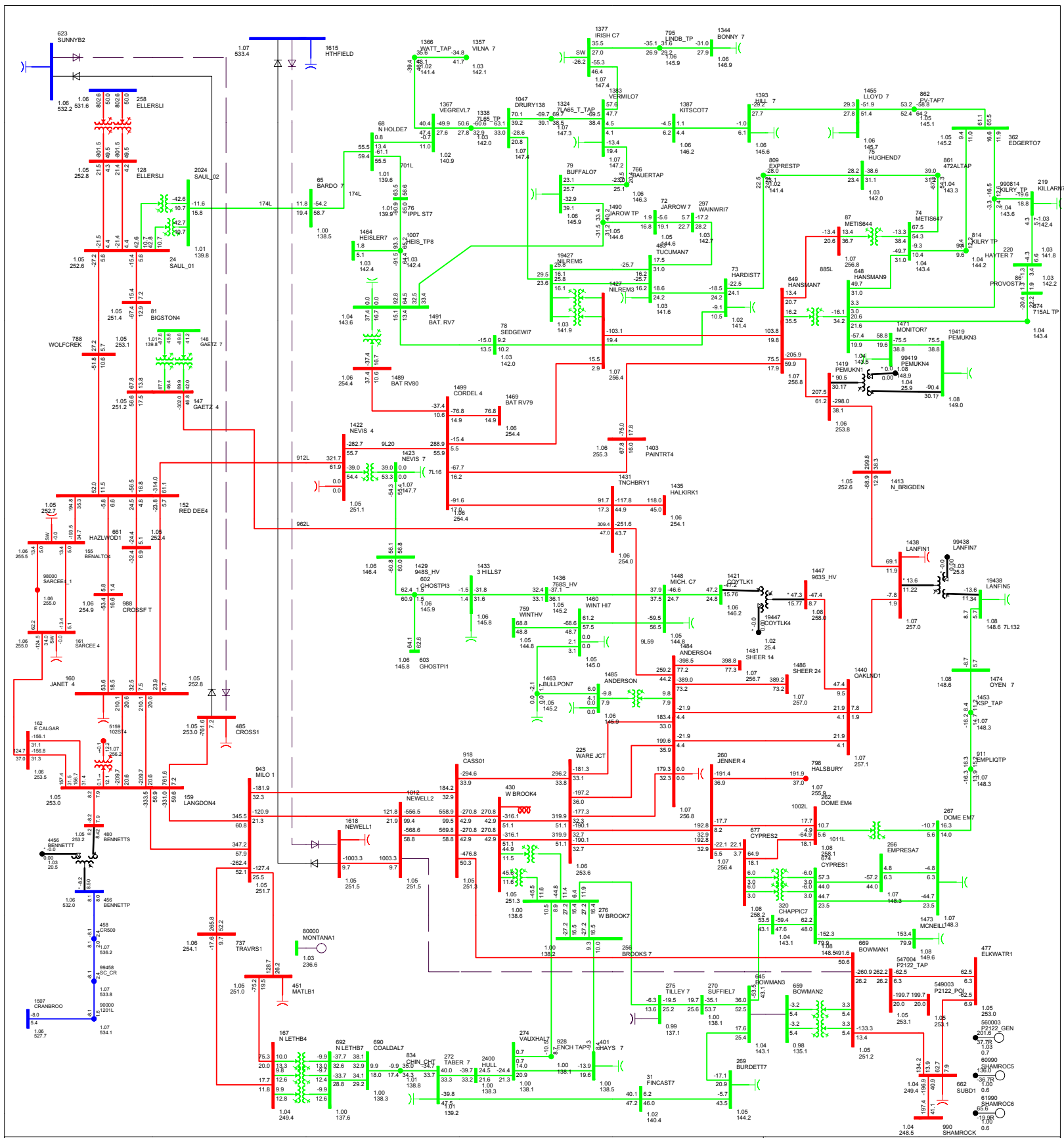
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 459.5 MW Central East: 309.7 MW South West: 324.0 MW
 FIG. C-45_VR2023; CASE H5; GEN SCN 2
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:11
 Contingency: Base, Trip Action: None

Branch Loading: >=100.0%
 kV: <=25.00V <=69.00V <=138.00V <=240.00V <=500.00V
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



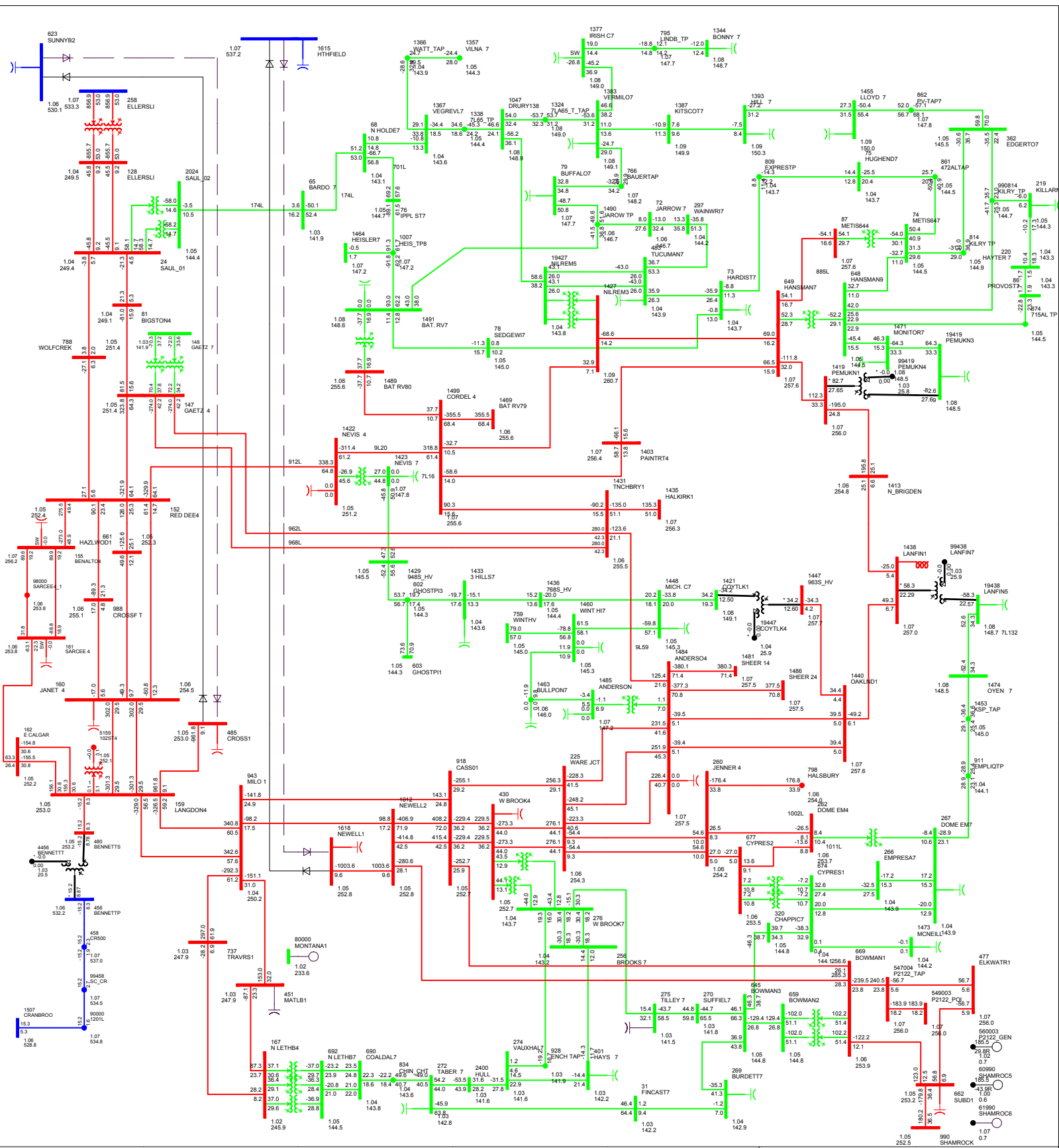
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 459.5 MW Central East: 309.7 MW South West: 324.0 MW
 FIG. C-46_VR-2023; CASE: H5; GEN: SCN2
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:11
 Contingency: EATL; Trip Action: 174L overload trip

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



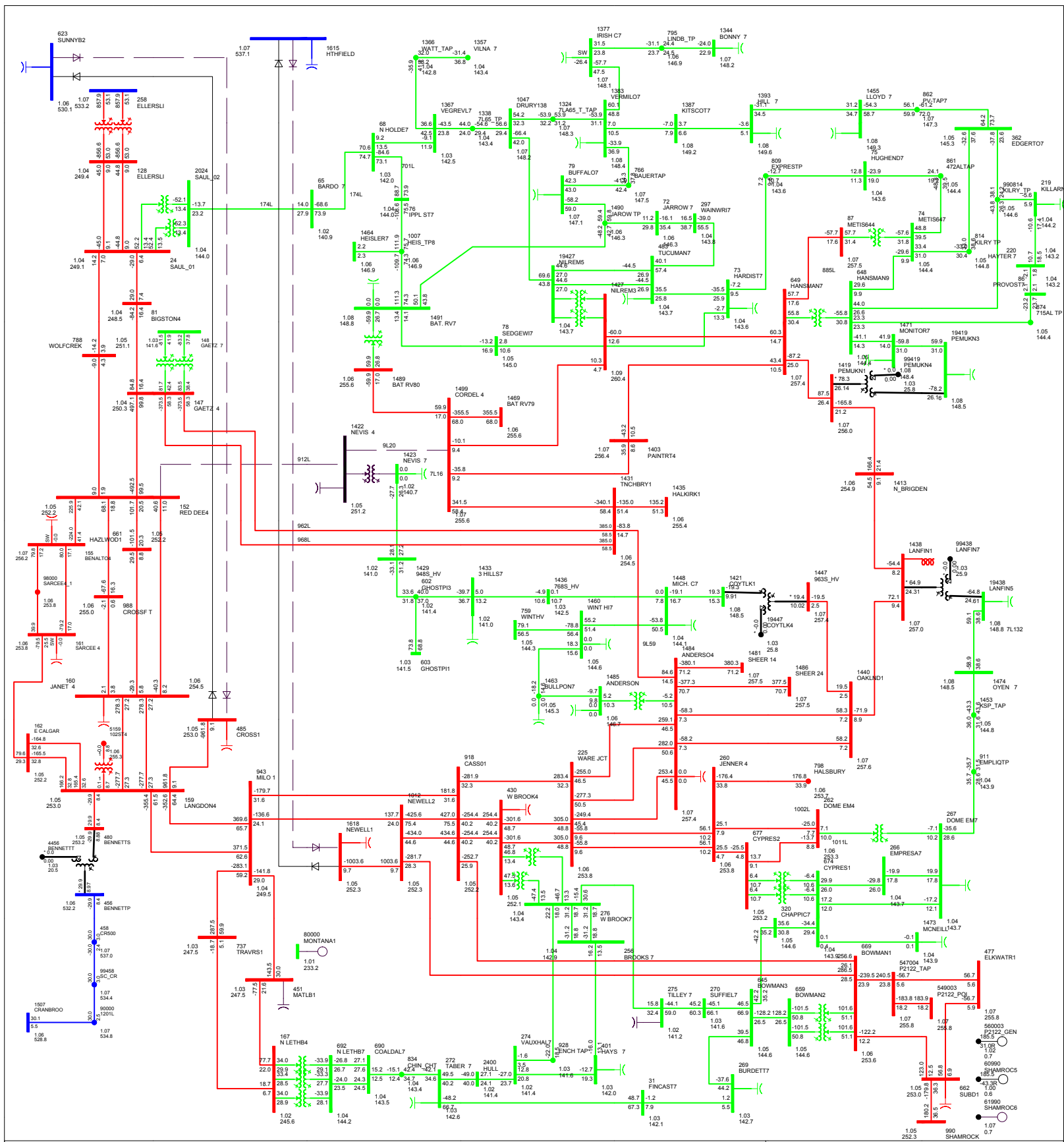
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 459.5 MW Central East: 309.7 MW South West: 324.0 MW
 FIG. C-47-VR-2023S; CASE: H5; GEN: SCN 2
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:10
 Contingency: 1035L; Trip Action: Bowmanman 240/139Kv split

Branch Loading: >=100.0%
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



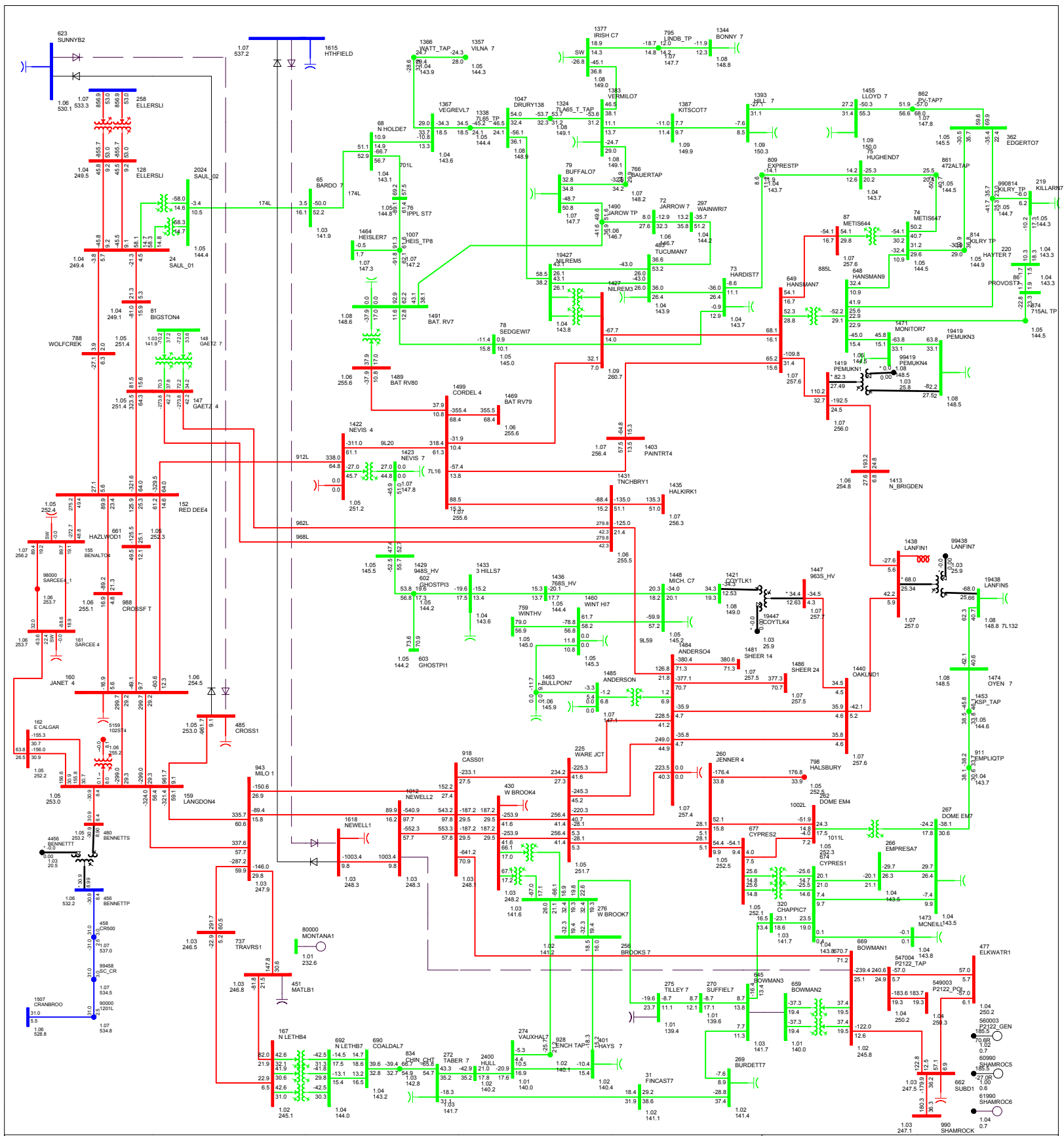
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 455.8 MW Central East: 588.0 MW South West: 366.4 MW
 FIG. C-48_VR2023SP_CAS2: HZ: GEN SCN 2
 PROJECT: CETO STAGE162
 CAP: MAXIMIZE
 SUN JUL 12 2023 23:14
 Contingency: Base, Trip Action: None

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW%/Loading



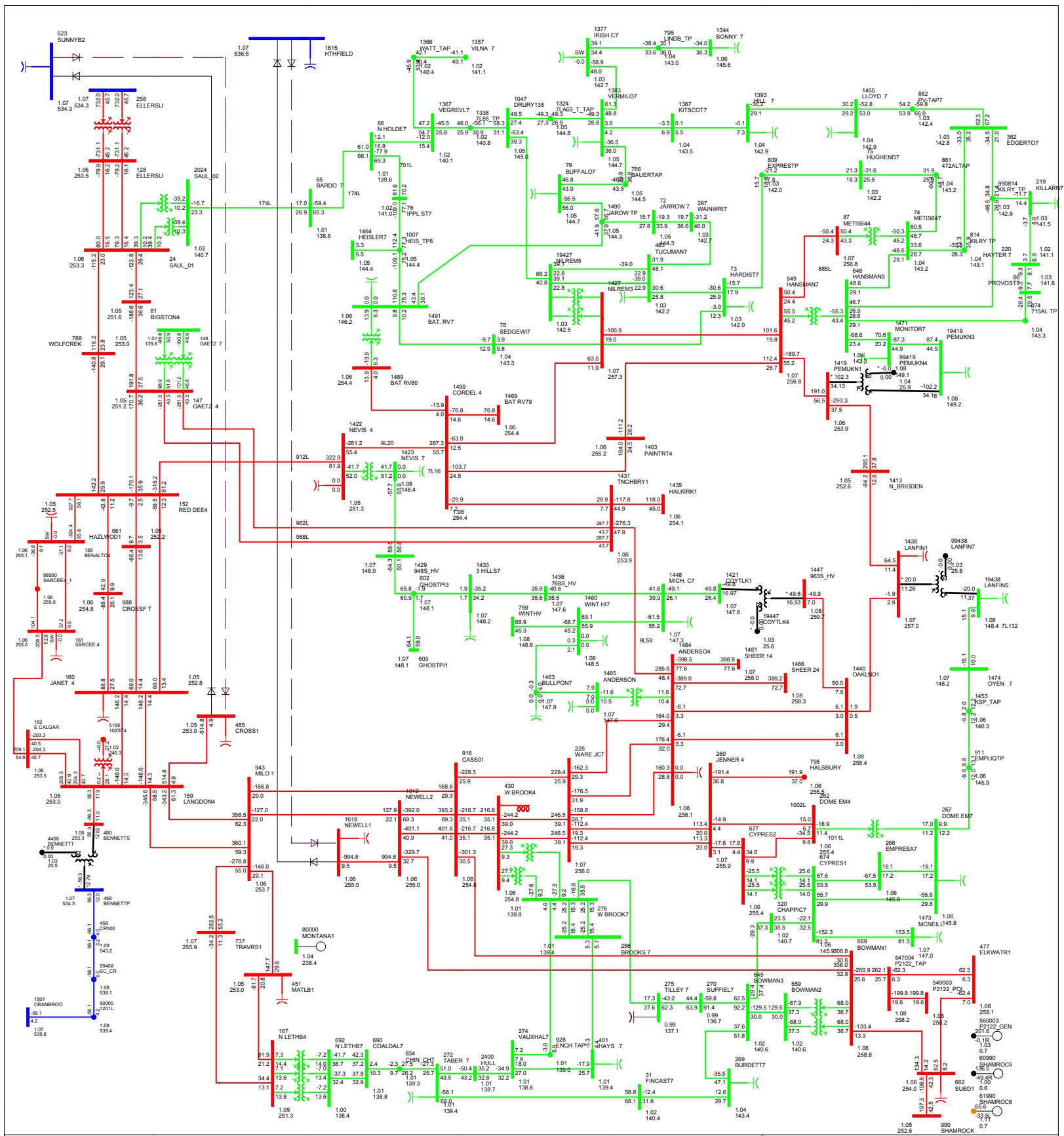
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 455.8 MW Central East: 588.0 MW South West: 366.4 MW
 FIG. C-49_VR2023SP_CASE: H2_GEN SCN 2
 PROJECT: CETO STAGE 1A2
 CAP: MAXIMUM
 SUN_Alt: 12/20/23 14
 Contingency: 76859011; Trip Action: None

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW%/Loading



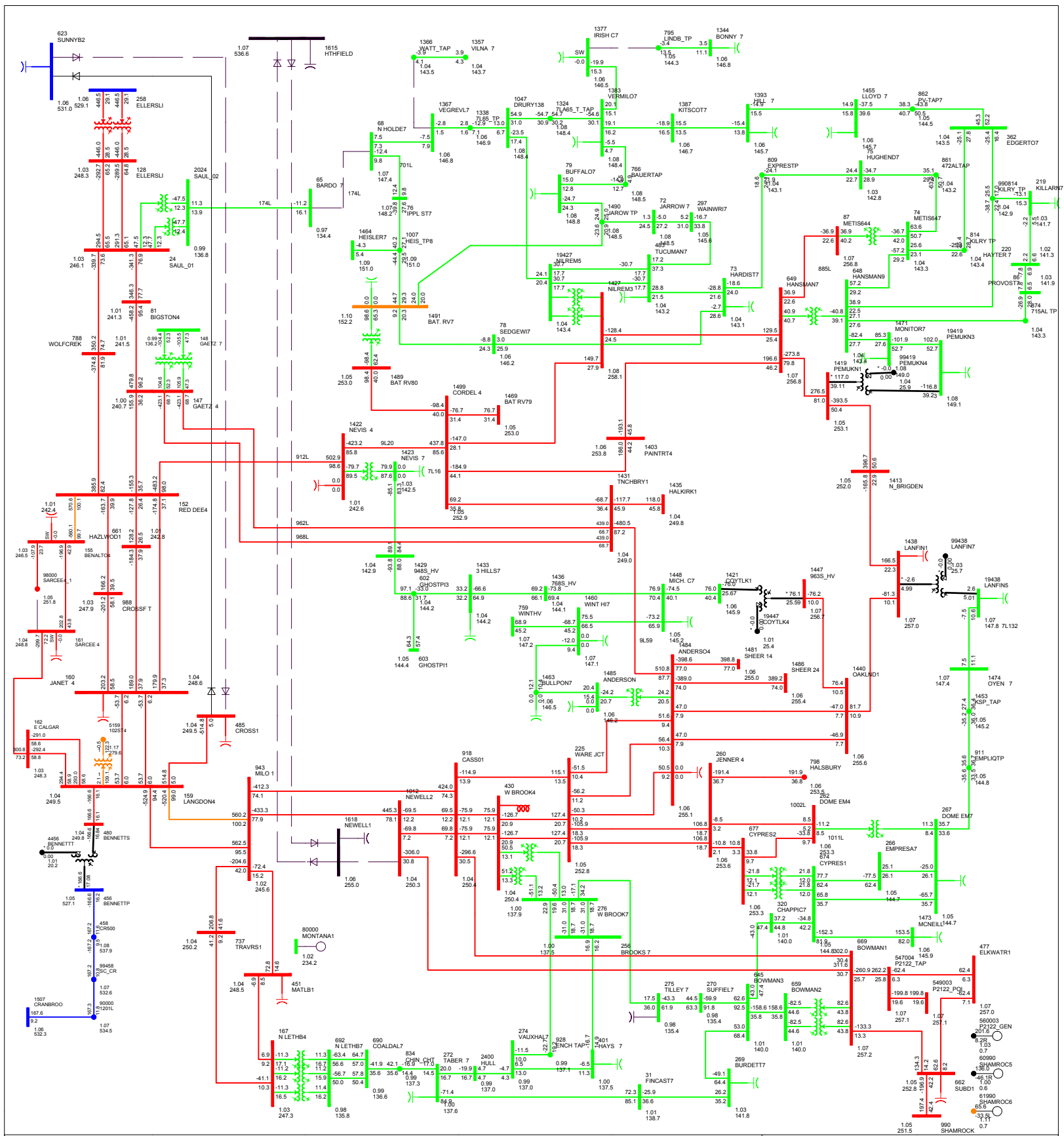
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 455.8 MW Central East: 588.0 MW South West: 366.4 MW
 FIG. C-10_VR2023SP_CASE: HZ: GEN SCN 2
 PROJECT: CETO STAGE162
 CAP: MAXIMIZE
 SUN: JUL 12 2023 23:14
 Contingency: 1035L; Trip Action: Bowmanman 240/138kV split

Branch Loading: **>=100.0%**
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW%/Loading



P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 455.8 MW Central East: 588.0 MW South West: 366.4 MW
 FIG. C-51-01-2023S; CASE: H6; GEN: SCN 2
 PROJECT: CETO STAGES 1&2
 CAP: MAXIMIZE
 RUN: JUL 12 2020 23:14
 Contingency: Base; Trip Action: None

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW/Loading

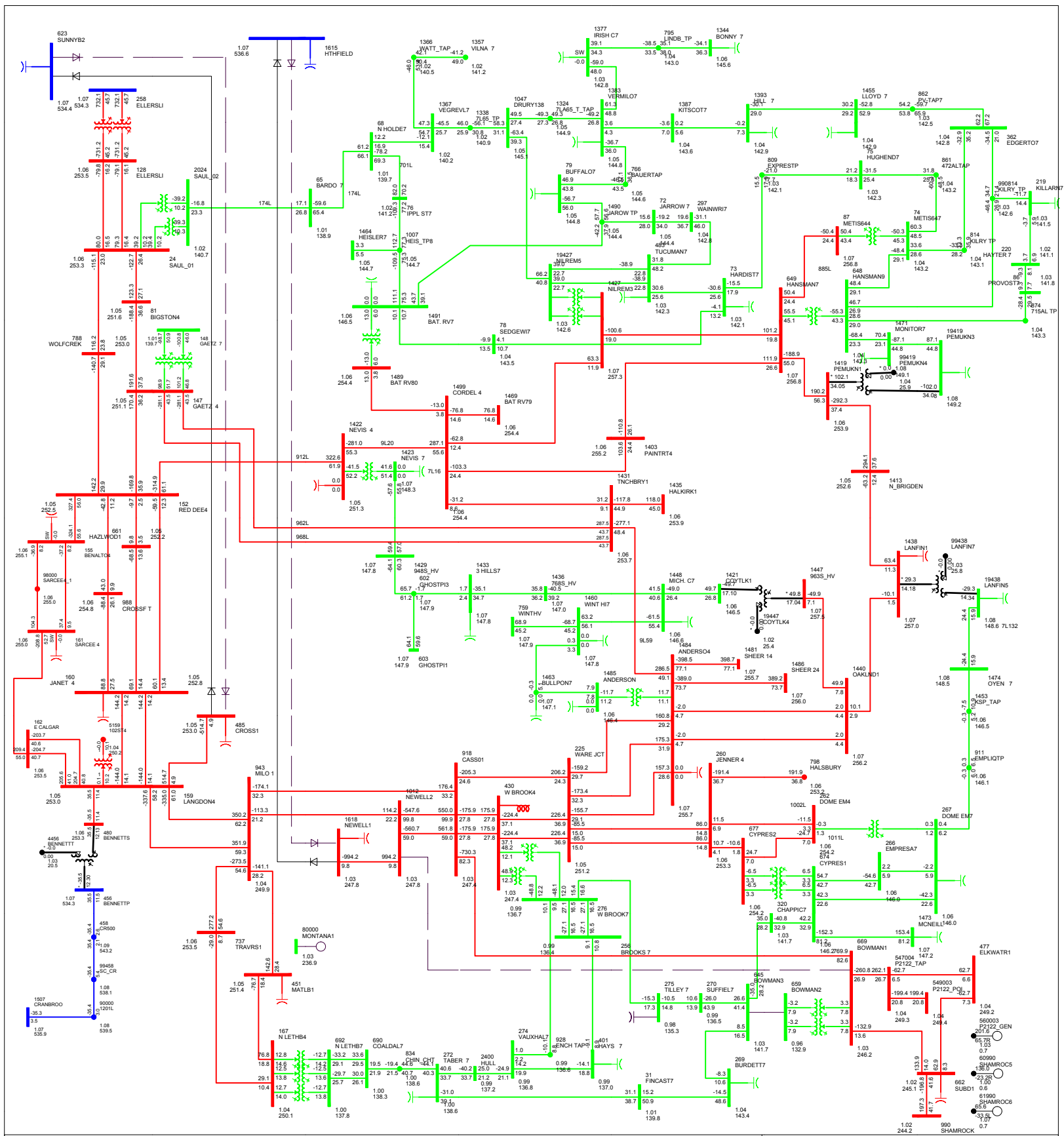


P7001 Central East Transfer Out Transmission Development

New Generation in Study Area and SW Sub-region
 South East: 455.8 MW Central East: 588.0 MW South West: 366.4 MW
 FIG. C-10_VR2023; CASE: H6_GEN SCEN 2
 PROJECT: CETO STAGES 1&2
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:15
 Contingency: EATL; Trip Action: 174L overload trip, 7L52 overload trip, 916L overload trip, 916L overload; Source: bus split

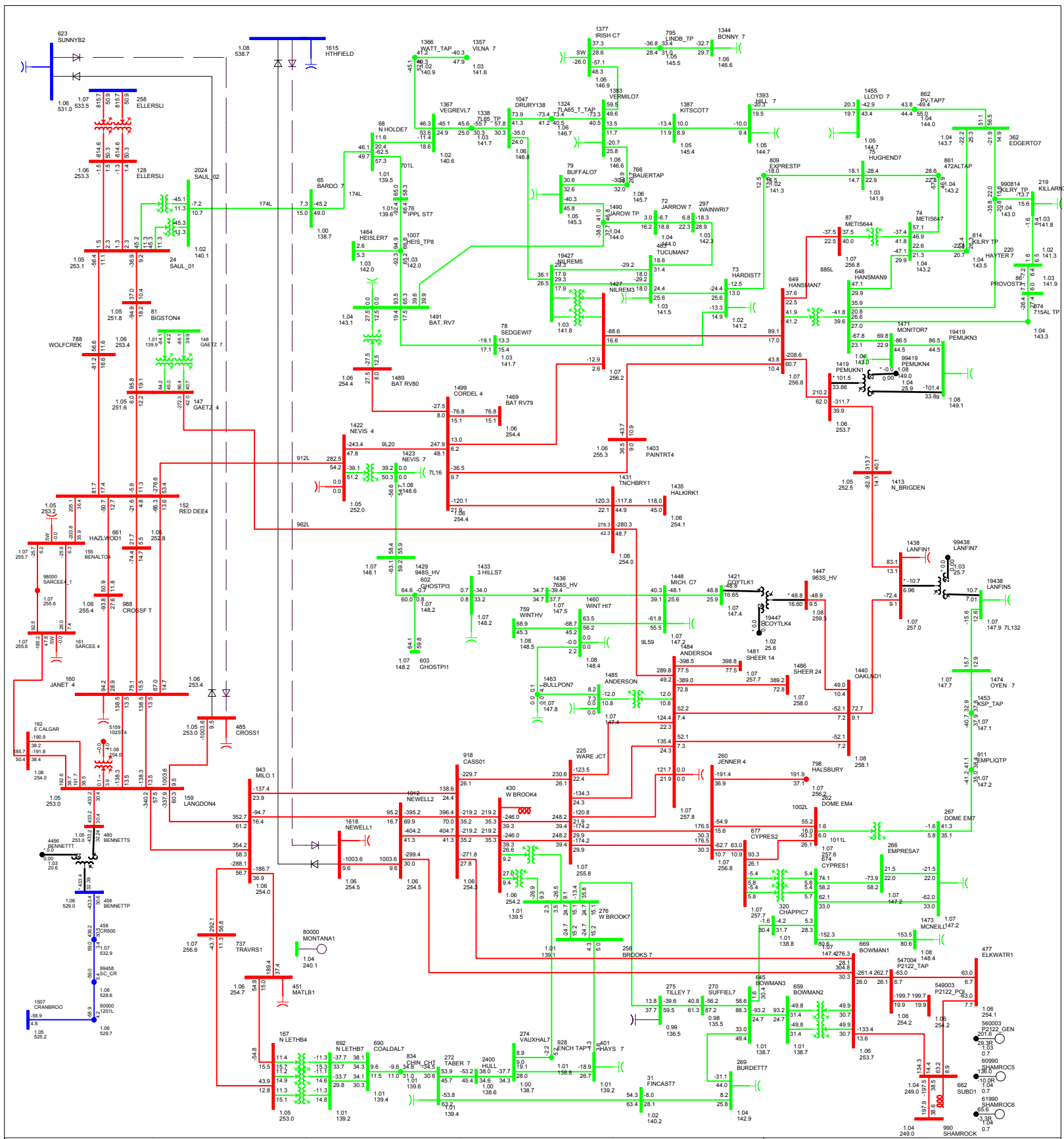
Branch Loading: >=100.0% >=90.0% >=80.0% <=70.0% <=60.0%
 kV: <=25.00V <=69.00V <=138.00V <=240.00V <=500.00V

Bus - Voltage (kV/pu) <=25.00V <=69.00V <=138.00V <=240.00V <=500.00V
 Branch - MW/Loading
 Equipment - MW/Loading



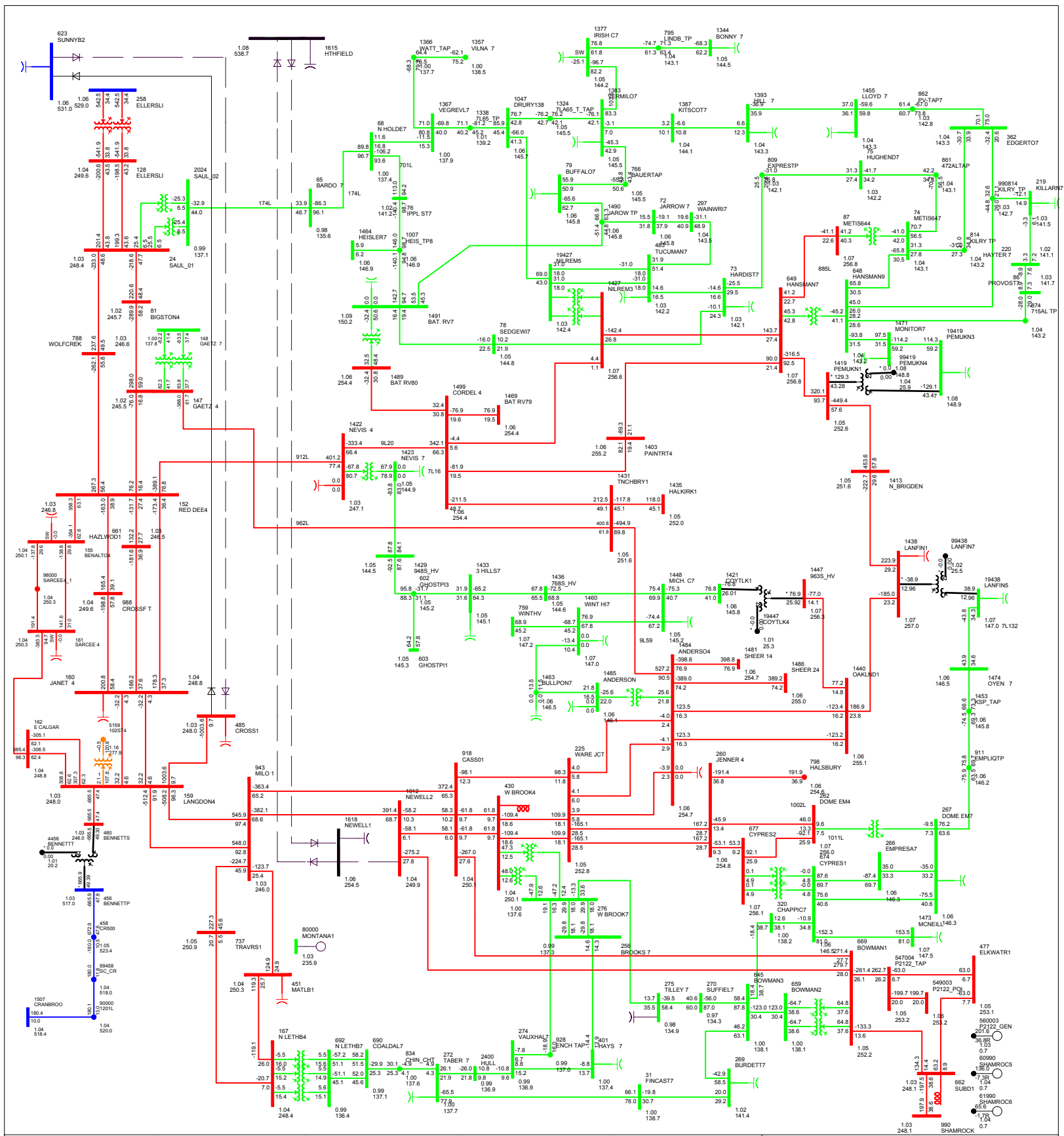
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 455.8 MW Central East: 588.0 MW South West: 366.4 MW
 FIG. C-33_VR2023; CASE: H6_GEN SCEN 2
 PROJECT: CETO STAGE 1&2
 CAP: MAXIMIZE
 SUN JUL 12 2023 23:15
 Contingency: 1035L; Trip Action: Bowman2 240/139kV split

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



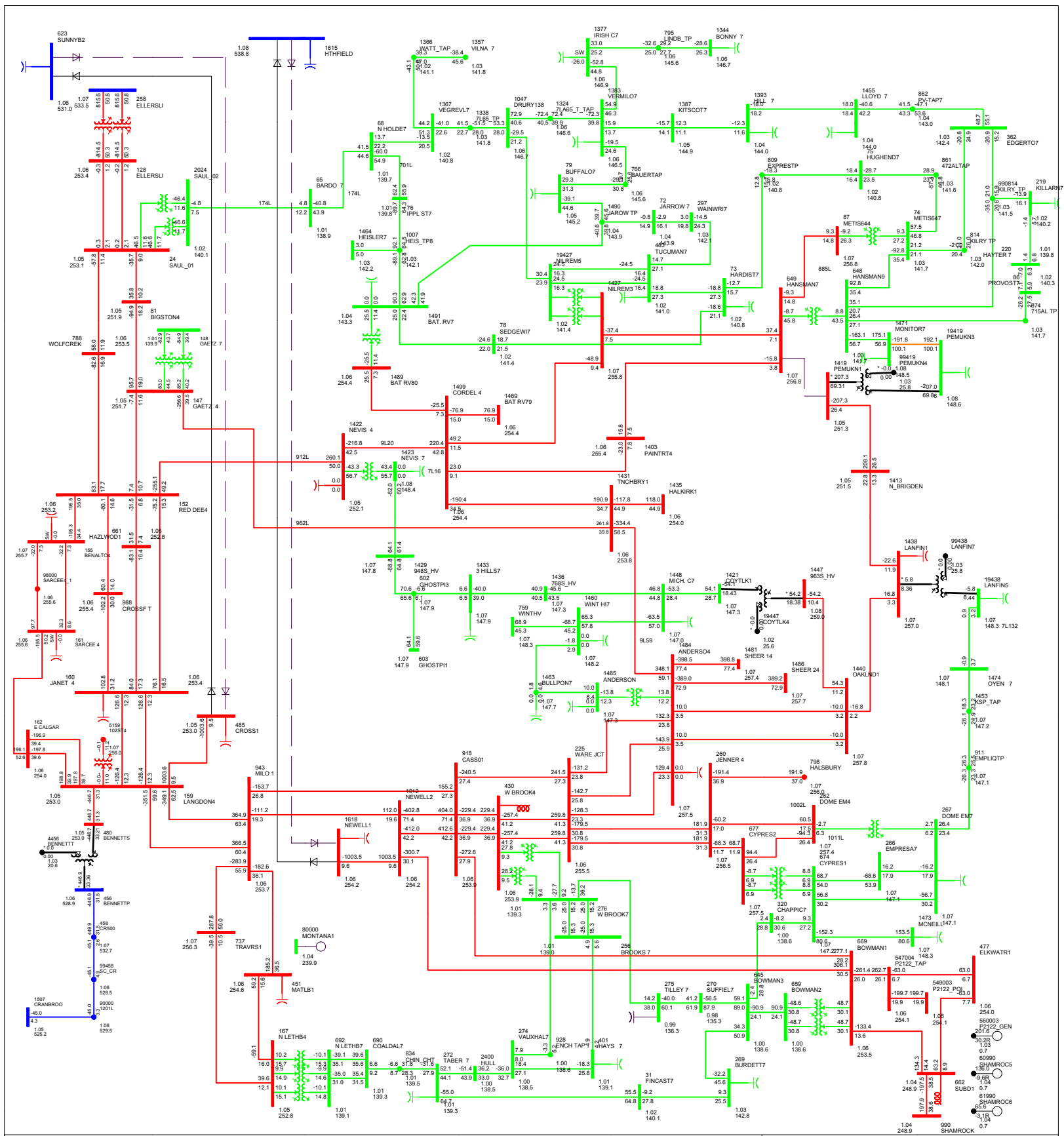
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 496.4 MW Central East: 114.6 MW South West: 940.0 MW
 FIG. C-54-VR-2023S; CASE: HS; GEN: GEN2
 PROJECT: CPEC (C/CORR/DPT); SET: STAGE1
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:01
 Contingency: Base; Trip Action: None

Branch Loading: >=100.0%
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



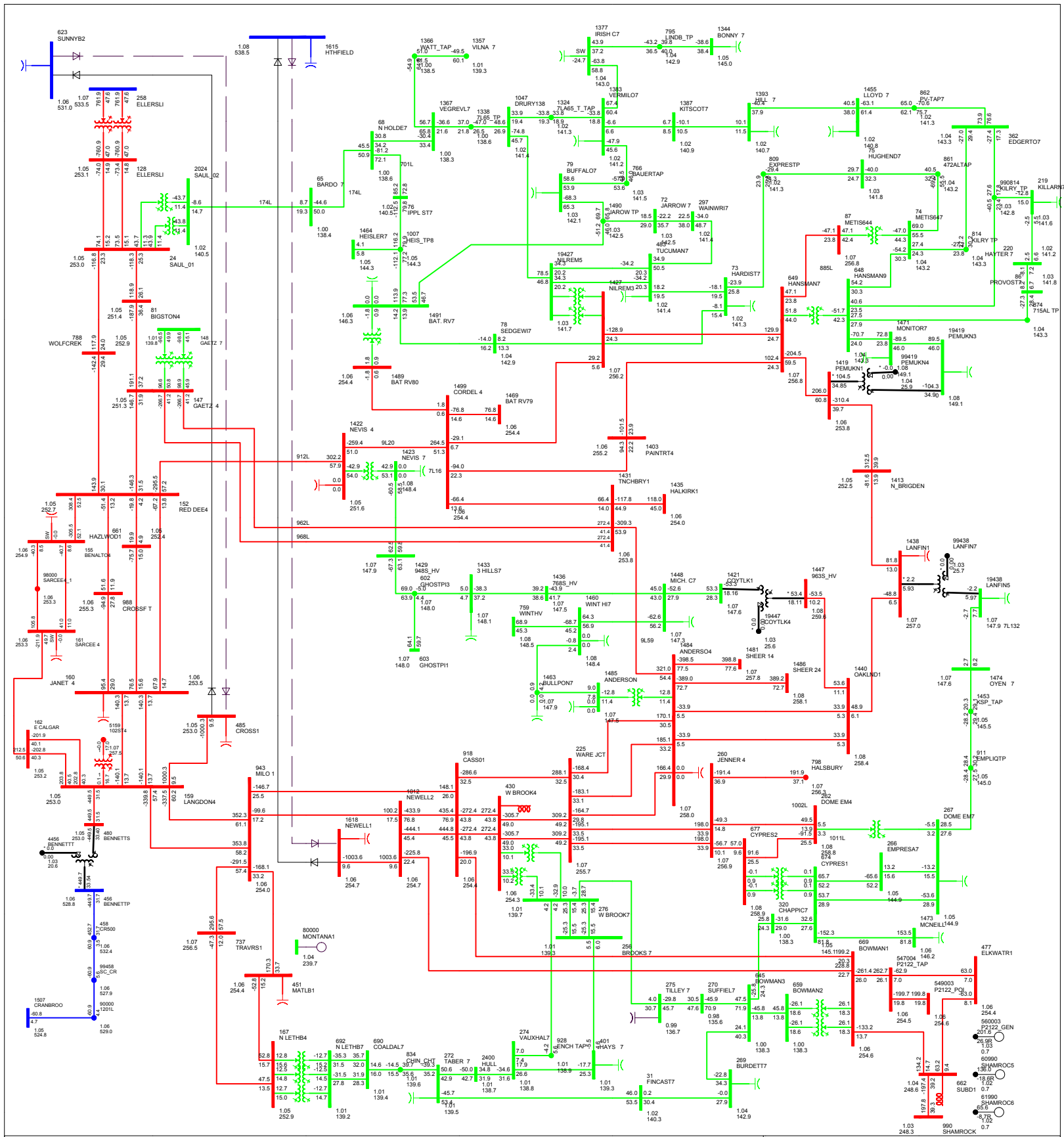
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 496.4 MW Central East: 114.6 MW South West: 940.0 MW
 FIG. C-05-VR-2023-02-03-08-ENR-GEN2
 PROJECT: CPEC (C-05-VR-2023-02-03-08-ENR)
 CAP. MAXIMIZE
 RUN. JUL. 12. 2023. 23:01
 Contingency: EATL; Trip Action: L274 BC 138KV Tie

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



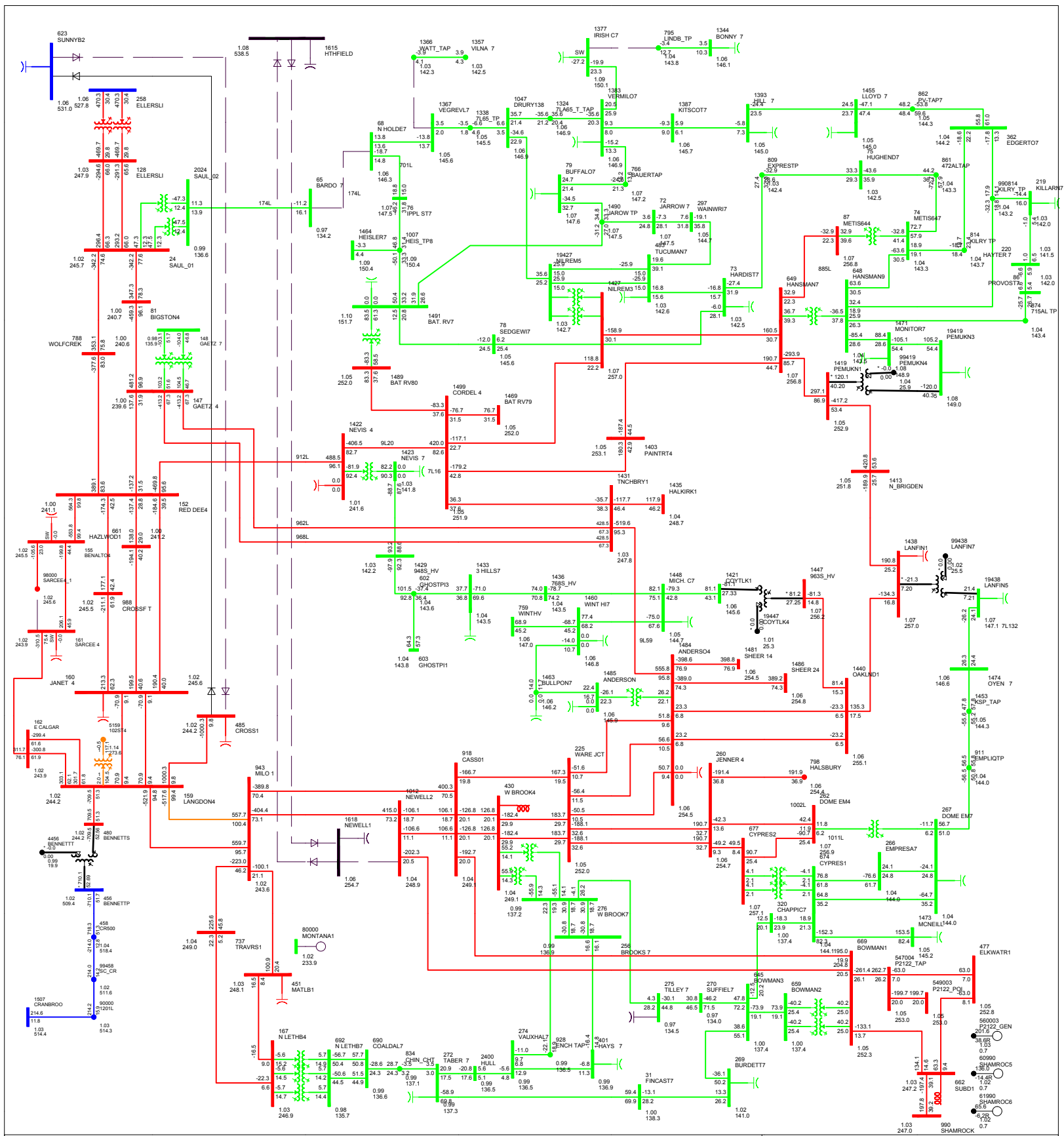
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 496.4 MW Central East: 114.6 MW South West: 940.0 MW
 FIG. C-06_VR-2023-02_CASE_HB_GEN_SCM2
 PROJECT: CRIC (CR-CR-001), CR-TO STAGE1
 CAP: MAXIMIZE
 RUN: JUL 12 2023 23:01
 Contingency: 96%, Trip Action: None

Branch Loading: **>=100.0%**
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



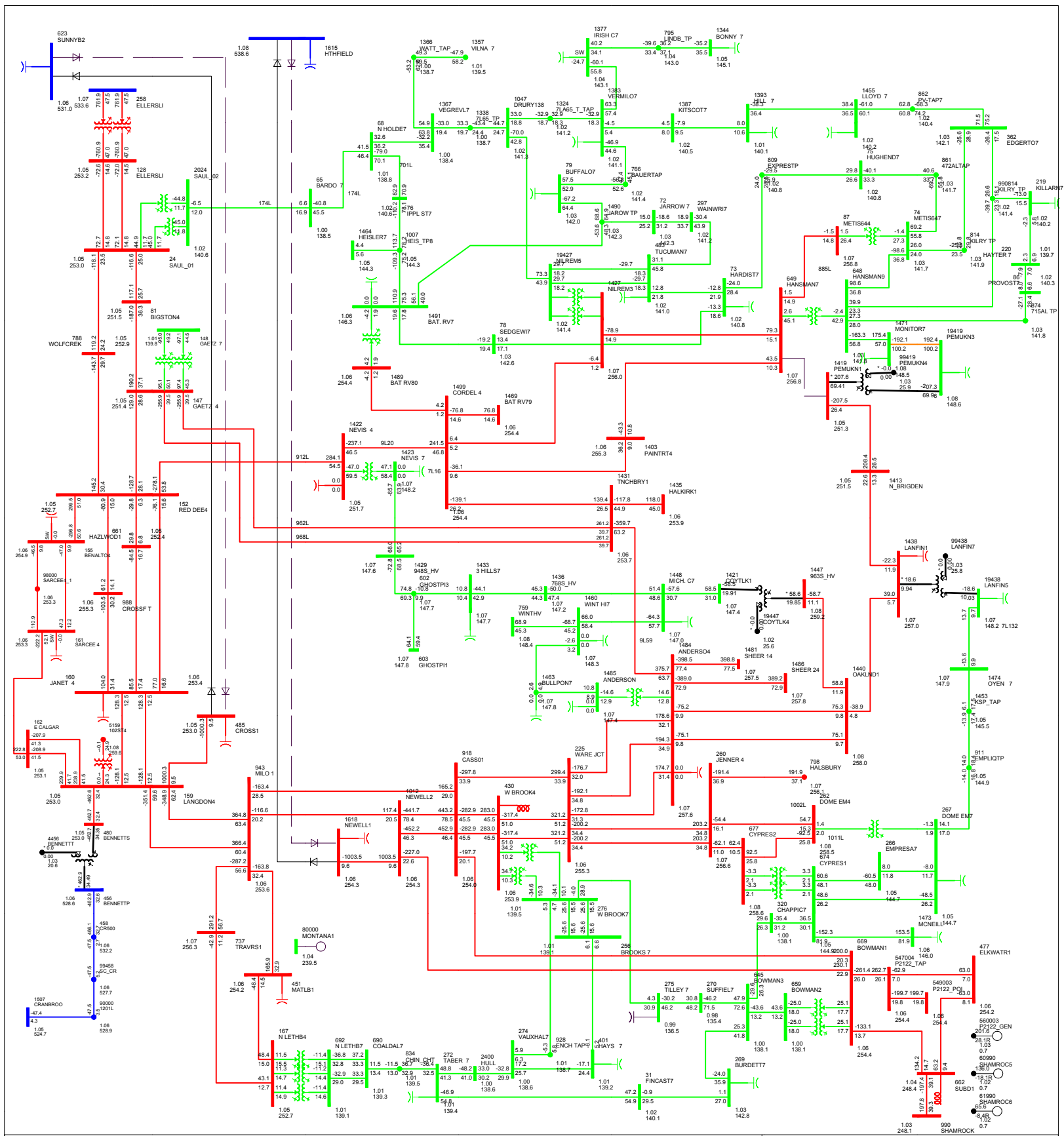
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 506.3 MW Central East: 437.3 MW South West: 986.4 MW
 FIG. C-07-VR-2023S; CASE: NR_GEN_SCM2
 PROJECT: CRPC (CR-CROR-UPFL) SETO STAGE1&2
 CAP: MAXIMIZE
 RUN: JUL 12 2020 23:01
 Contingency: Base, Trip Action: None

Branch Loading: **>=100.0%**
 kV: <=25.00V <=69.00V <=138.00V <=240.00V <=500.00V
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



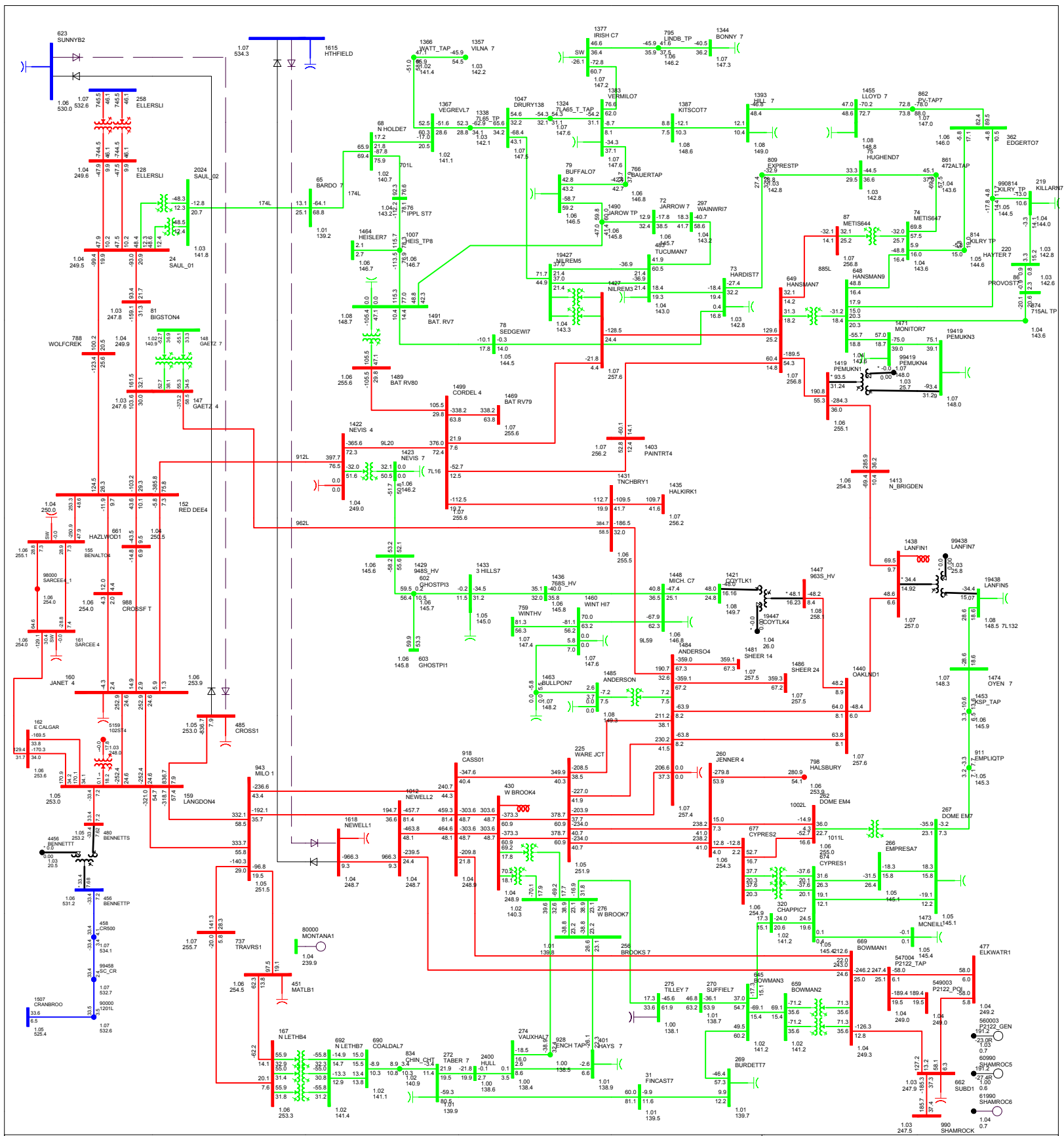
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 506.3 MW Central East: 437.3 MW South West: 986.4 MW
 FIG. C-08_VR-2023-02_CASE_HR_GEN-SCN2
 PROJECT: CRPC (CR-CRRC-UPFL) SETO STAGE1&2
 CAP. MAXIMIZE
 SUN. JUL. 12 2023 23:02
 Contingency: EATL1, Trip Action: 174L overload trip, L274 BC 138V TP, N 916L overload, Sarcee bus split, 7L53 overload trip

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW%/Loading



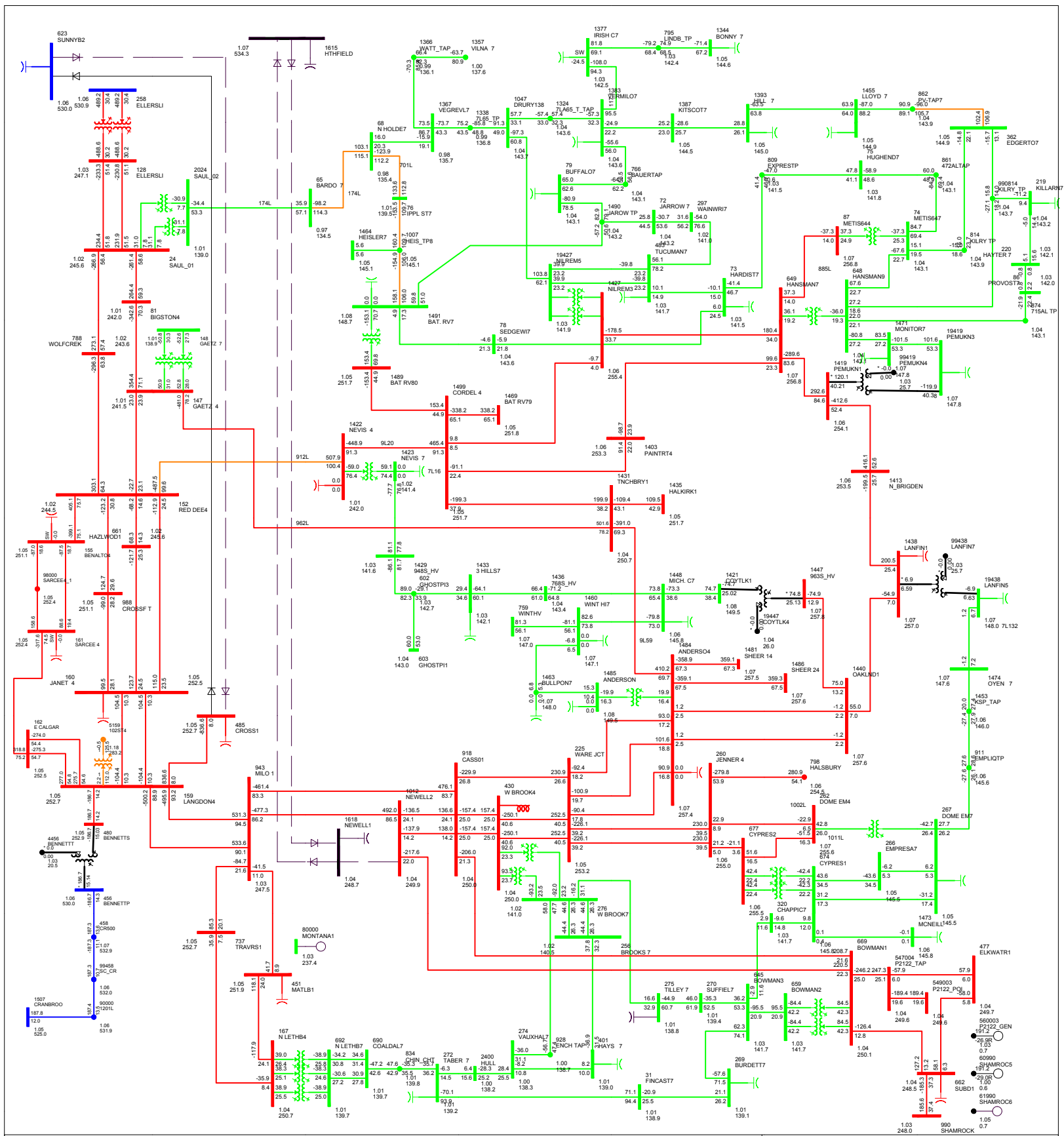
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 506.3 MW Central East: 437.3 MW South West: 986.4 MW
 FIG. C-99-VR-2023S; CASE: H8; GEN: SCN24
 PROJECT: CRPC; IUR: CRK (UPL); CETO: STAGE142
 CAP: MAXIMUM
 SUN: JUL 12 2023 23:03
 Contingency: 96%, Trip Action: None

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



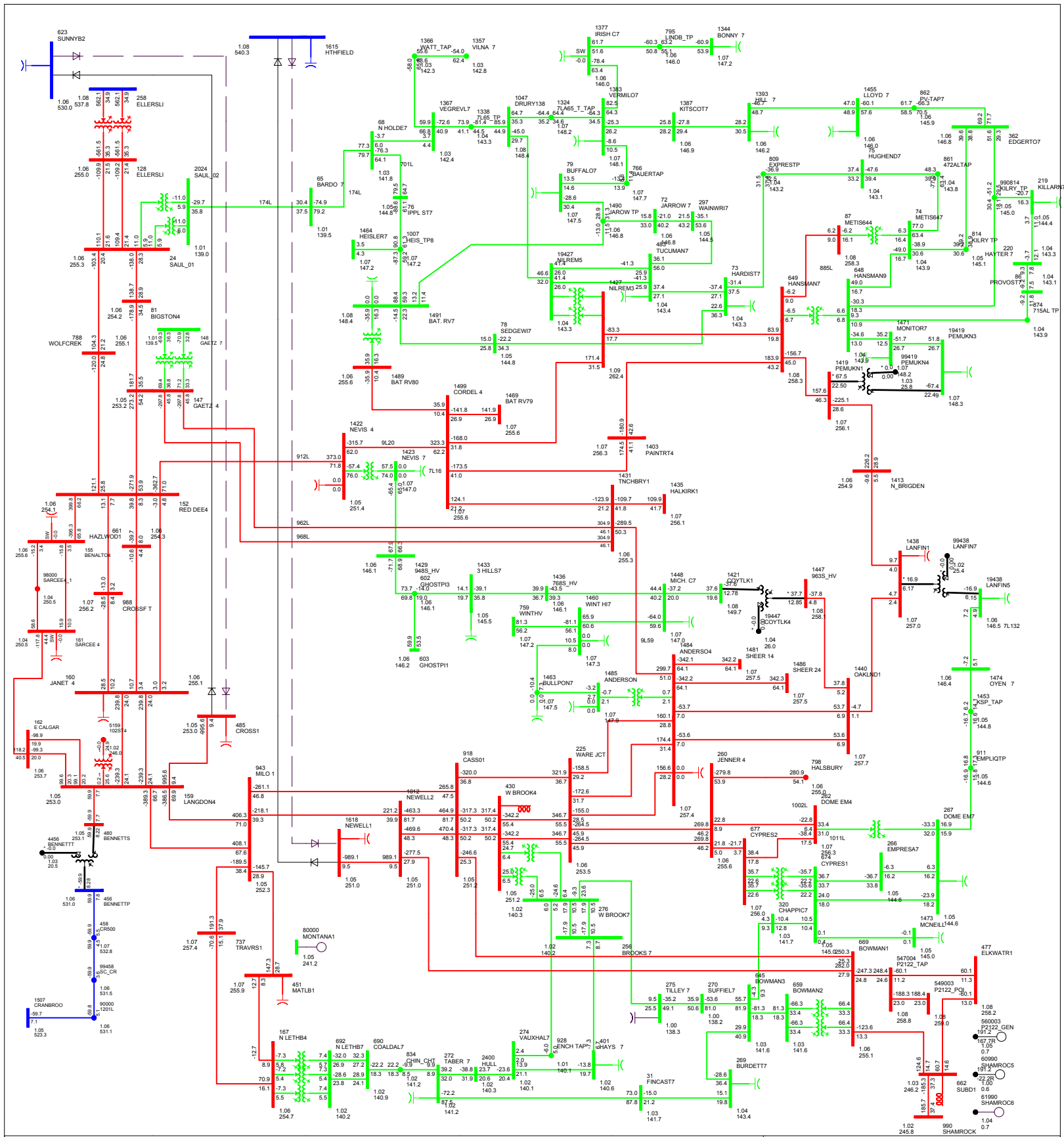
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 714.9 MW Central East: 563.3 MW South West: 628.1 MW
 FIG. C-40. YR.2023SP. CASE: MA. GEN SCN 1
 PROJECT: CETO STAGE1
 CAP. MAXIMIZE
 WED, JUL 29 2020 9:56
 Contingency: Base
 Trip Action: None
 Connected/Not Applied

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu) Branch - MW/Loading
 Equipment - MW/Loading



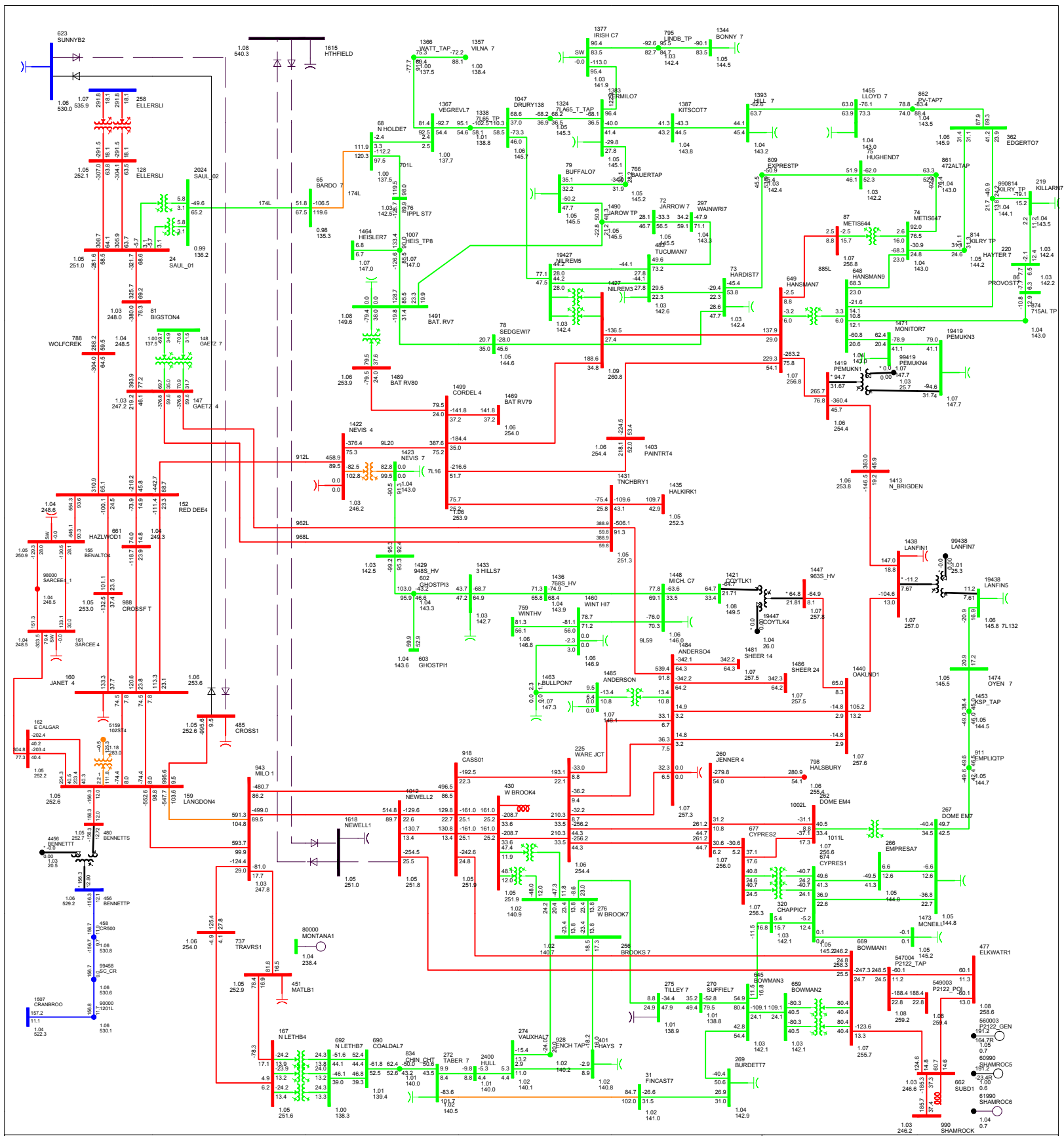
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 714.9 MW Central East: 563.3 MW South West: 628.1 MW
 FIG. C-61.01.YR.2023SP.CASE: M4: GEN SCN 1
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 WED, JUL 29 2020 9:56
 Contingency: SA1
 Trip Action: None
 Connected/Not Applied

Branch Loading: >=100.0%
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



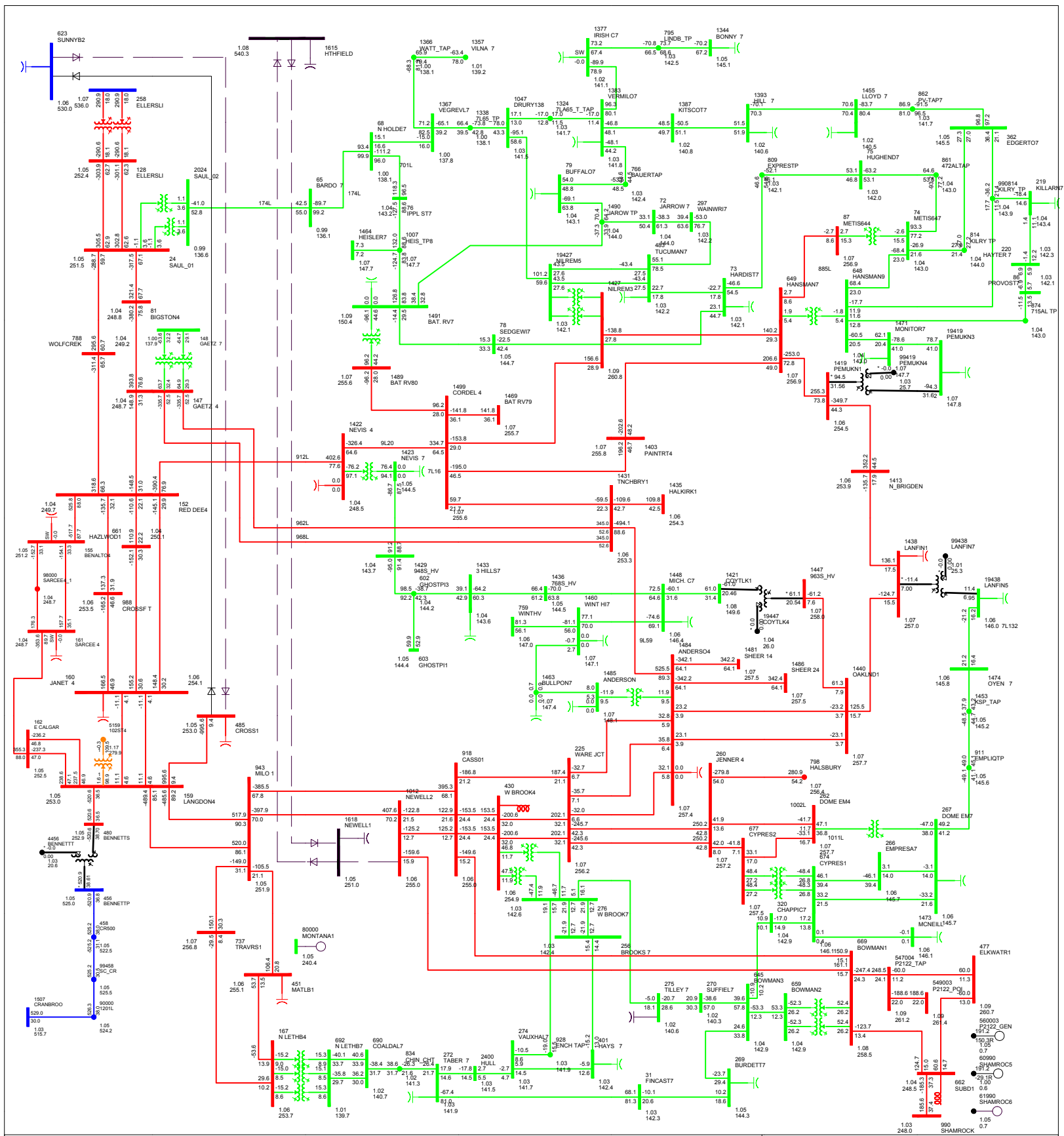
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 851.9 MW Central East: 716.7 MW South West: 666.0 MW
 FIG. C-42 (YR.2023)S; CASE: MS; GEN SCN 1
 PROJECT: CETO STAGE1&2
 CAP: MAXIMIZE
 VED: JUL 29 2020 9:55
 Contingency: Base
 Trip Action: None
 Connected/Not Applied

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu) Branch - MW/Loading
 Equipment - MW/Loading



P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 851.9 MW Central East: 716.7 MW South West: 666.0 MW
 FIG. C-43.01.YR.2023.SL.CASE.MR.GEN.SCN.1
 PROJECT: CETO STAGE1A2
 CAP: MAXIMIZE
 WED, JUL 29 2020 9:56
 Contingency: S.A.T.
 Trip Action: None
 Connected: Not Applied

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW/Loading

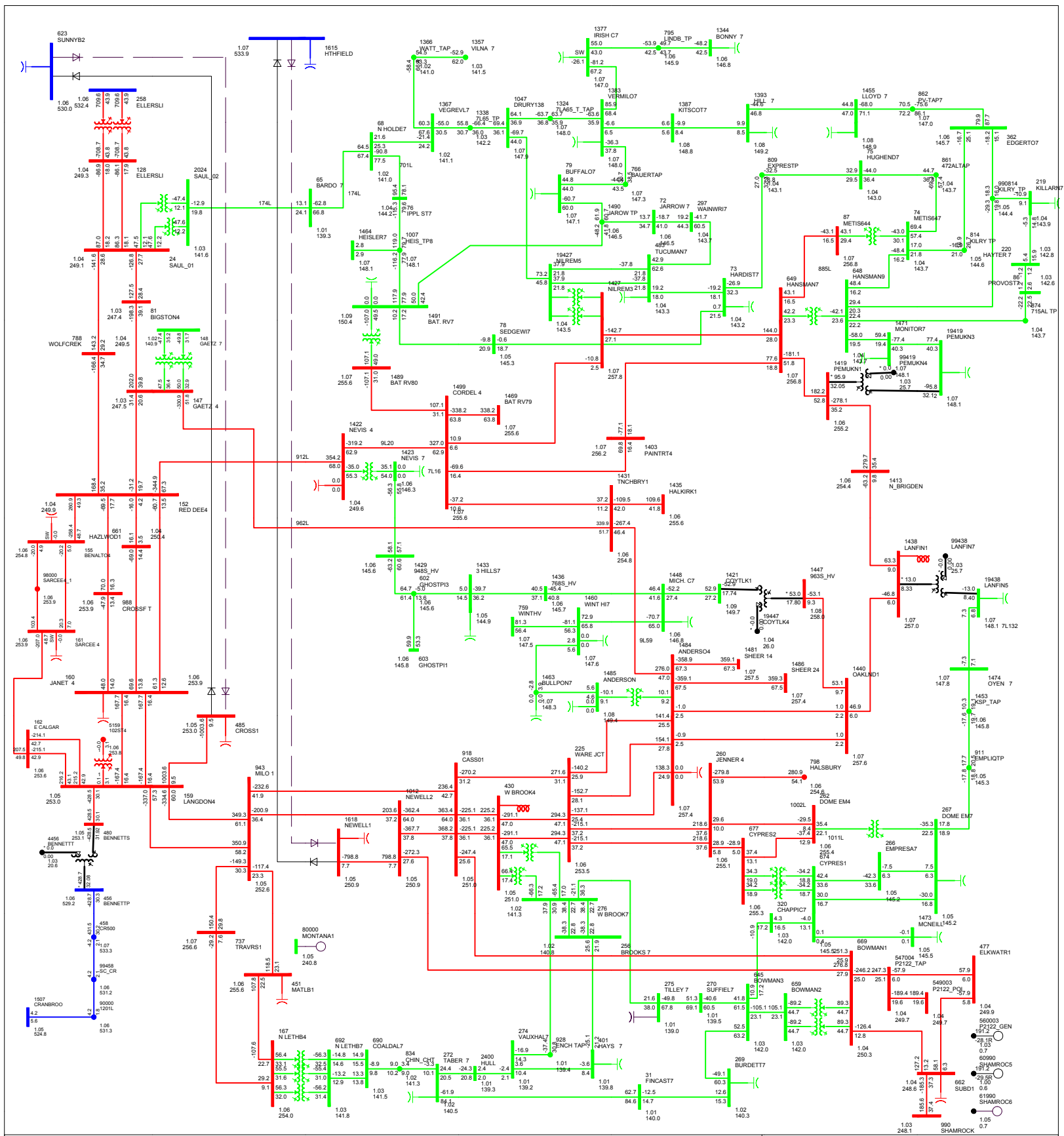


P7001 Central East Transfer Out Transmission Development

New Generation in Study Area and SW Sub-region
 South East: 600.4 MW Central East: 507.0 MW South West: 666.0 MW
 FIG. C-43.02 FIG. C-43.01.YR.2023SLI_CASE_M5_GEN_SCN1
 PROJECT: CETO STAGE1A2
 CAP: MAXIMIZE
 VED: JUL 29 2020 956
 Contingency: SA11
 Trip Action: L274 BC 138V TP
 Generation: MW_M5_113-60LN-31-NLR-11-DRURY-106.Total:461 MW

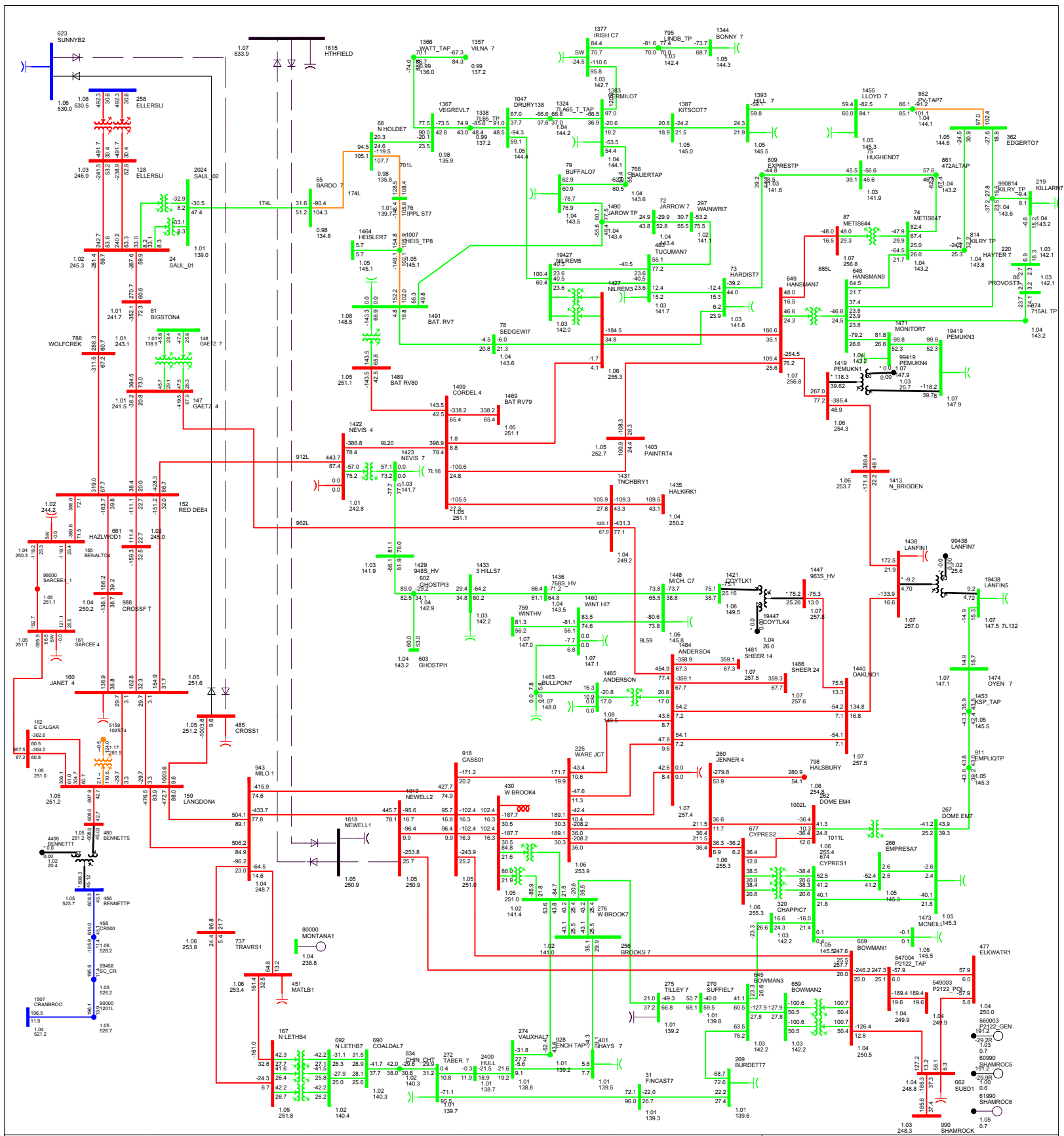
Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000

Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



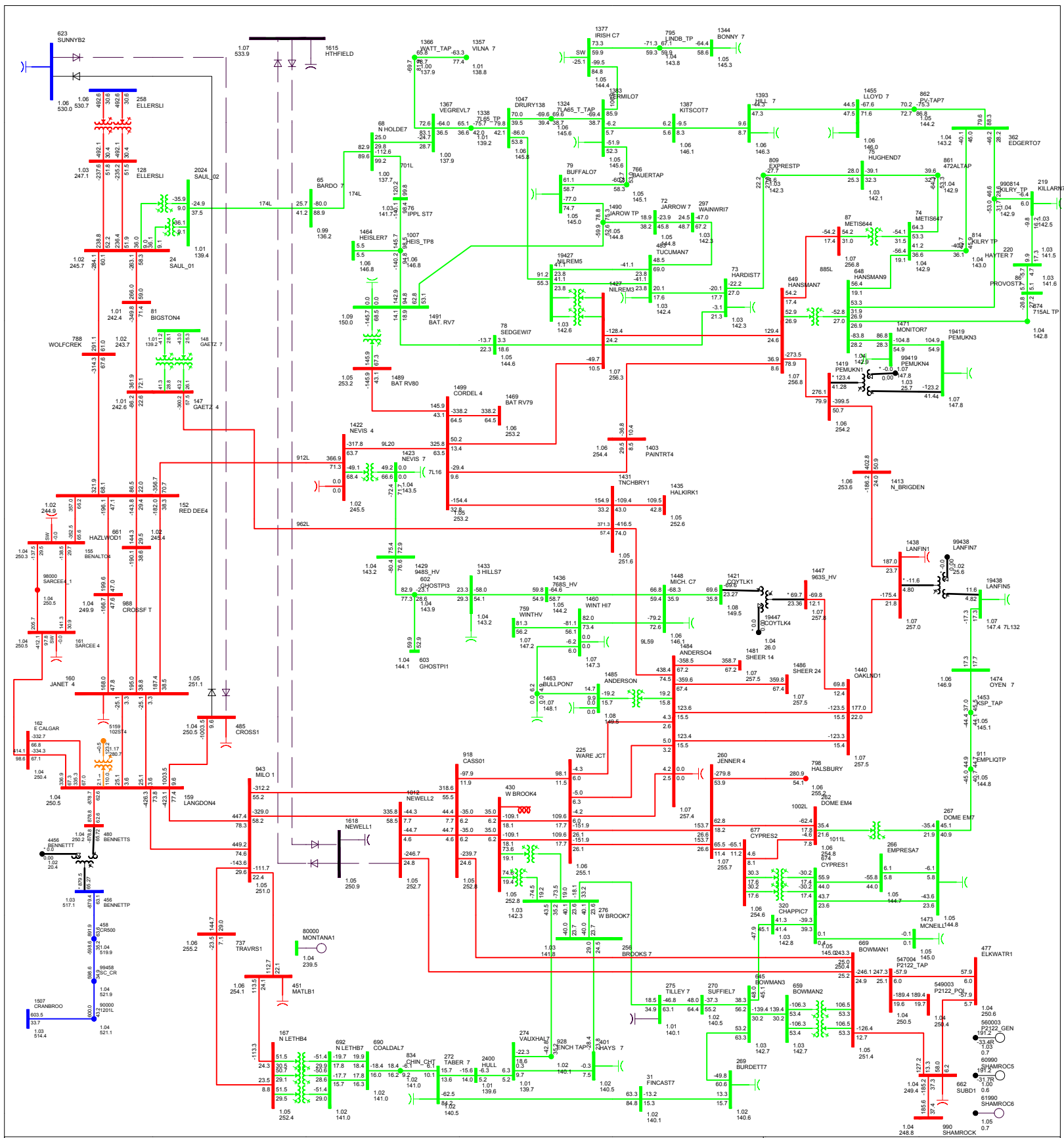
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 751.9 MW Central East: 273.6 MW South West: 1139.9 MW
 FIG. C-64.YR.2023SP.CASE.MA.GEN.SCN 1
 PROJECT: CRPC (CR-CRR OPT), CETO STAGE 1
 CAP: MAXIMIZE
 WED, JUL 29 2020 9:56
 Contingency: Base
 Trip Action: None
 Connected/Not Applied

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



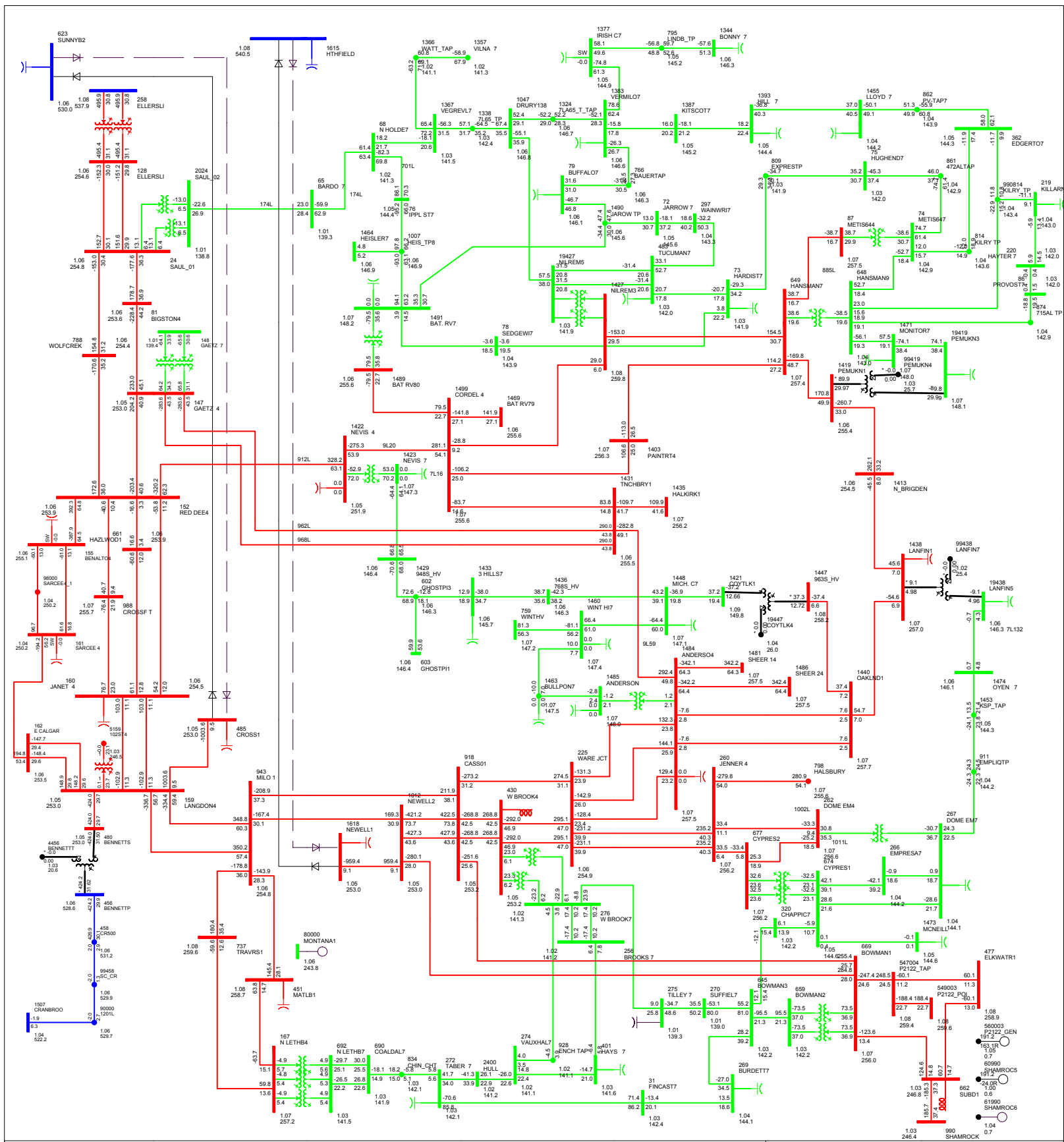
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 751.9 MW Central East: 273.6 MW South West: 1139.9 MW
 FIG. C-65.01.YR.2023SP-CASE-M4: GEN SCH 1
 PROJECT: CRPC (CR-CRR OPT), CETO STAGE 1
 CAP: MAXIMIZE
 WED, JUL 29 2020 9:56
 Contingency: S.A.T.
 Trip Action: None
 Connected/Not Applied

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu) Branch - MW/Loading
 Equipment - MW/Loading



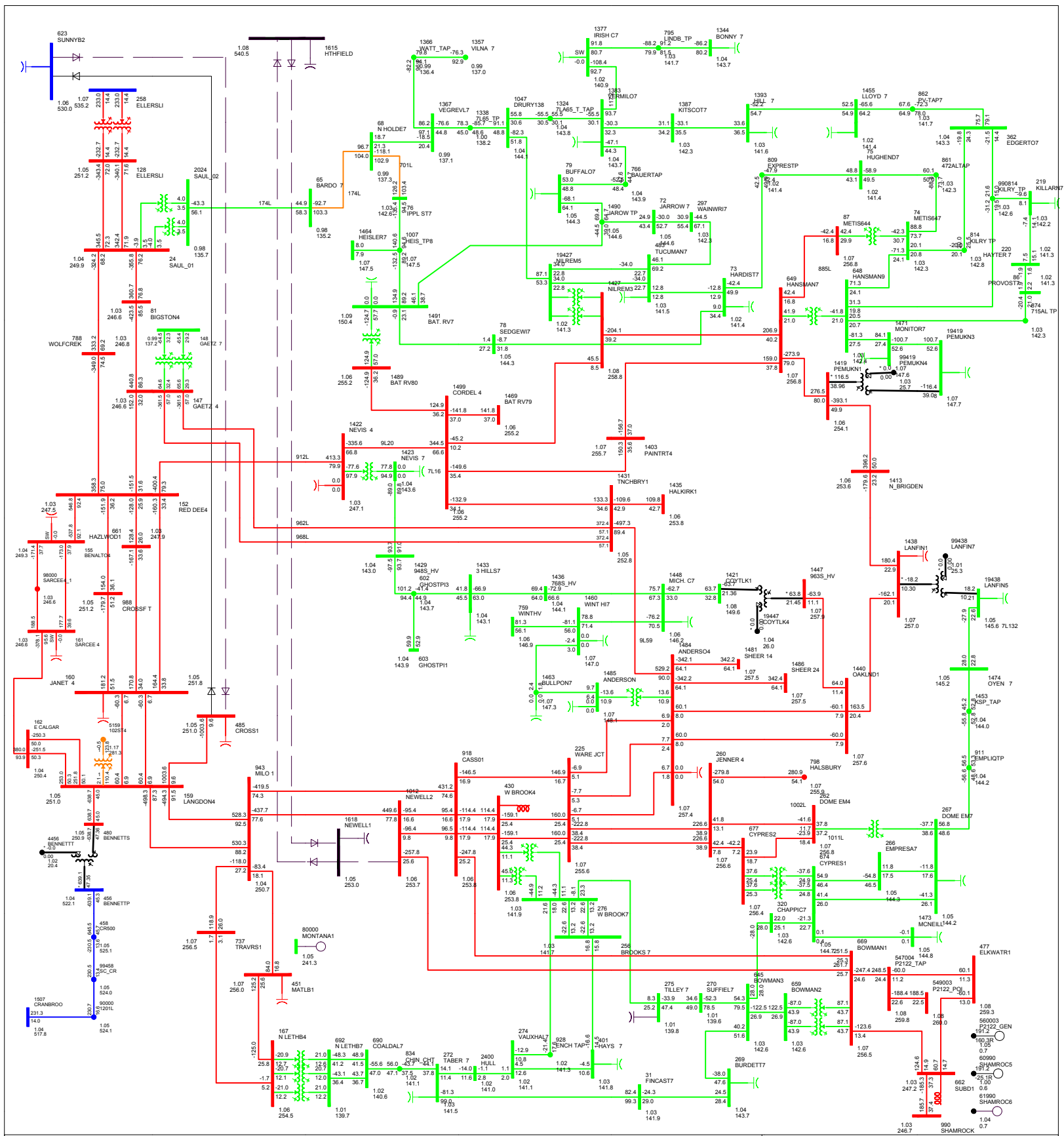
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 509.9 MW Central East: 64.7 MW South West: 1139.9 MW
 FIG. C-65.02 FIG. C-65.01.YR2023SP.CASE.M4.GEN.SCN.1
 PROJECT: CRSP (CR-CRR OPT), CETO STAGE1
 CAP. MAXIMIZE
 WED, JUL 29 2020 9:56
 Contingency: SAIL
 Trip Action: LF24 BC 138V TP
 CaseName: N-61.CRRS-77.OJKLD-102.HSM-127.LNF-29.DGN-52.Total-450 MW

Branch Loading: **>=100.0%**
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00
 Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW/Loading



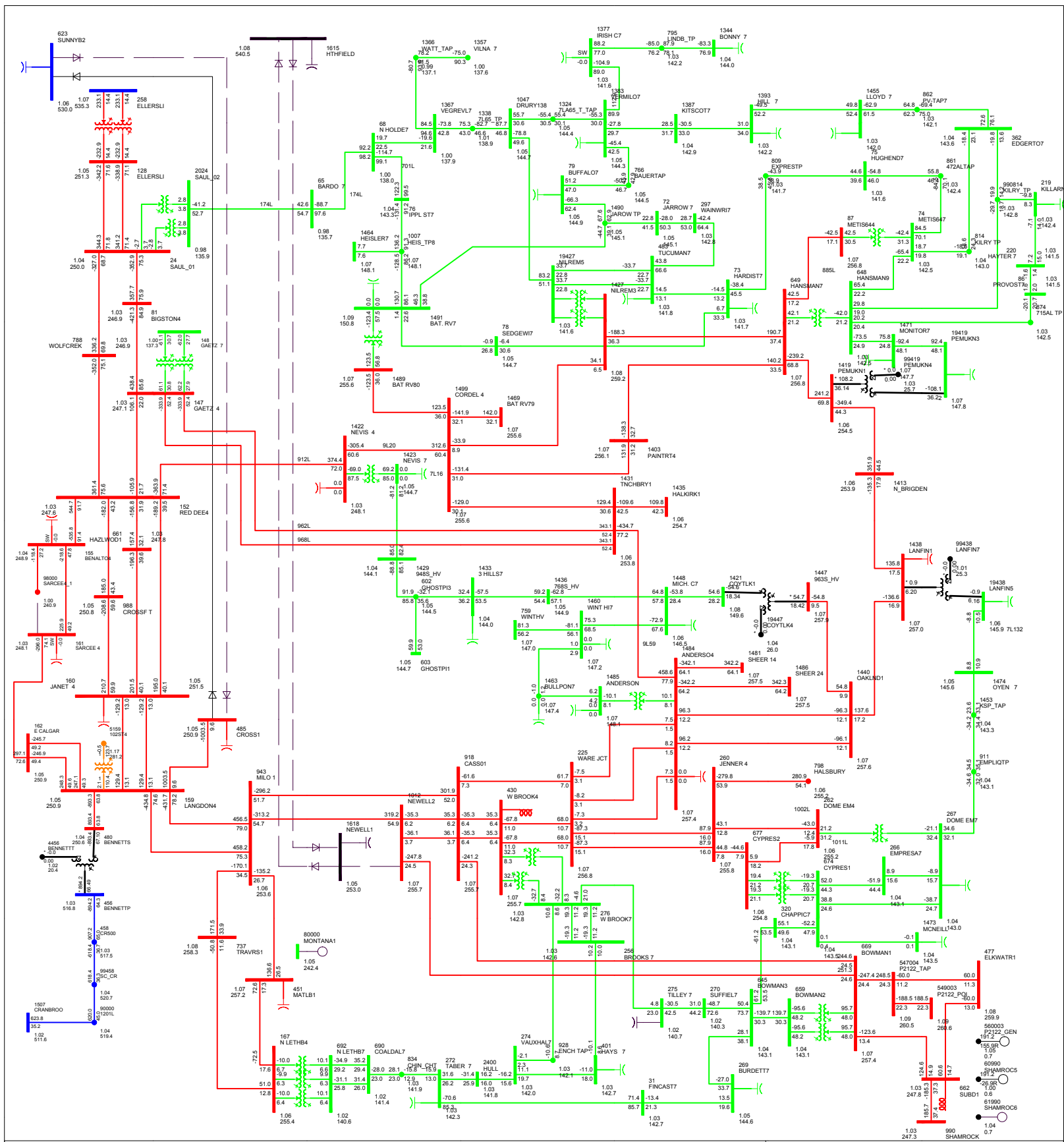
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 761.17 MW Central East: 569.1 MW South West: 1025.8 MW
 FIG. C-66.YR.2023SL.CASE.MS.GEN.SCN.1
 PROJECT: CRPC (CR-CRR OPT), CETO STAGE1&2
 CAP: MAXIMIZE
 VED: JUL 29 2023 9:56
 Contingency: Base
 Trip Action: None
 Connected/Not Applied

Branch Loading: >=100.0%
 kV: <=25.000 <=99.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW/Loading



P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 761.7 MW Central East: 569.1 MW South West: 1025.8 MW
 FIG. C-47.01.YR.2023.SL CASE: M5; GEN: SCN1
 PROJECT: CRPC (CR-CRR OPT), CETO STAGE1&2
 CAP: MAXIMIZE
 WED, JUL 29 2020 9:56
 Contingency: S&T
 Trip Action: None
 Connected/Not Applied

Branch Loading: **>=100.0%**
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW/Loading

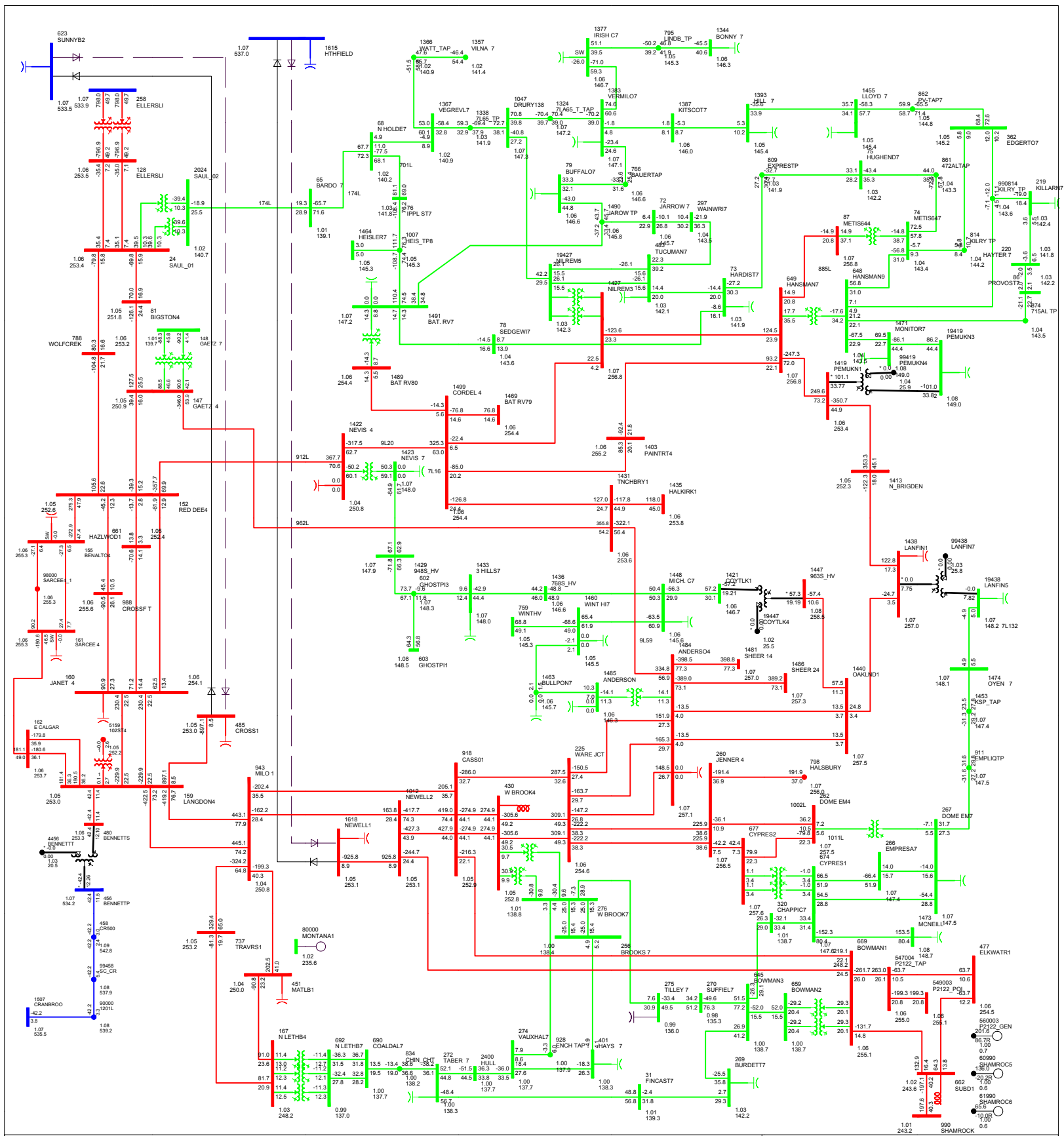


P7001 Central East Transfer Out Transmission Development

New Generation in Study Area and SW Sub-region
 South East: 319.6 MW Central East: 569.1 MW South West: 1025.8 MW
 FIG. C-47.02 FIG. C-47.01.YR.2023SLI_CASE_MIS_GEN_SCN1
 PROJECT: CRSP (CR-CRR OPT), CETO STAGE1A2
 CAP: MAXIMIZE
 VED: JUL 29 2020 956
 Contingency: SA11
 Tip Action: LF4 BC 138kV Tap 916, overlaid.Sarces bus split
 Generation: N-76.P005-27.0KMW, Total: 442 MW

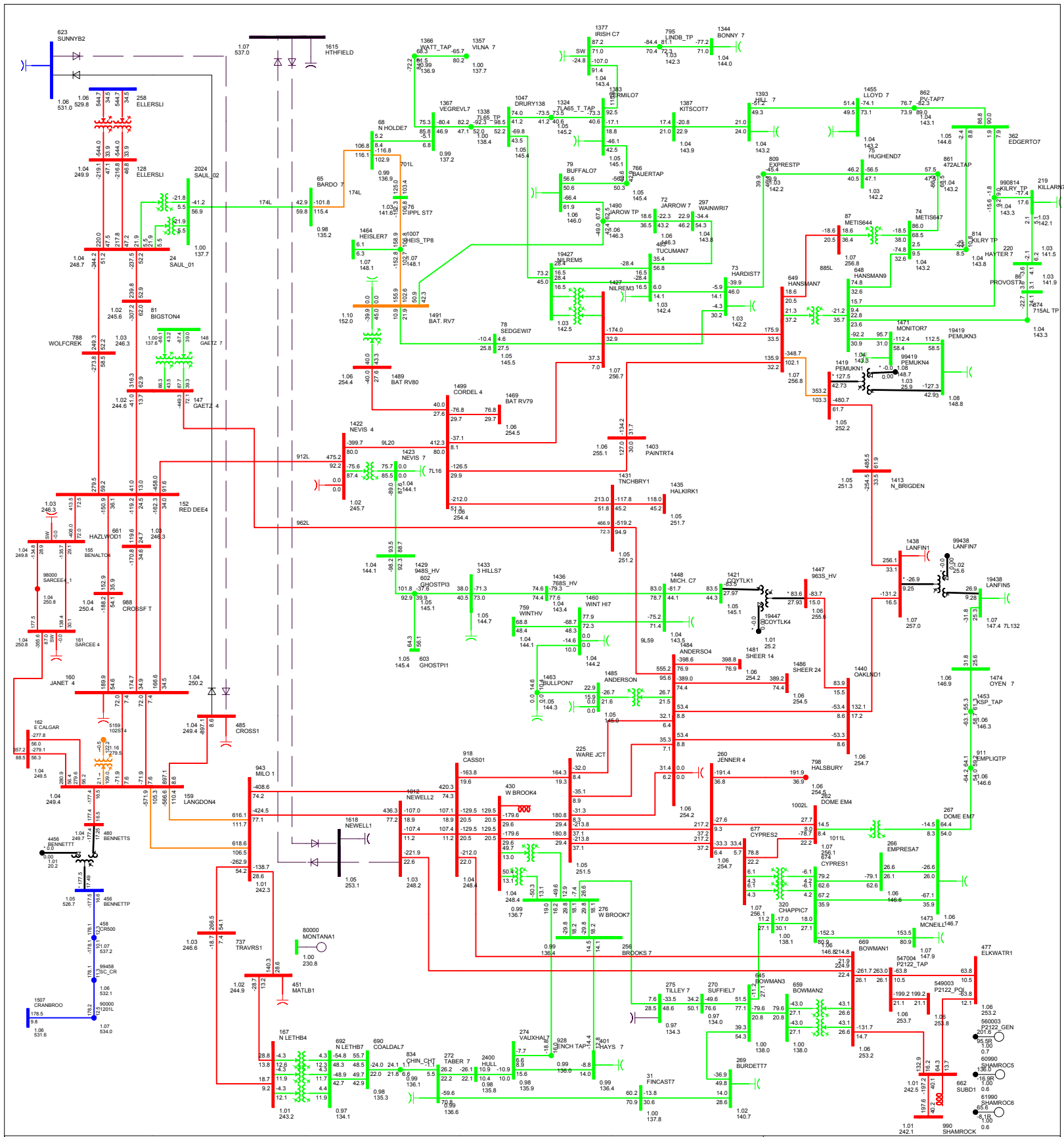
Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000

Bus - Voltage (kV/pu) Branch - MW/Loading
 Equipment - MW%/Loading



P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 552.2 MW Central East: 341.8 MW South West: 716.7 MW
 FIG. C-68.YR.2023S.CASE.H5.GEN.SCM.2
 PROJECT: CETO STAGE1
 CAP. MAXIMIZE
 WED, JUL 22 2020 12:56
 Contingency: Base
 Trip Action: None
 Contingency: Not Applied

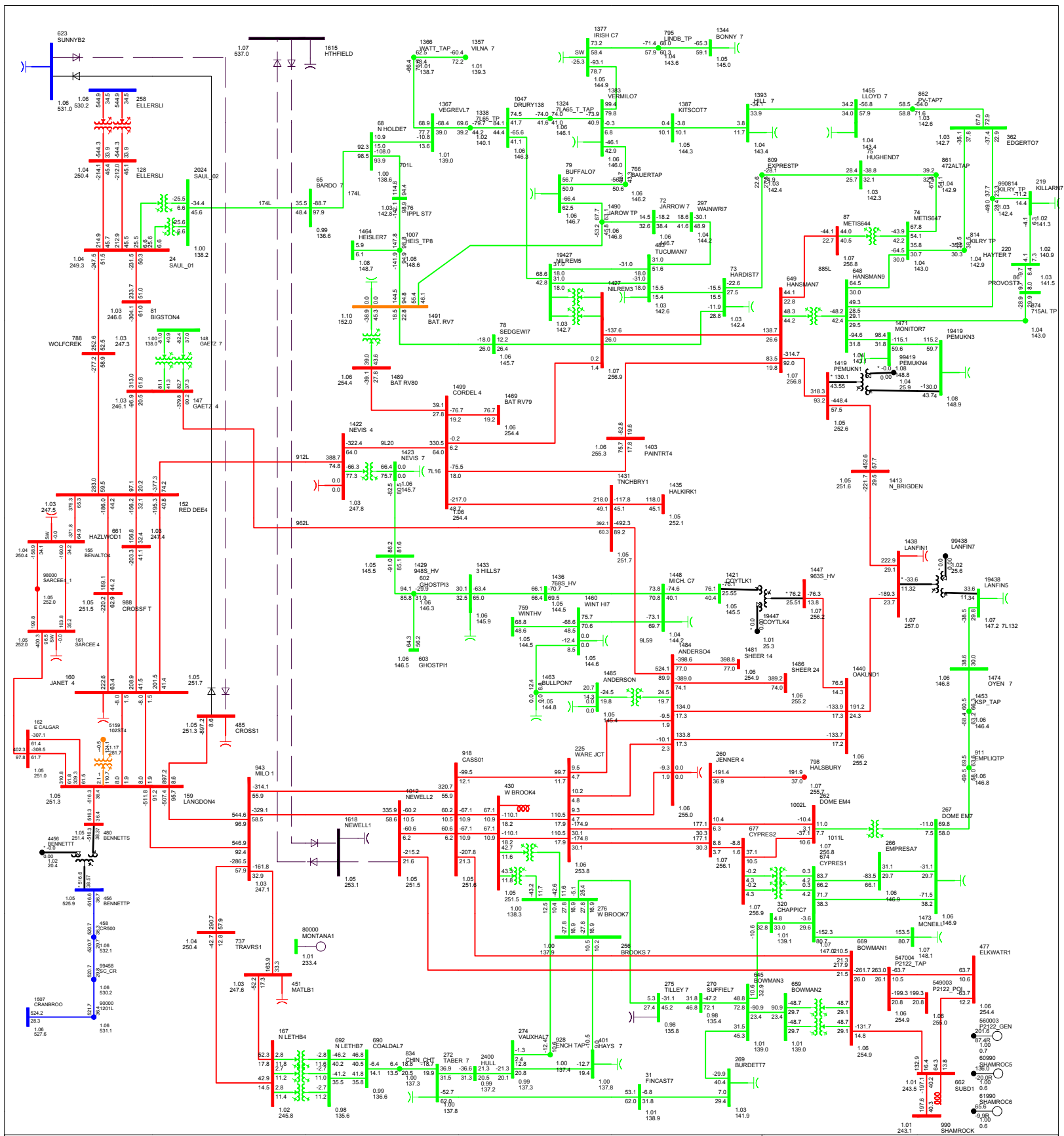
Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW/Loading



P7001 Central East Transfer Out Transmission Development

New Generation in Study Area and SW Sub-region
 South East: 552.2 MW Central East: 341.8 MW South West: 716.7 MW
 FIG. C-69.01.YR.2023.CASE: H5.GEN.SCN.2
 PROJECT: C20 STAGE1
 CAP: MAXIMIZE
 WED, JUL 22 2020 12:56
 Contingency: SA1
 Trip Action: None
 Connected: Not Applied

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu) Branch - MW/Loading
 Equipment - MW/Loading

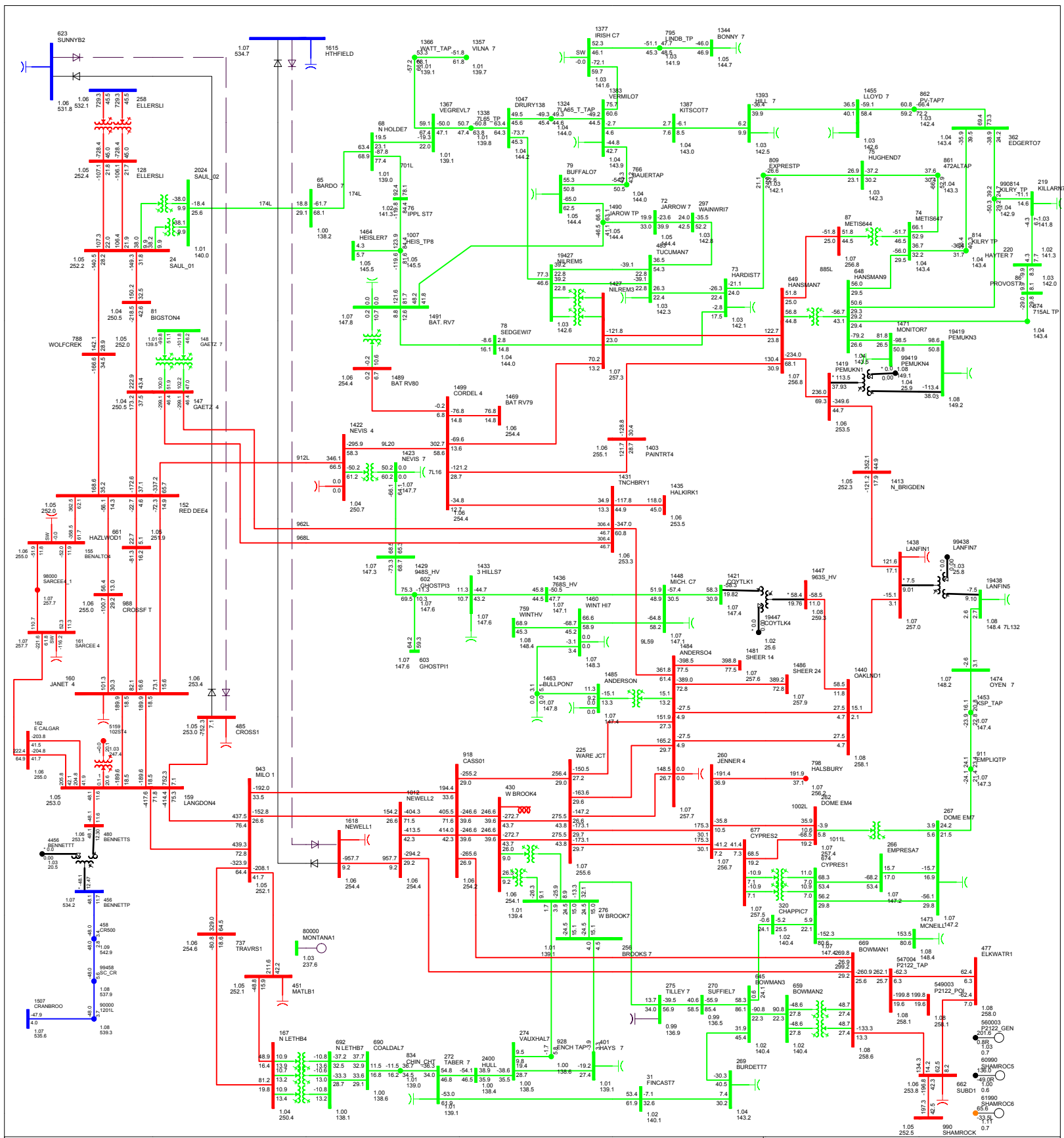


P7001 Central East Transfer Out Transmission Development

New Generation in Study Area and SW Sub-region
 South East: 344.4 MW Central East: 94.2 MW South West: 716.7 MW
 FIG. C-49.02 FIG. C-49.01.YR.2023.CASE: H6: GEN SCN 2
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 WED, JUL 22 2020 12:56
 Contingency: SAT1
 Trip Action: None
 Genname: P701_07_OKLND-110.HSM-3.TCHB-43.LNF-99.DRURY-9.EDGN-92.Total-455 MW

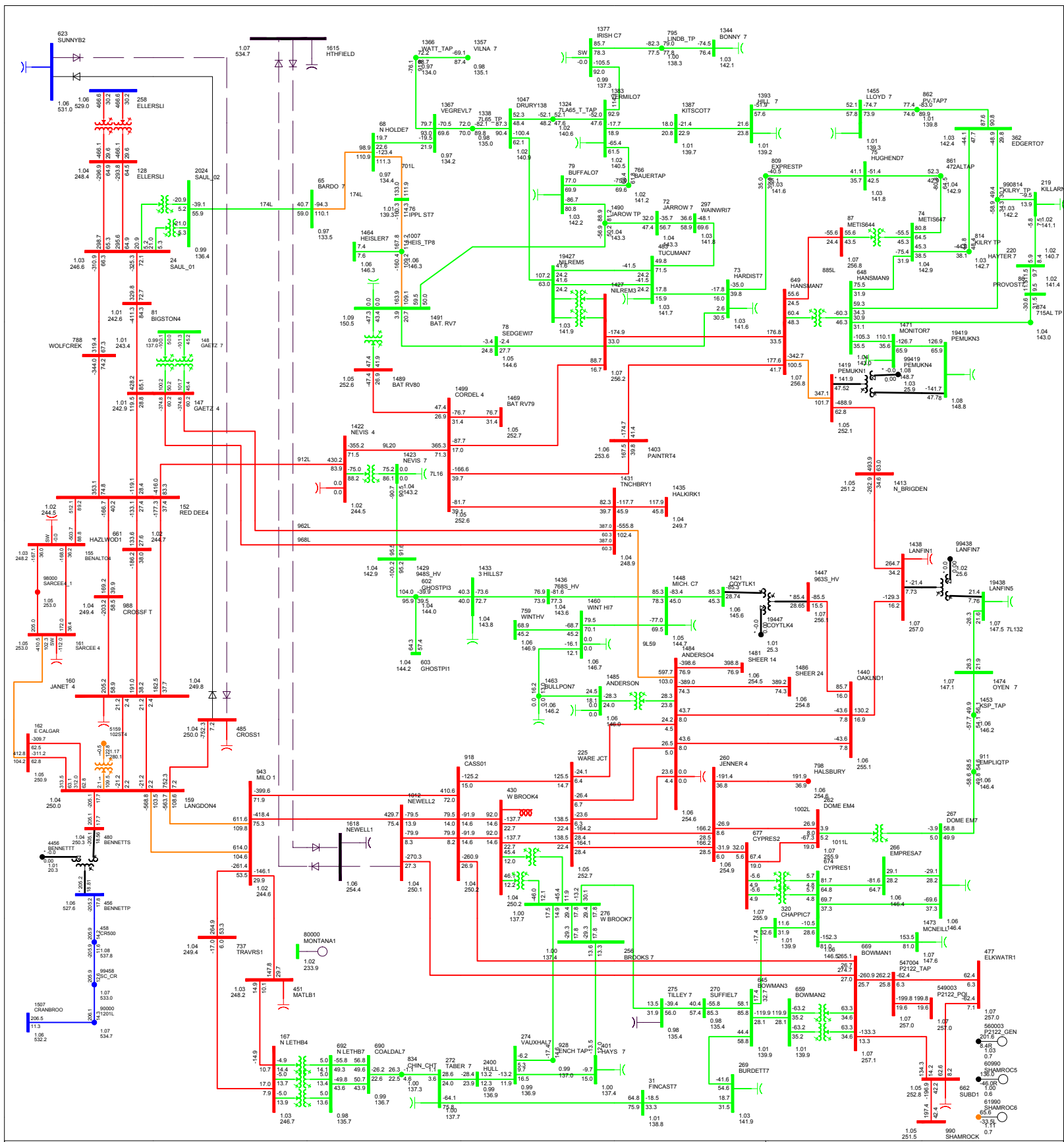
Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000

Bus - Voltage (kV/pu) Branch - MW/Loading
 Equipment - MW/Loading



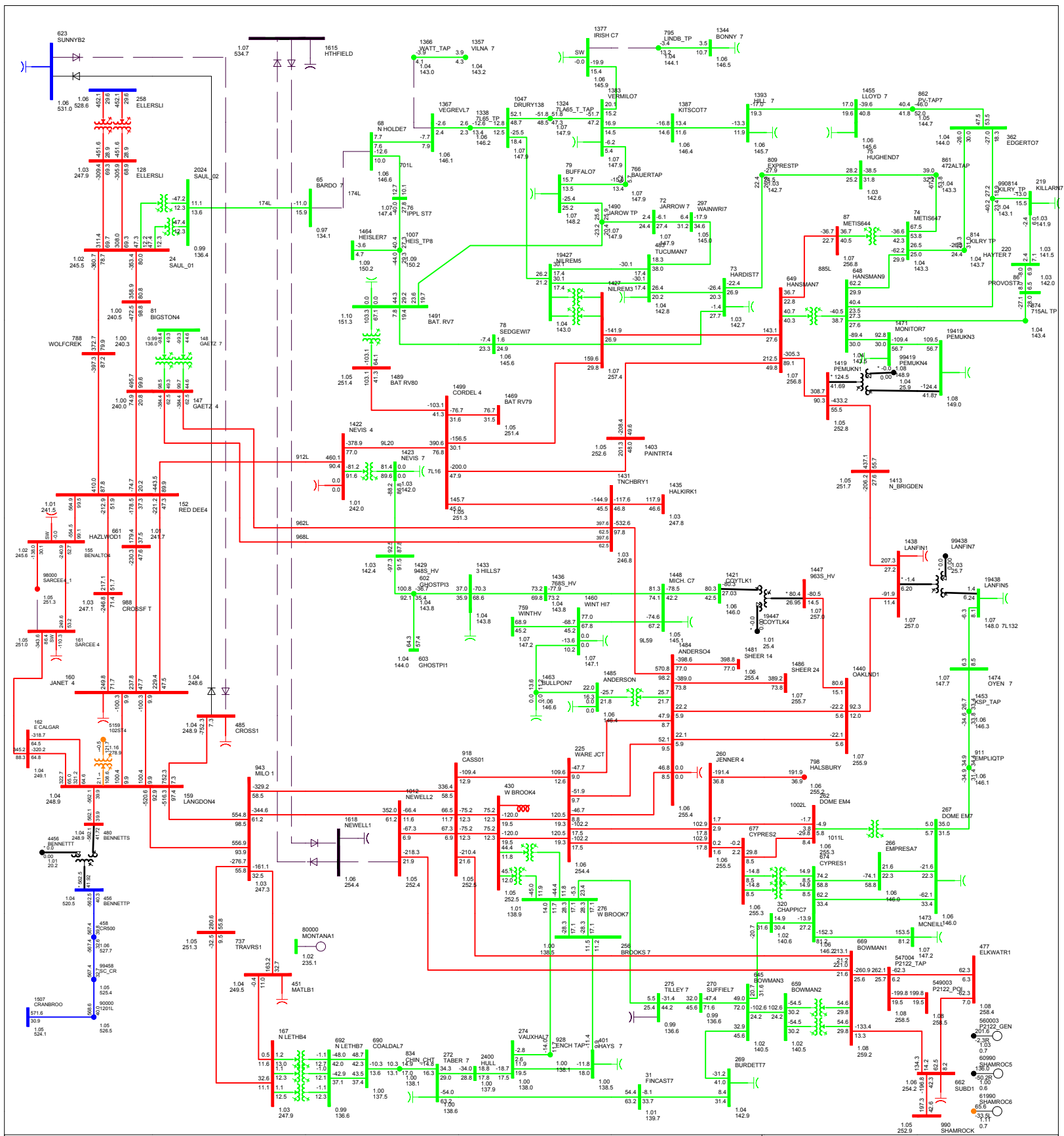
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 575.1 MW Central East: 580.7 MW South West: 703.4 MW
 FIG. C-70.YR.2023; CASE: H5; GEN SCN 2
 PROJECT: CETO STAGE1&2
 CAP: MAXIMIZE
 VED: JUL 22 2020 12:56
 Contingency: Base
 Trip Action: None
 Connected/Not Applied

Branch Loading: >=100.0%
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 575.1 MW Central East: 580.7 MW South West: 703.4 MW
 FIG. C-71.01.YR.2023S.CASE: H5.GEN.SCN.2
 PROJECT: CETO STAGE1&2
 CAP: MAXIMIZE
 WED, JUL 22 2020 12:56
 Courtesy: EA11
 Trip Action: None
 Connected: Not Applied

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading

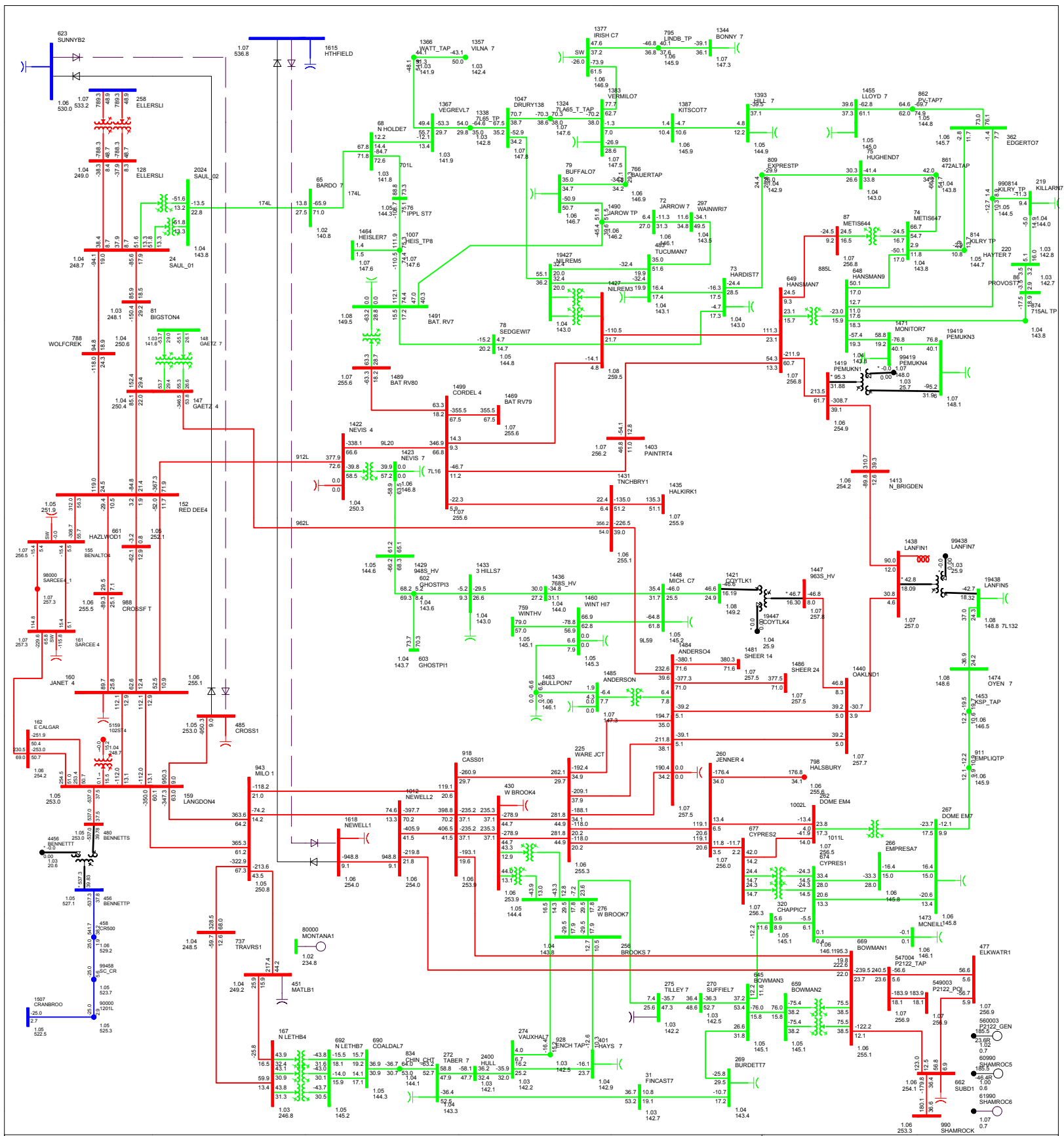


P7001 Central East Transfer Out Transmission Development

New Generation in Study Area and SW Sub-region
 South East: 294.9 MW Central East: 395.8 MW South West: 703.4 MW
 FIG. C-71.02 FIG. C-71.01.YR.2023.CASE.HS.GEN.SCN.2
 PROJECT: CETO STAGE1&2
 CAP: MAXIMIZE
 WED, JUL 22 2020 12:36
 Contingency: S&T1
 Trip Action: 91HL overload, Sarcee bus split, 174L overload trip, 7L52 overload trip, 7L53 overload trip
 Generation: MW=124, J&K=68, P&R=88, L&H=18, T&L=65, Total=451 MW

Branch Loading: >=100.0%
 kV: <=250.0 <=9.00 <=138.00 <=240.00 <=500.00

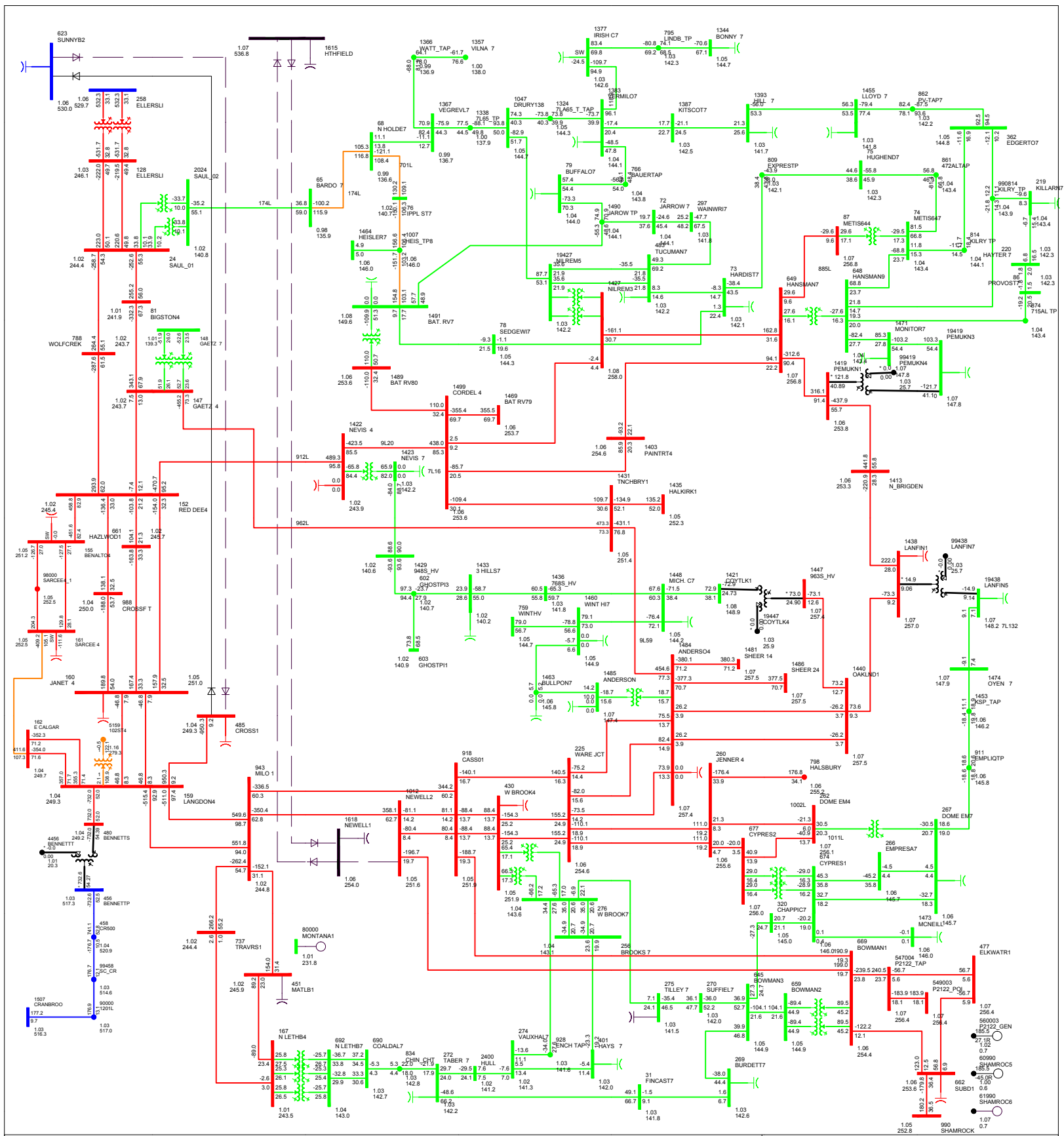
Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW%/Loading



P7001 Central East Transfer Out Transmission Development

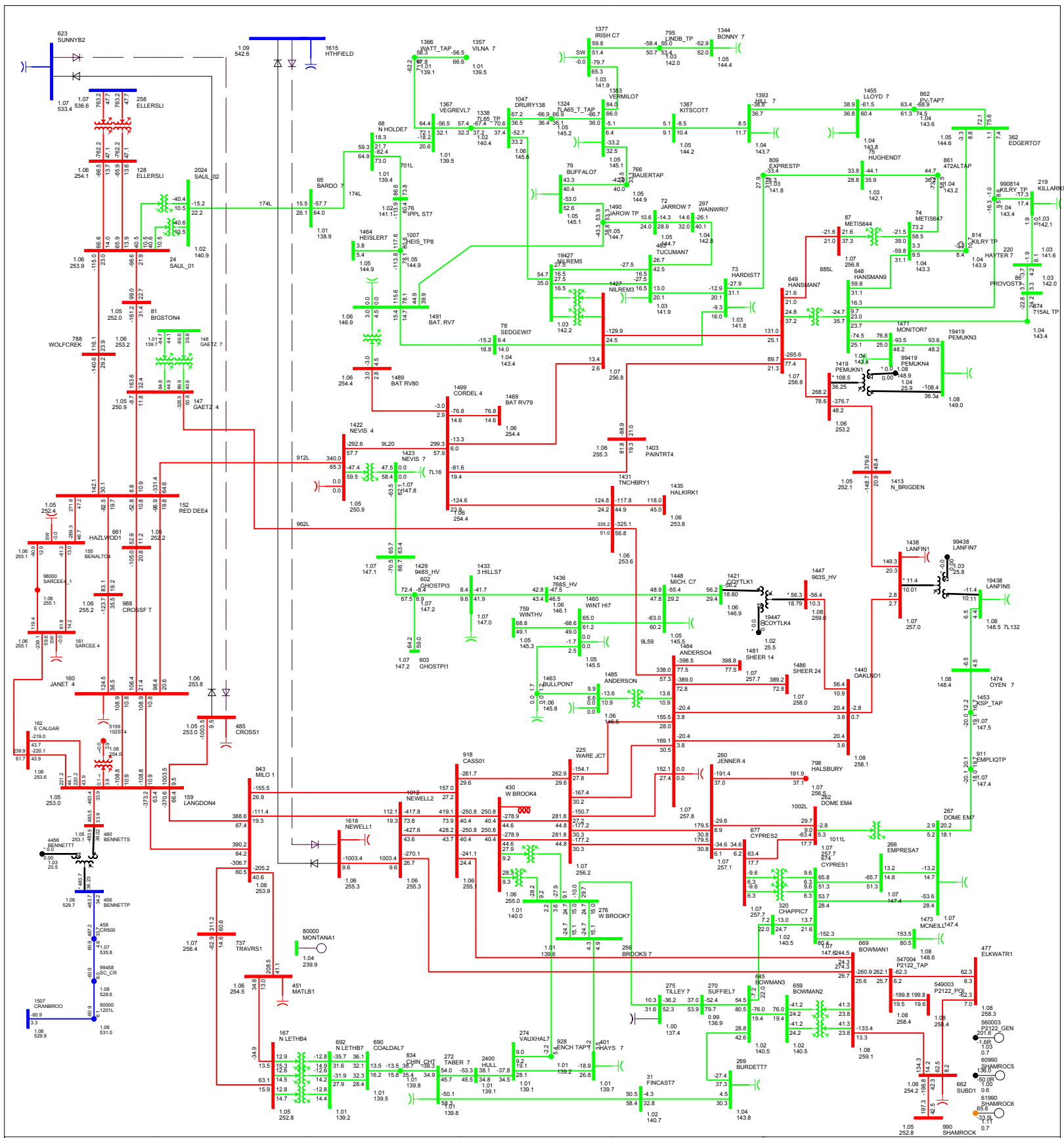
New Generation in Study Area and SW Sub-region
 South East: 487.2 MW Central East: 348.2 MW South West: 1145.7 MW
 FIG. C-72.YR.2023P.CASE.H2: GEN SCN 2
 PROJECT: CRPC (CR-CRR OPT), CETO STAGE 1
 CAP: MAXIMIZE
 WED, JUL 22 2020 12:55
 Contingency: Base
 Trip Action: None
 GenConnect: Applied

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW/Loading



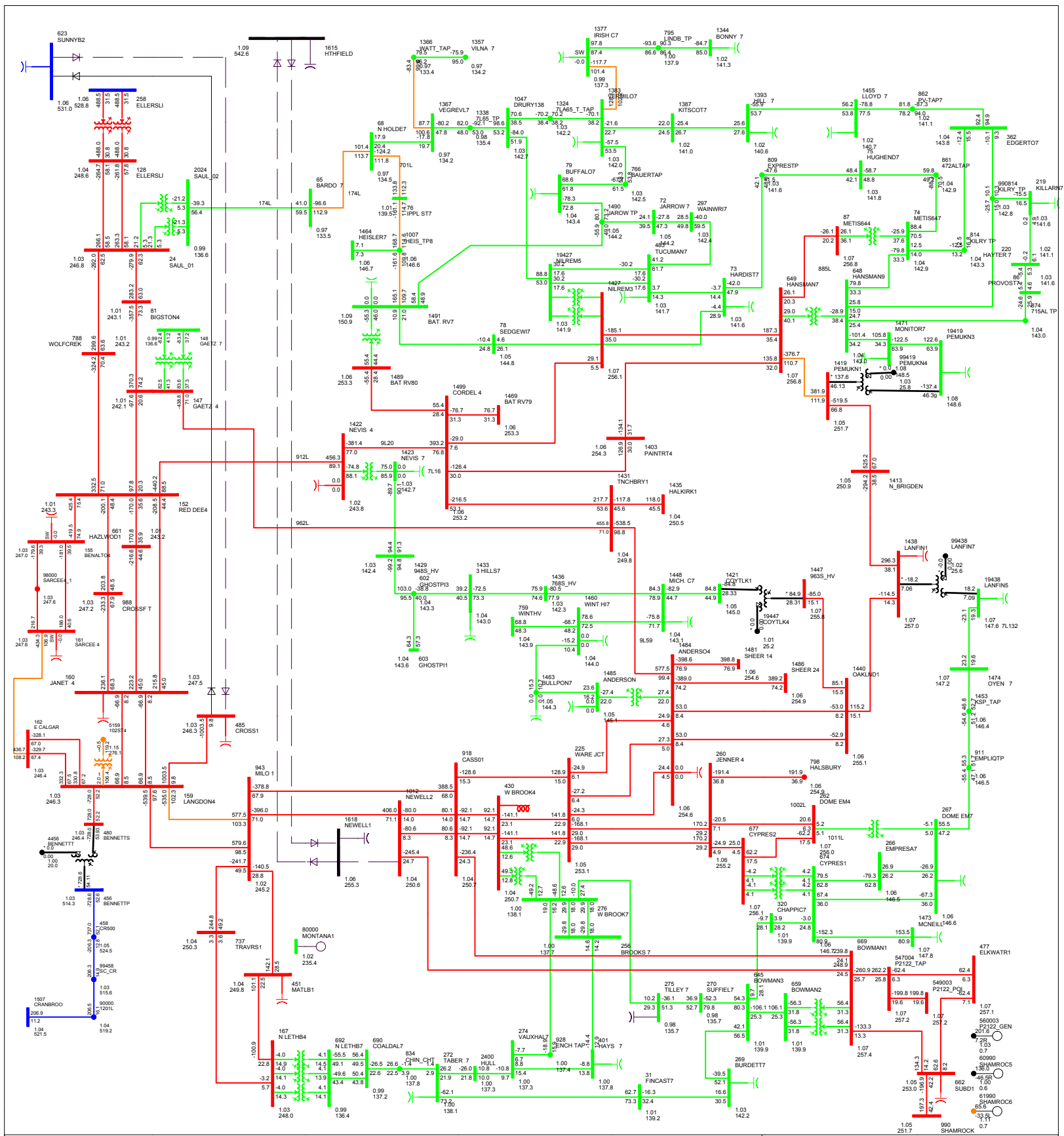
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 487.2 MW Central East: 346.2 MW South West: 1145.7 MW
 FIG. C-73.01_YR2023SP_CASE_H2_GEN_SCN2
 PROJECT: CRSP (CR-CRR OPT), CETO STAGE1
 CAP: MAXIMIZE
 WED, JUL 22 2020 12:55
 Contingency: SA1
 Trip Action: None
 Connected/Not Applied

Branch Loading: >=100.0%
 kV: <=250.0 <=138.0 <=145.0 <=240.0 <=500.0
 Bus - Voltage (kV/pu) Branch - MW/Loading Equipment - MW/Loading



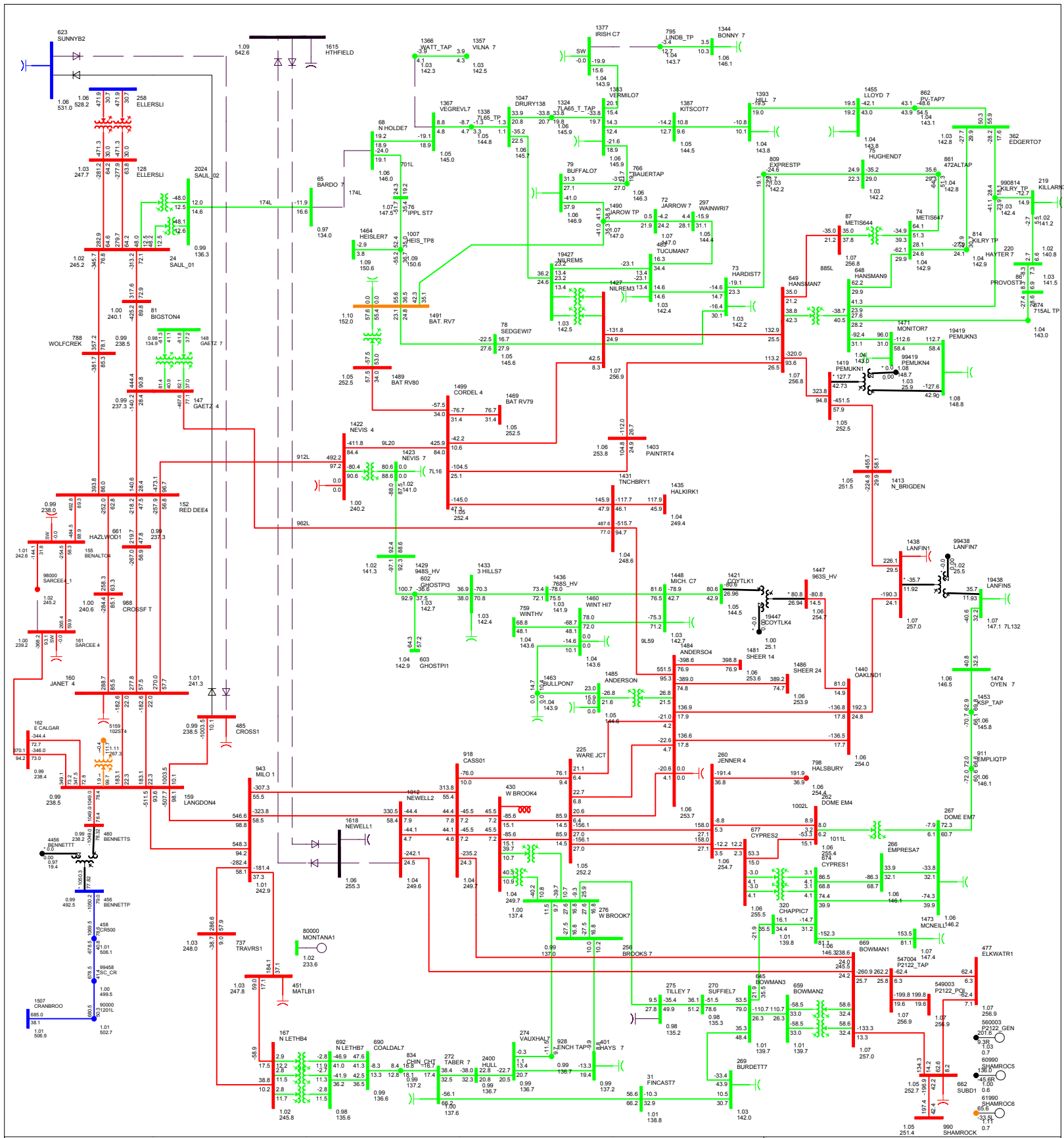
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 487.2 MW Central East: 348.2 MW South West: 1145.7 MW
 FIG. C-74.YR.2023.CASE.H5.GEN.SCN2
 PROJECT: CRPC (CR-CRR OPT), CETO STAGE1
 CAP: MAXIMIZE
 WED, JUL 22 2020 12:55
 Contingency: Base
 Trip Action: None
 Connection: Not Applied

Branch Loading: >=100.0%
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 487.2 MW Central East: 348.2 MW South West: 1145.7 MW
 FIG. C-75:01_YR2023_CASE: H5_GEN S2
 PROJECT: CRSP (CR-CRR OPT), CETO STAGE 1
 CAP: MAXIMIZE
 WED, JUL 22 2020 12:55
 Conveyance: S.A.T.
 Trip Action: None
 Connected/Not Applied

Branch Loading: >=100.0%
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading

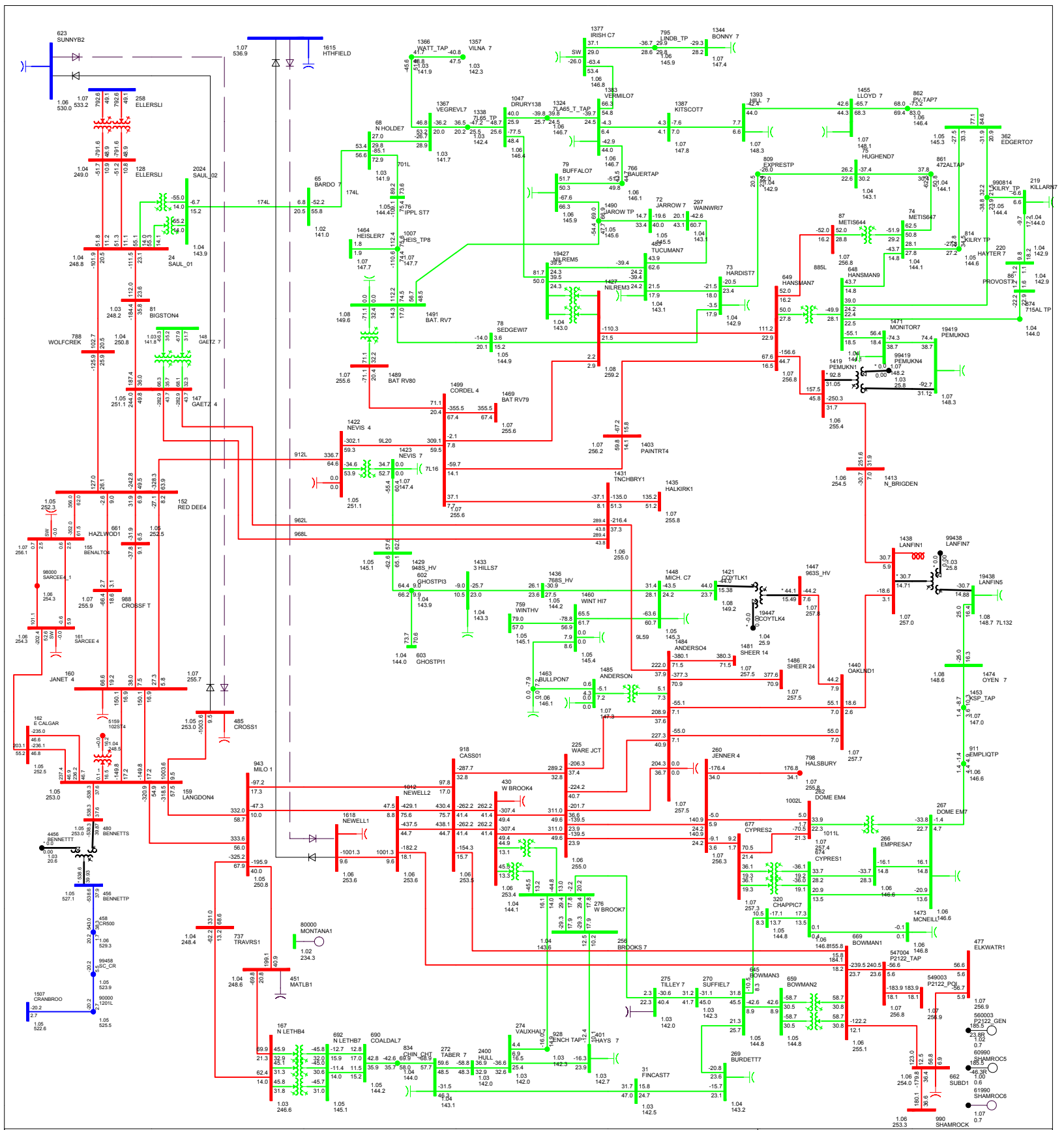


P7001 Central East Transfer Out Region

New Generation in Study Area and SW Sub-region
 South East: 372.2 MW Central East: 0.1 MW
 FIG. C-75.02 FIG. C-75.01.YR.2023.CASE. H5. GEN SCN 2
 PROJECT: CRSP CR-CRR OPTI. CETO STAGE 1
 CAP. MAXIMIZE
 WED, JUL 22 2020 12:56
 Contingency: SA11
 Trip Action: L24 BC 136V 1c, 136V overload Source bus south, 174L overload trip, 7L53 overload trip, 7L53 overload trip
 Generator PRR: 16.0kV/40.0kV: 1.10; 11.7kV/40.0kV: 1.05; 11.7kV/40.0kV: 1.05; 11.7kV/40.0kV: 1.05; 11.7kV/40.0kV: 1.05

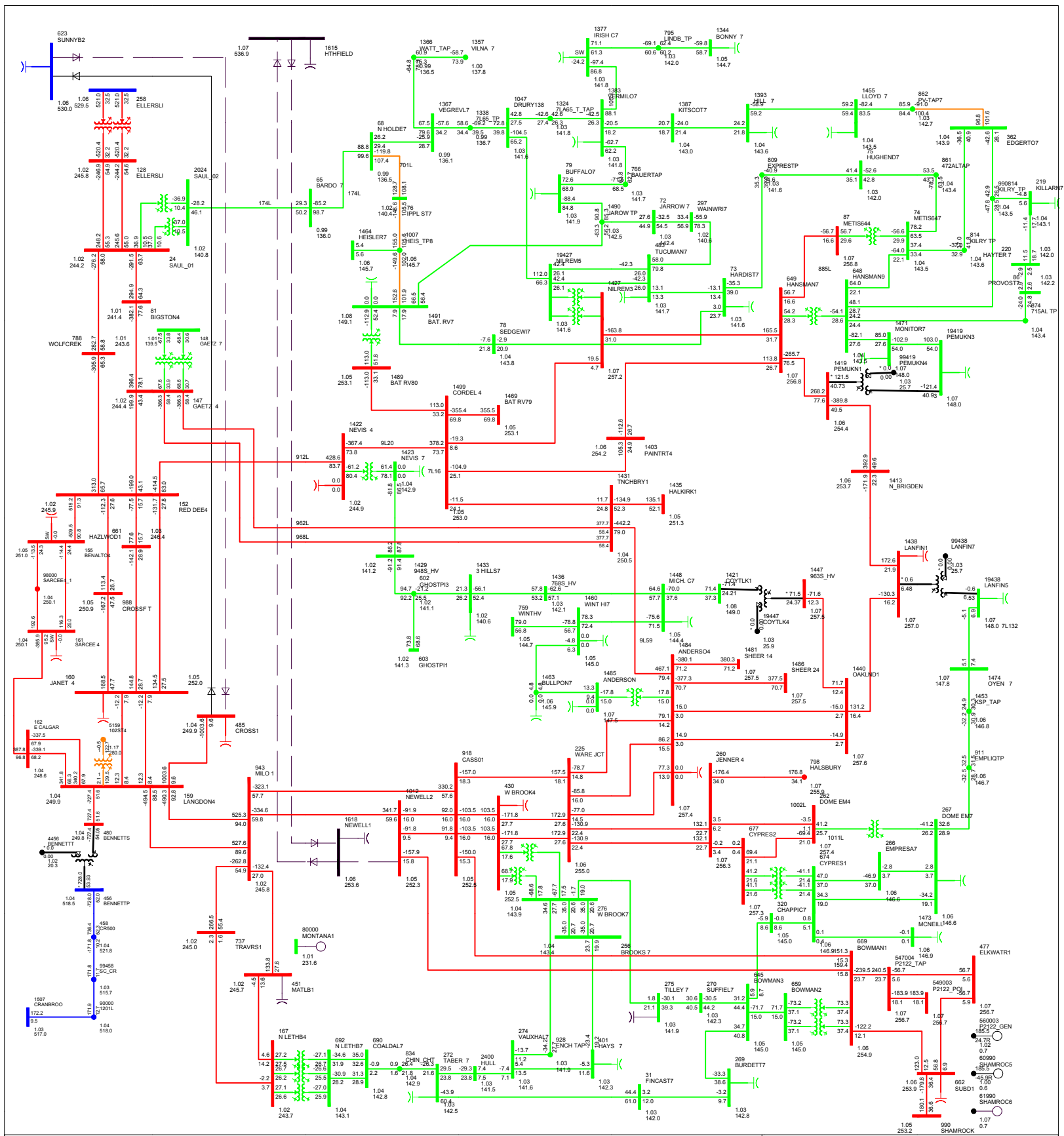
Branch Loading: >=100.0%
<=99.0% <=90.0% <=80.0%

Bus - Voltage (kV/pu) Branch - MW/Loading
 Equipment - MW/Loading



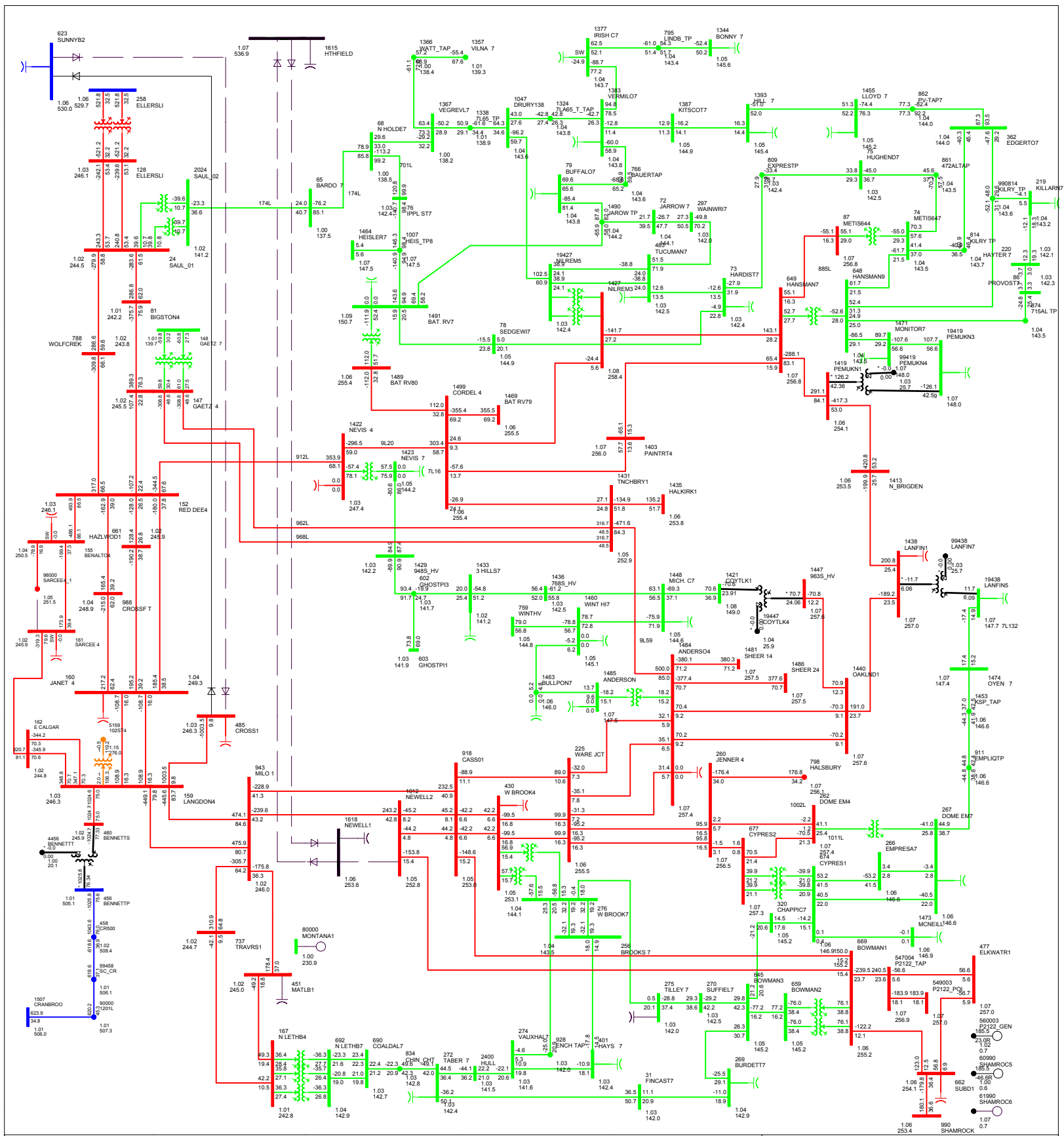
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 531.5 MW Central East: 455.4 MW South West: 1111.6 MW
 FIG. C-76.YR.2023SP.CASE.H2: GEN SCN 2
 PROJECT: CRPC (CR-CRR OPT), CETO STAGE1&2
 CAP: MAXIMIZE
 VED: JUL 22 2020 12:57
 Contingency: Base
 Trip Action: None
 Contingency: Not Applied

Branch Loading: >=100.0%
 kV: <=250.0 <=90.0 <=138.0 <=240.0 <=500.0
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading



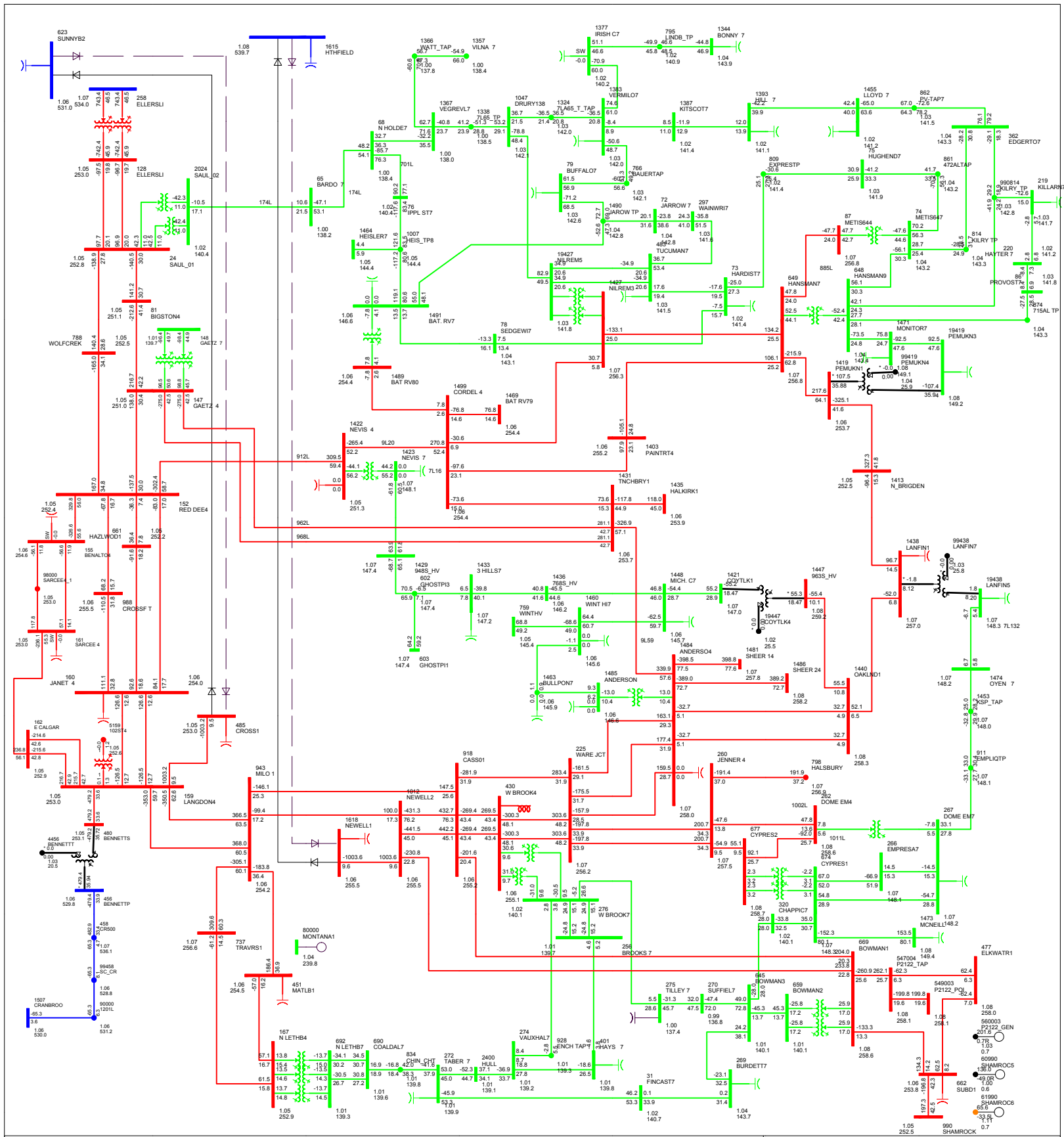
P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 531.5 MW Central East: 455.4 MW South West: 1111.6 MW
 FIG. C-77.01.YR.2023.SP.CASE.H2.GEN.SCN.2
 PROJECT: CRPC (CR-CRR OPT), CETO STAGE1&2
 CAP: MAXIMIZE
 VED: JUL 22 2020 12:57
 Contingency: SA1
 Trip Action: None
 Connected: Not Applied

Branch Loading: >=100.0%
 kV: <=25.000 <=99.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu) Branch - MW/Loading
 Equipment - MW/Loading



P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 403.0 MW Central East: 118.8 MW South West: 111.6 MW
 FIG. C-77.02 FIG. C-77.01.YR.2023.P3.CASE.H2_GEN.SCN.2
 PROJECT: CRSP (CR-CRR OPT), CETO STAGE1A2
 CAP: MAXIMIZE
 WED, JUL 22 2020 12:57
 Contingency: SAT1
 Tap Action: LF4 BC 138kV Tm 3.95, overleaf Sarcee bus split
 Generation: NR-TORONTO-32, RMK-97, YCHS-16, ALNR-38, EDGN-18, Total: 455 MW

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW%/Loading



P7001 Central East Transfer Out Transmission Development
 New Generation in Study Area and SW Sub-region
 South East: 531.6 MW Central East: 455.4 MW South West: 1111.6 MW
 FIG. C-78.YR.2023S.CASE.H5.GEN.SCN2
 PROJECT: CRSP (CR-CRR OPT), CETO STAGE1&2
 CAP: MAXIMIZE
 WED, JUL 22 2020 12:56
 Contingency: Base
 Trip Action: None
 GenConnect: Applied

Branch Loading: >=100.0%
 kV: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/pu)
 Branch - MW/Loading
 Equipment - MW/Loading

