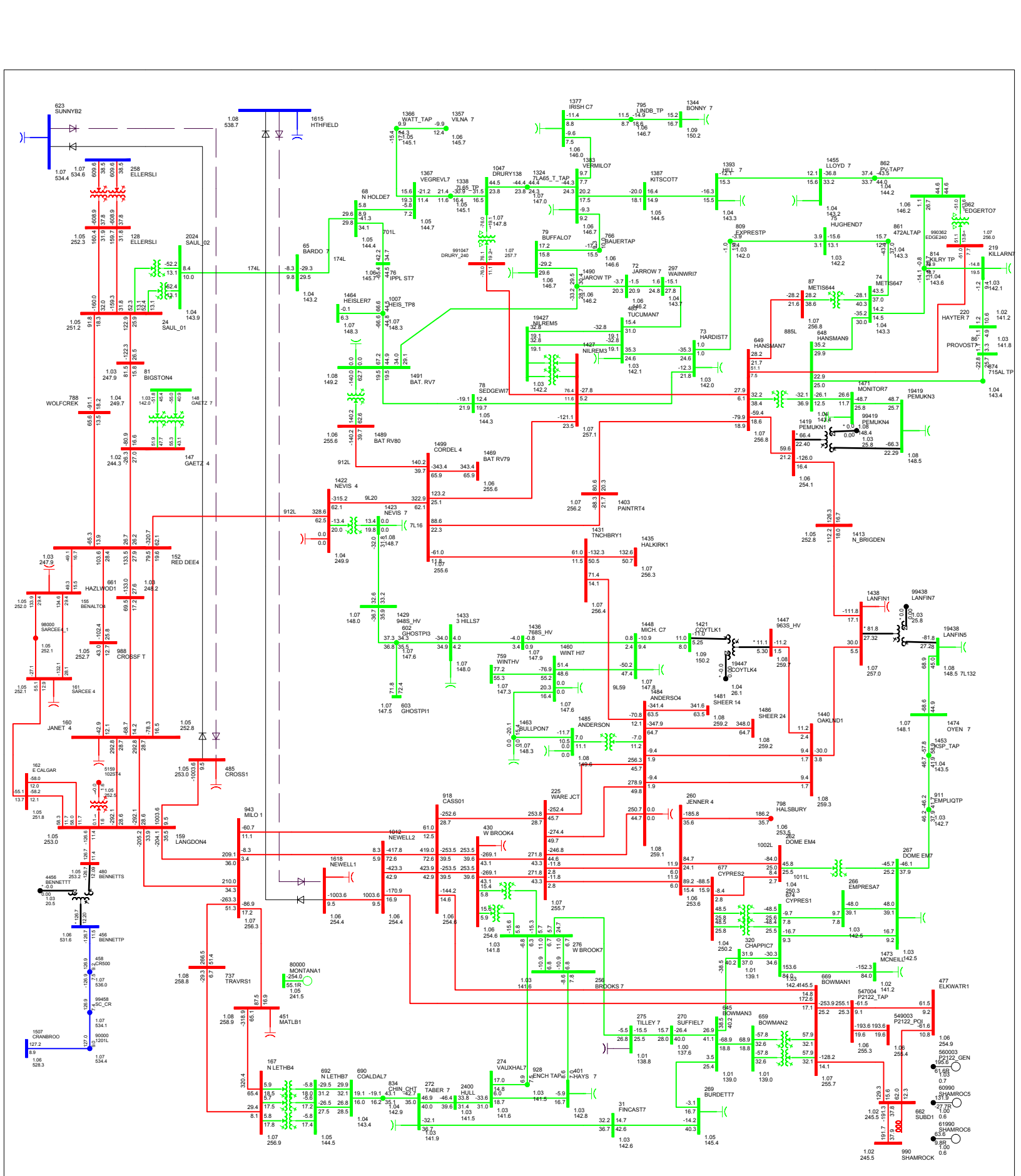


Attachment D: Power Flow SLDs – Medium-term (2031) Assessment

Attachment D Summary

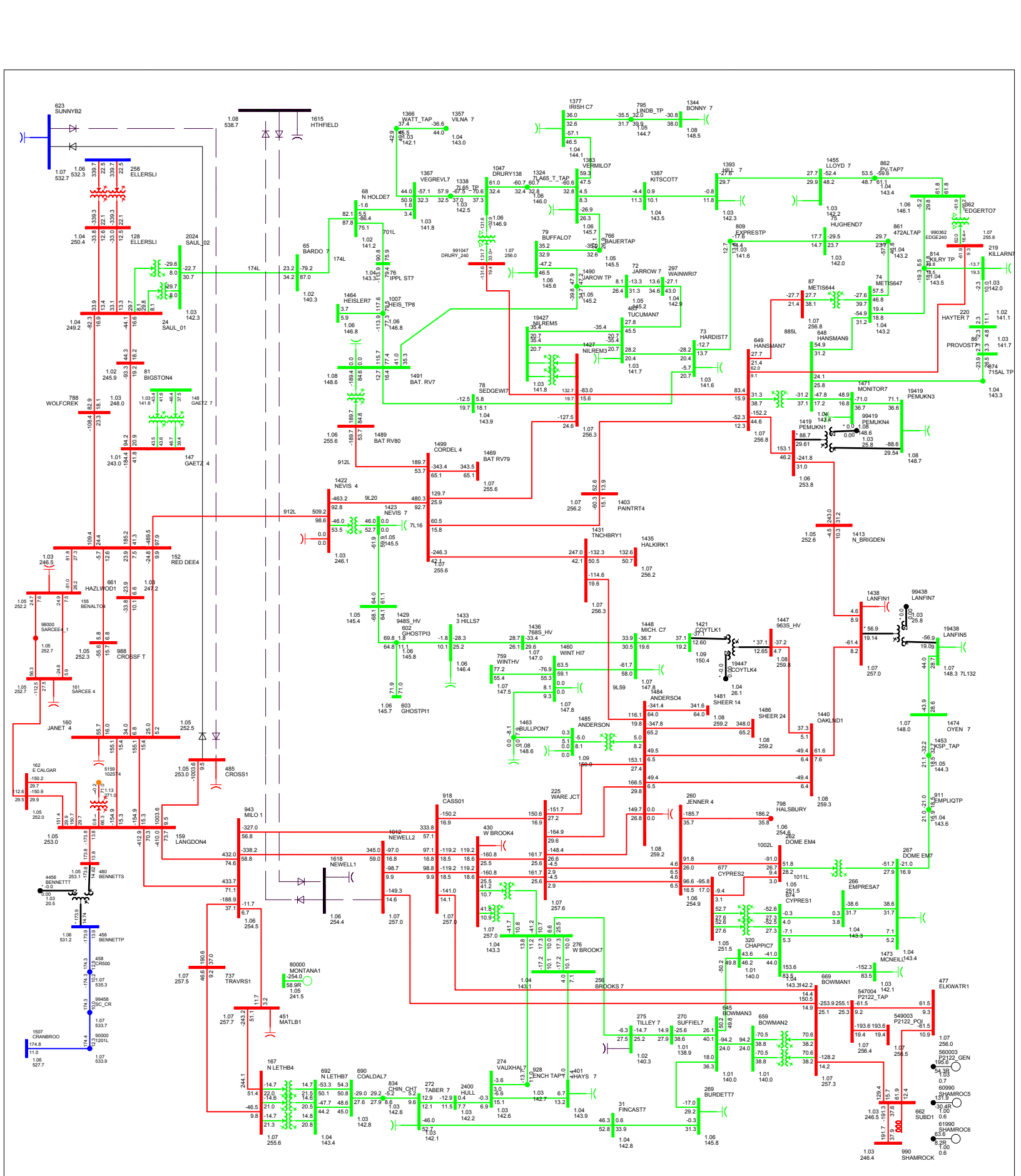
No.	Capability Category	Scenario	Option	Case	Contingency	Figure No.
1	B	2	Pre Development	H11	Base	Fig. D-1
2	B	2	Pre Development	H11	EATL	Fig. D-2
3	B	1	Pre Development	M13	Base	Fig. D-3
4	B	1	Pre Development	M13	EATL	Fig. D-4
5	B	1	Pre Development	M13	Base	Fig. D-5
6	B	1	Pre Development	M13	EATL	Fig. D-6
7	B	2	CETO Stage1	H10	Base	Fig. D-7
8	B	2	CETO Stage1	H10	1003L	Fig. D-8
9	B	2	CETO Stage1	H11	Base	Fig. D-9
10	B	2	CETO Stage1	H11	CETO_CKT_1	Fig. D-10
11	B	1	CETO Stage1	M13	Base	Fig. D-11
12	B	1	CETO Stage1	M13	EATL	Fig. D-12
13	B	1	CRPC, CETO Stage1	M13	Base	Fig. D-13
14	B	1	CRPC, CETO Stage1	M13	EATL	Fig. D-14
15	B	2	CRPC, CETO Stage1	H11	Base	Fig. D-15
16	B	2	CRPC, CETO Stage1	H11	CETO_CKT_1	Fig. D-16
17	B	2	CRPC, CETO Stage1	H11	Base	Fig. D-17
18	B	2	CRPC, CETO Stage1	H11	912L	Fig. D-18
19	B	2	CRPC, CETO Stage1	H11	Base	Fig. D-19
20	B	2	CRPC, CETO Stage1	H11	EATL	Fig. D-20
21	B	2	CRPC, CETO Stage1&2	H11	Base	Fig. D-21
22	B	2	CRPC, CETO Stage1&2	H11	EATL	Fig. D-22
23	B	1	CRPC, CETO Stage1&2	M13	Base	Fig. D-23
24	B	1	CRPC, CETO Stage1&2	M13	EATL	Fig. D-24
25	B	1	CETO Stage1&2	M13	Base	Fig. D-25
26	B	1	CETO Stage1&2	M13	EATL	Fig. D-26
27	B	2	CETO Stage1&2	H11	Base	Fig. D-27
28	B	2	CETO Stage1&2	H11	912L	Fig. D-28
29	A	1	Pre Development	M13	Base	Fig. D-29
30.01	A	1	Pre Development	M13	EATL	Fig. D-30.01
30.02	A	1	Pre Development	M13	EATL	Fig. D-30.02
31	A	2	Pre Development	H11	Base	Fig. D-31
32.01	A	2	Pre Development	H11	EATL	Fig. D-32.01
32.02	A	2	Pre Development	H11	EATL	Fig. D-32.02
33	A	1	CETO Stage1	M13	Base	Fig. D-33
34.01	A	1	CETO Stage1	M13	EATL	Fig. D-34.01
34.02	A	1	CETO Stage1	M13	EATL	Fig. D-34.02
35	A	2	CETO Stage1	H10	Base	Fig. D-35
36.01	A	2	CETO Stage1	H10	EATL	Fig. D-36.01
36.02	A	2	CETO Stage1	H10	EATL	Fig. D-36.02
37	A	1	CRPC, CETO Stage1	M13	Base	Fig. D-37
38.01	A	1	CRPC, CETO Stage1	M13	EATL	Fig. D-38.01
38.02	A	1	CRPC, CETO Stage1	M13	EATL	Fig. D-38.02
39	A	2	CRPC, CETO Stage1	H9	Base	Fig. D-39

No.	Capability Category	Scenario	Option	Case	Contingency	Figure No.
40.01	A	2	CRPC, CETO Stage1	H9	EATL	Fig. D-40.01
40.02	A	2	CRPC, CETO Stage1	H9	EATL	Fig. D-40.02
41	A	1	CRPC, CETO Stage1&2	M13	Base	Fig. D-41
42.01	A	1	CRPC, CETO Stage1&2	M13	EATL	Fig. D-42.01
42.02	A	1	CRPC, CETO Stage1&2	M13	EATL	Fig. D-42.02
43	A	2	CRPC, CETO Stage1&2	H11	Base	Fig. D-43
44.01	A	2	CRPC, CETO Stage1&2	H11	EATL	Fig. D-44.01
44.02	A	2	CRPC, CETO Stage1&2	H11	EATL	Fig. D-44.02
45	A	1	CETO Stage1&2	M13	Base	Fig. D-45
46.01	A	1	CETO Stage1&2	M13	EATL	Fig. D-46.01
46.02	A	1	CETO Stage1&2	M13	EATL	Fig. D-46.02
47	A	2	CETO Stage1&2	H11	Base	Fig. D-47
48.01	A	2	CETO Stage1&2	H11	EATL	Fig. D-48.01
48.02	A	2	CETO Stage1&2	H11	EATL	Fig. D-48.02



New Generation in Study Area and SW Sub-region
 South East: 52.4 MW Central East: 0.6 MW South West: 484.9 MW
 FIG. D-1: YR2031S; CASE: H11; GEN SCN2
 PROJECT: PRE PROJECT (NO CRPC OR CETO)
 CAP: MAXIMIZE
 THU: APR 02 2020 14:23
 Contingency Basis: Trip Action: None

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

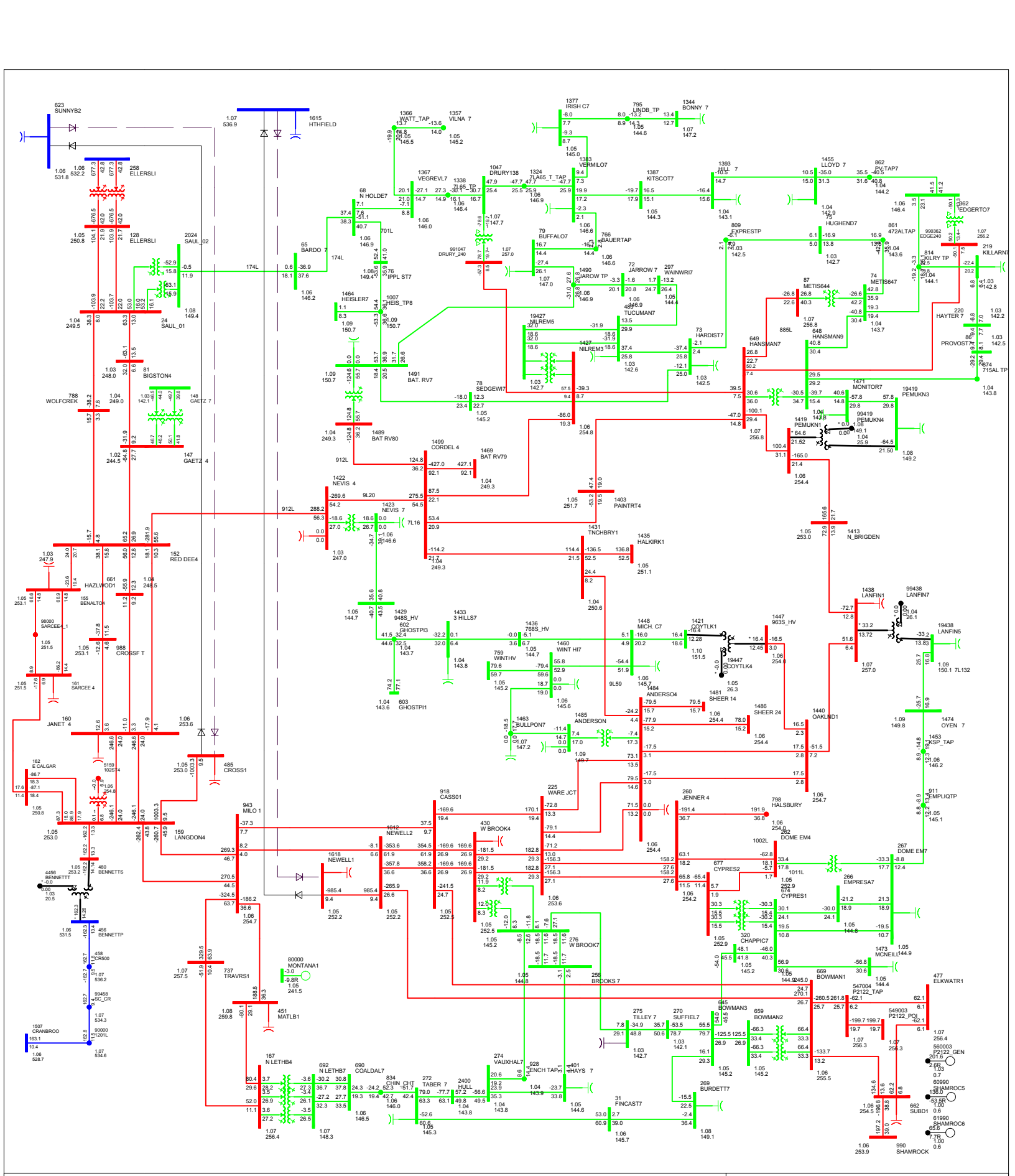


New Generation in Study Area and SW Sub-region
 South East: 52.4 MW Central East: 0.6 MW South West: 484.9 MW

FIG. D-2 YR2035; CASE: H11; GEN SCN2
 PROJECT: PRE PROJECT (NO CRPC OR CETO)
 CAP: MAXIMIZE
 THU APR 02 2020 14:23
 Copyright: EATL, Trip Action: None

Branch Loading: $\geq 100.0\%$
 kV: $<=25.000$ $<=69.000$ $<=138.000$ $<=240.000$ $<=500.000$

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

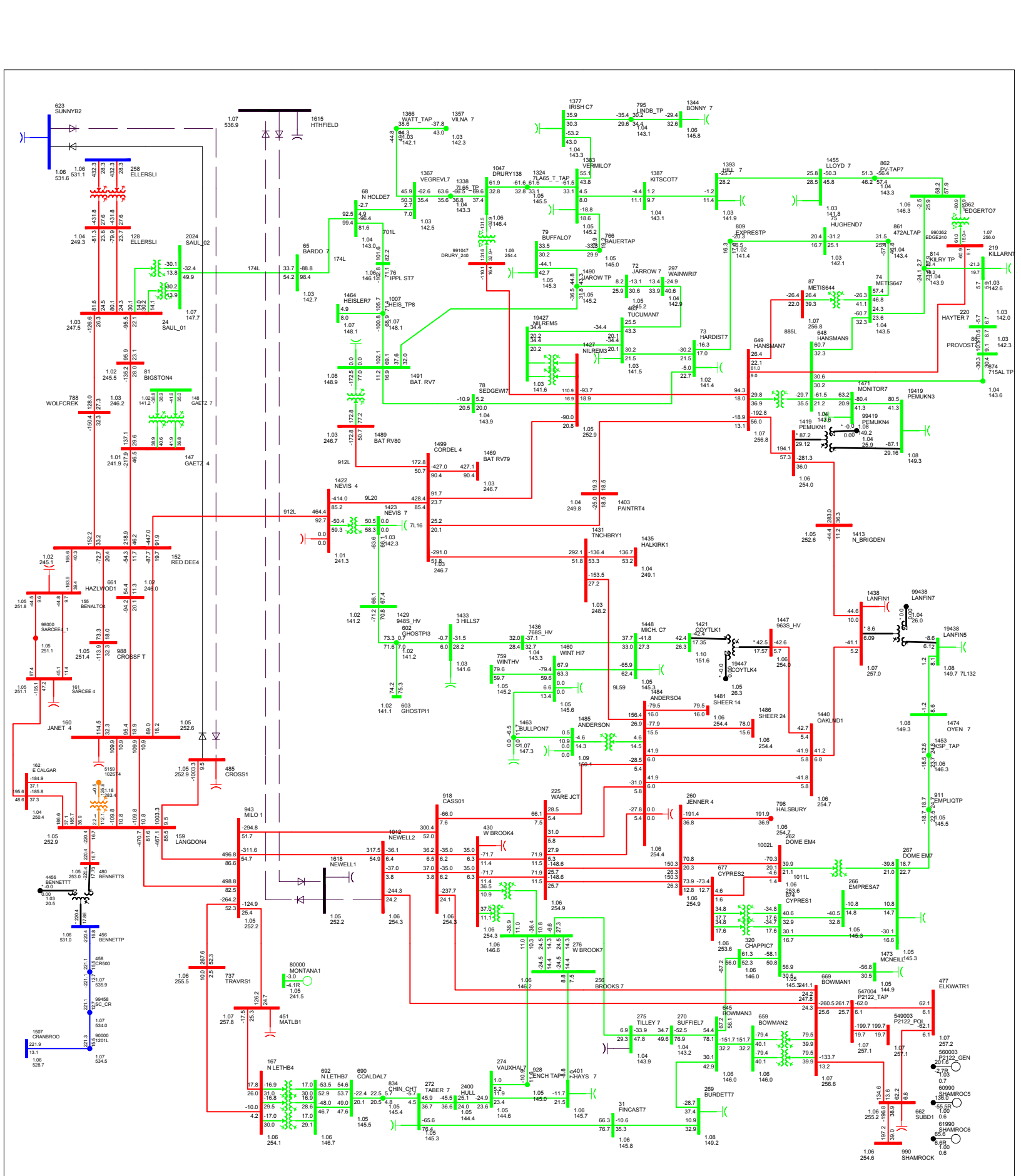


New Generation in Study Area and SW Sub-region
 South East: 523.8 MW Central East: 36.6 MW South West: 405.0 MW

FIG. D-3 YR2031S: CASE: M13, GEN SCN 1
 PROJECT: PRE PROJECT (NO CRPC OR CETO)
 CAP: MAXIMIZE
 THU APR 02 2020 14:23
 Copyright: Bates, Trip Adorn: None

Branch Loading: $\geq 100.0\%$
 kV: $<=25.000$ ≤ 69.000 ≤ 138.000 ≤ 240.000 ≤ 500.000

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

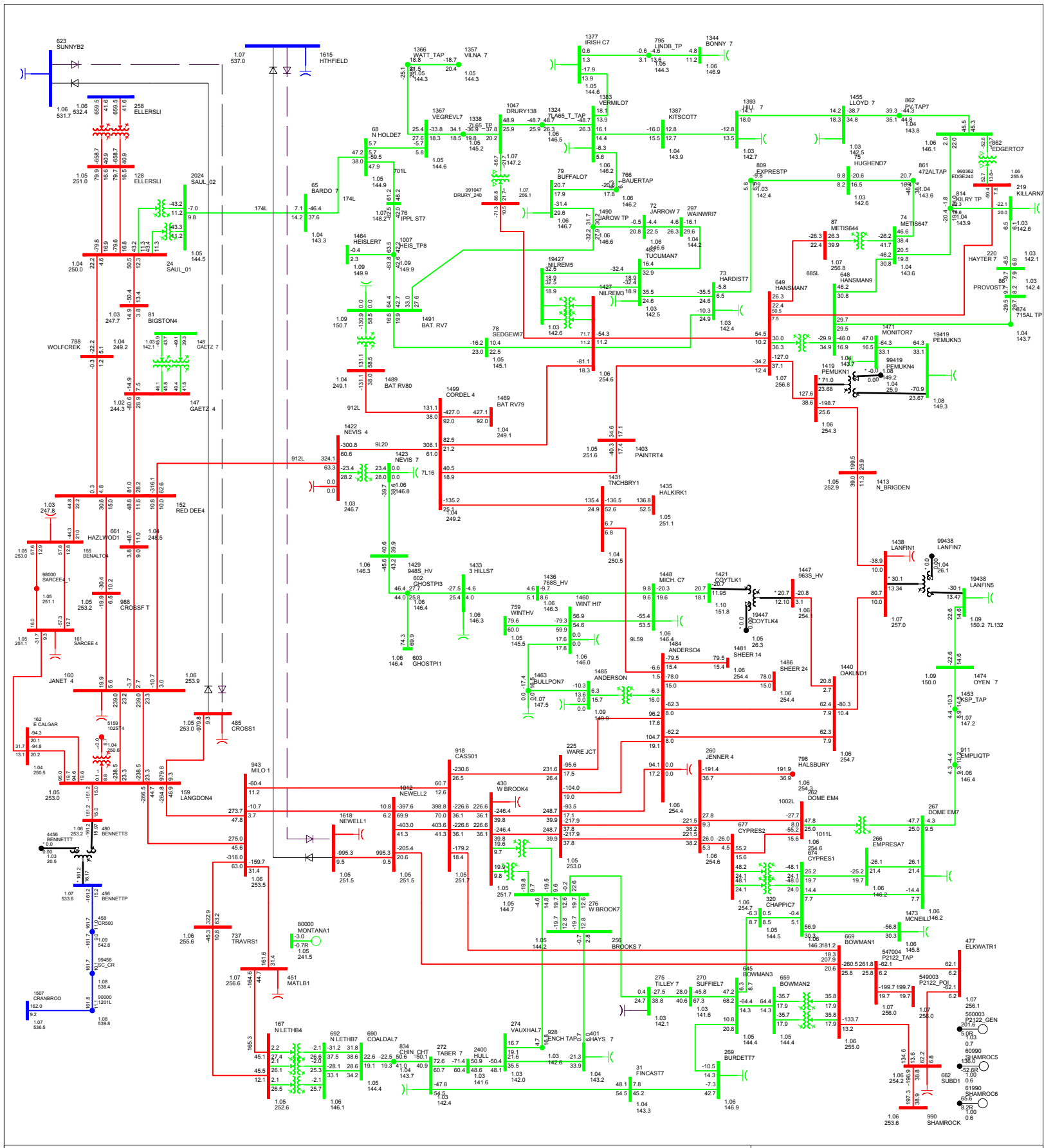


New Generation in Study Area and SW Sub-region
 South East: 523.8 MW Central East: 36.6 MW South West: 405.0 MW

FIG. 4- YR2031S; CASE: M13; GEN SCN 1
 PROJECT: PRE PROJECT (NO CRPC OR CETO)
 CAP: MAXIMIZE
 THU APR 02 2020 14:23
 Copyright: EATL, TPL Action: None

Branch Loading: $\geq 100.0\%$
 kV: $<=25.000$ $<=69.000$ $<=138.000$ $<=240.000$ $<=500.000$

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

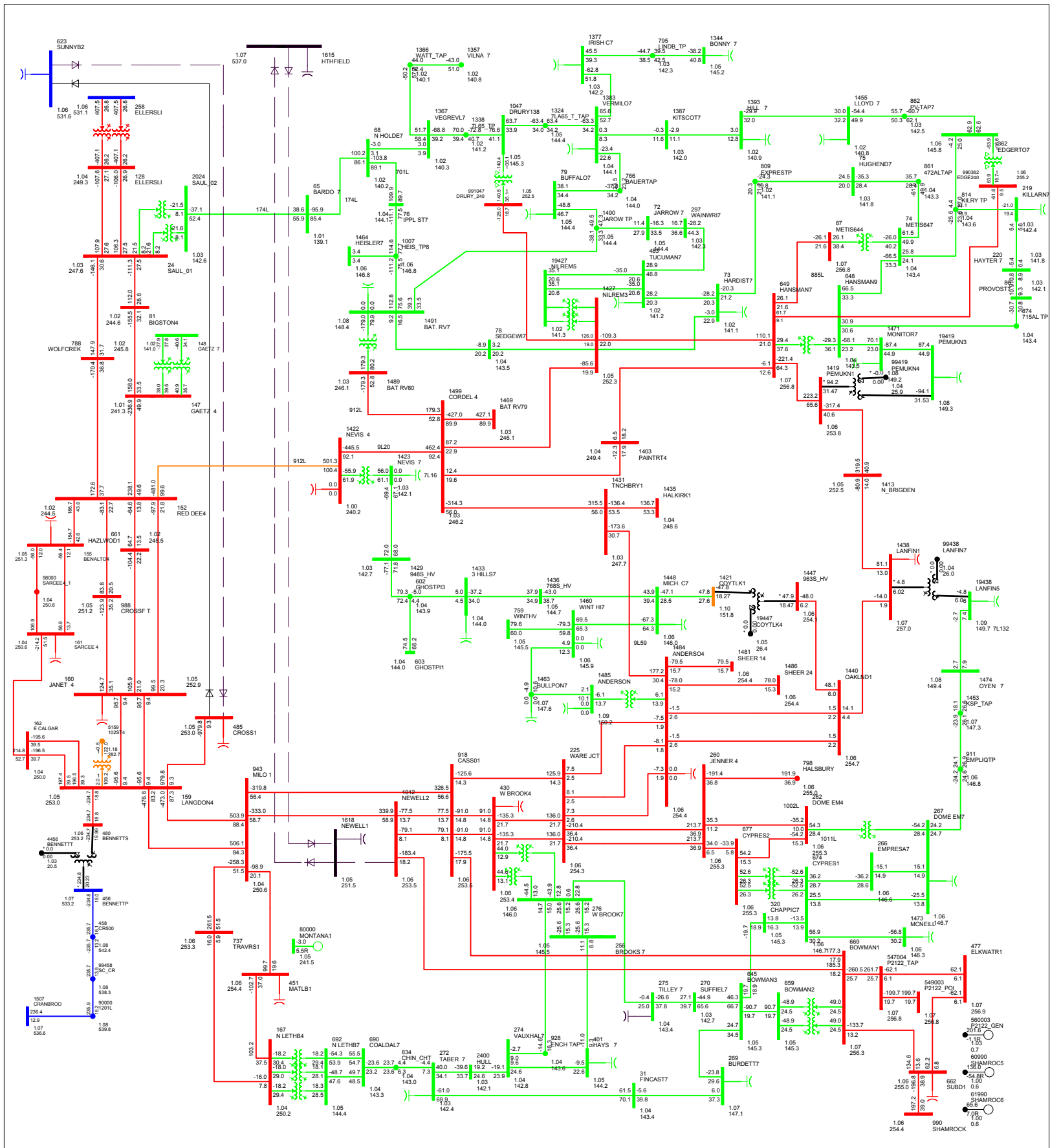


New Generation in Study Area and SW Sub-region
 South East: 577.9 MW Central East: 101.6 MW South West: 391.8 MW

FIG. 0-5 YR2031S; CASE: M13; GEN SCN 1
 PROJECT: PRE PROJECT (NO CRPC OR CETO)
 CAP: 174
 THU, APR 02 2020 14:23
 Copyright: Bates, Trip Adorn: None

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

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

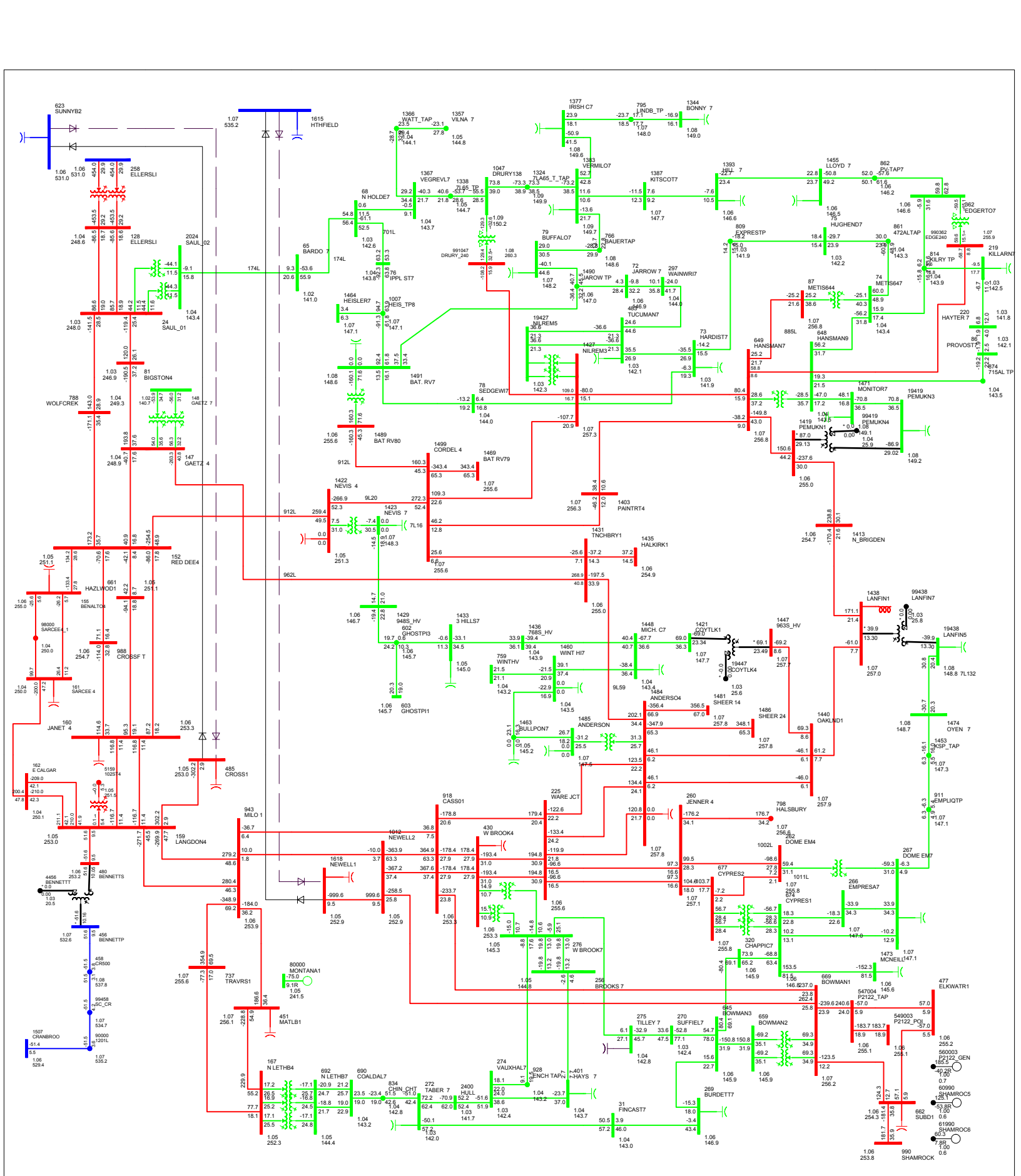


New Generation in Study Area and SW Sub-region
 South East: 577.9 MW Central East: 1016.6 MW South West: 391.8 MW

FIG. D-6 YR2031S-CASE: M13, GEN SCN 1
 PROJECT: PRE PROJECT (NO CRPC OR CETO)
 CAP: 174
 THU APR 02 2020 14:23
 Copyright: EATL, TPL Action: None

Branch Loading: $\geq 100.0\%$
 kV: $<=25.000$ ≤ 69.000 $<=138.000$ $<=240.000$ $<=500.000$

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

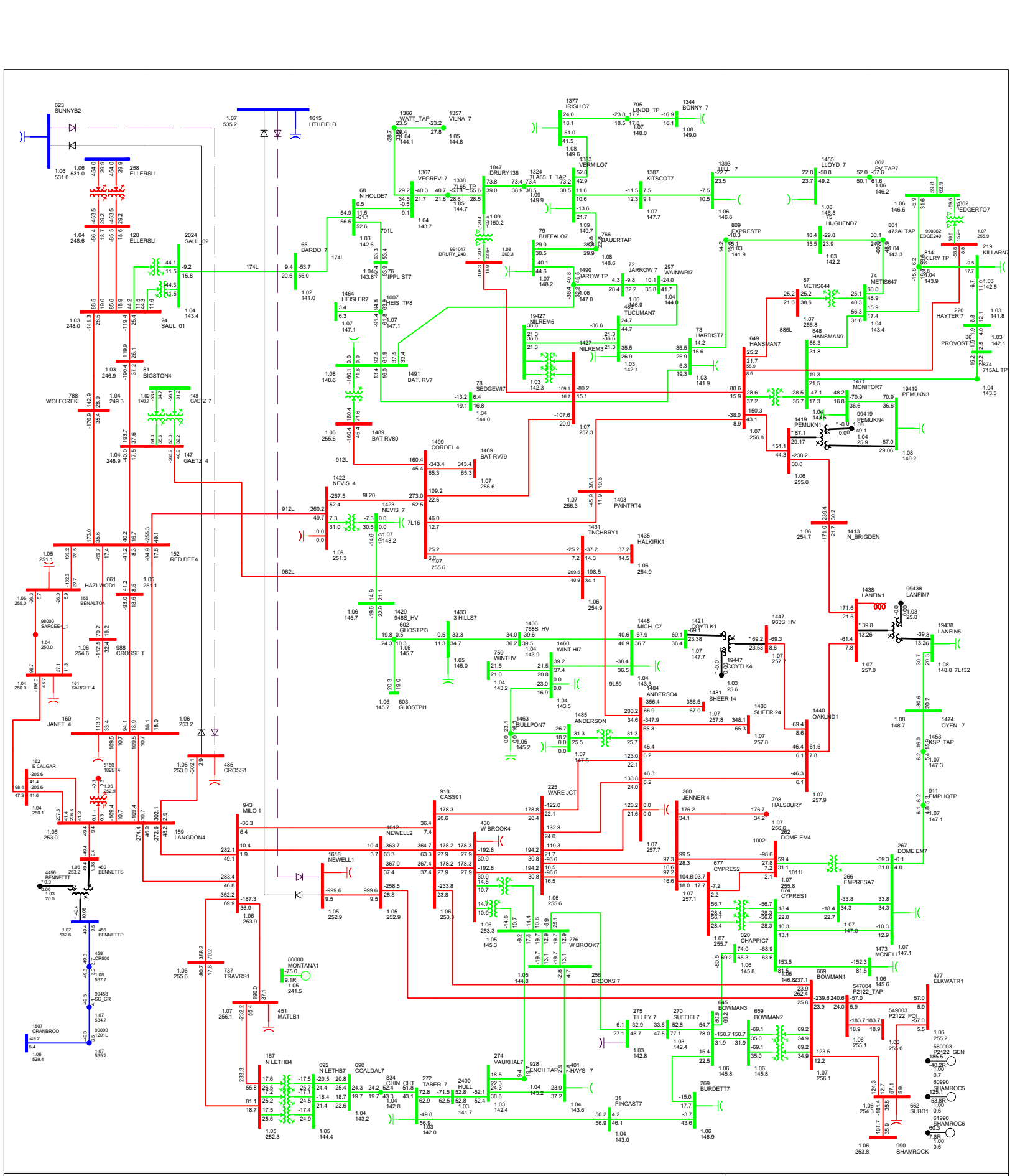


New Generation in Study Area and SW Sub-region
 South East: 562.1 MW Central East: 187.4 MW South West: 522.5 MW

FIG. D-7_YR2031S_CASE-H10_GEN_SCN2
 PROJECT_CETO_STAGE1
 CAP_MAXIMIZE
 THU APR 02 2020 14:21
 Copyright: Bates, Trip Achen: None

Branch Loading: $\geq 100.0\%$
 kV: $<=25.000$ $<=69.000$ $<=138.000$ $<=240.000$ $<=500.000$

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

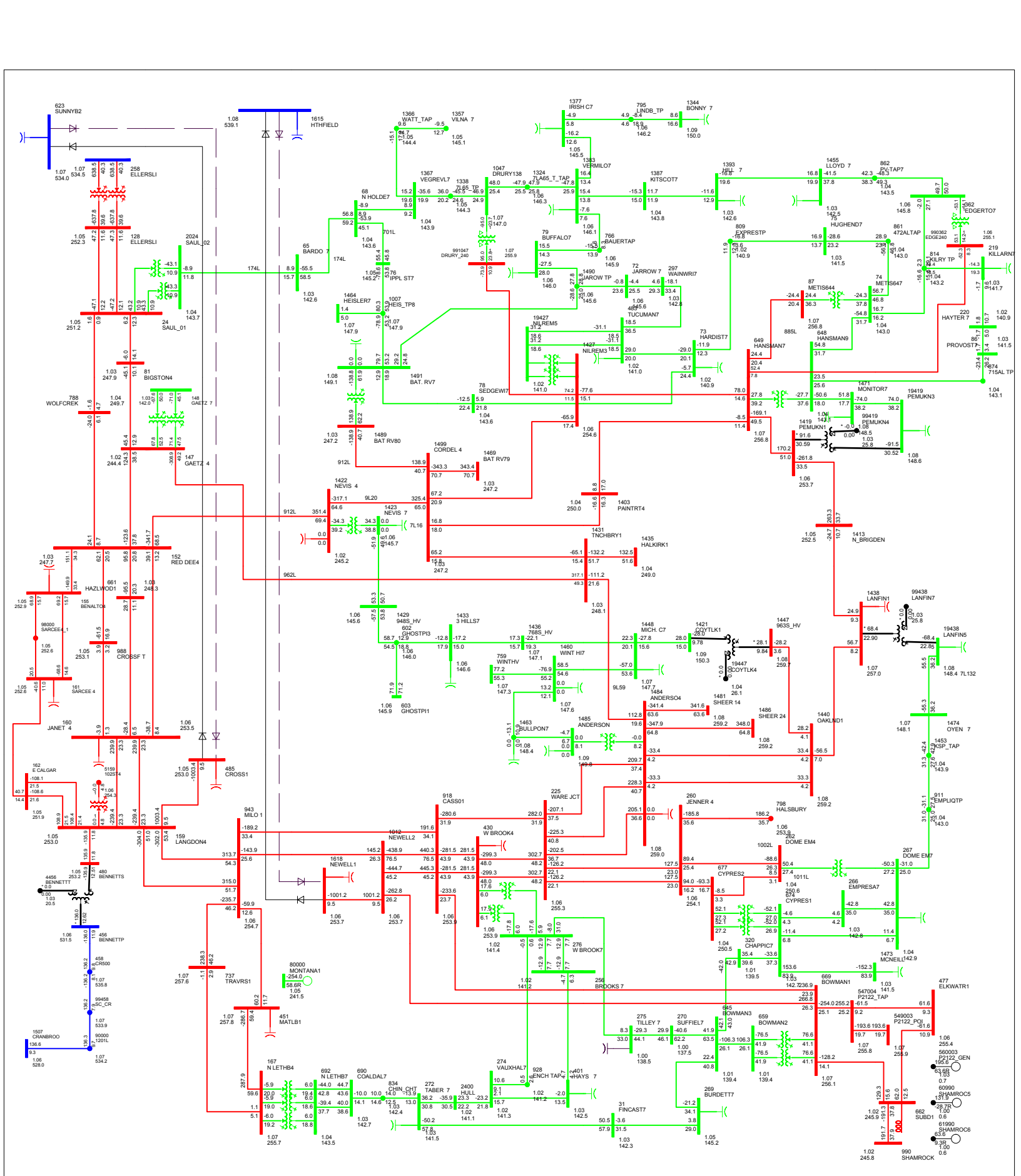


New Generation in Study Area and SW Sub-region
 South East: 562.1 MW Central East: 187.4 MW South West: 522.5 MW

FIG. D-8 YR2031S-CASE: H10; GEN SCN2
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 THU, APR 02 2020 14:21
 Contingency: 100%; Trip Action: None

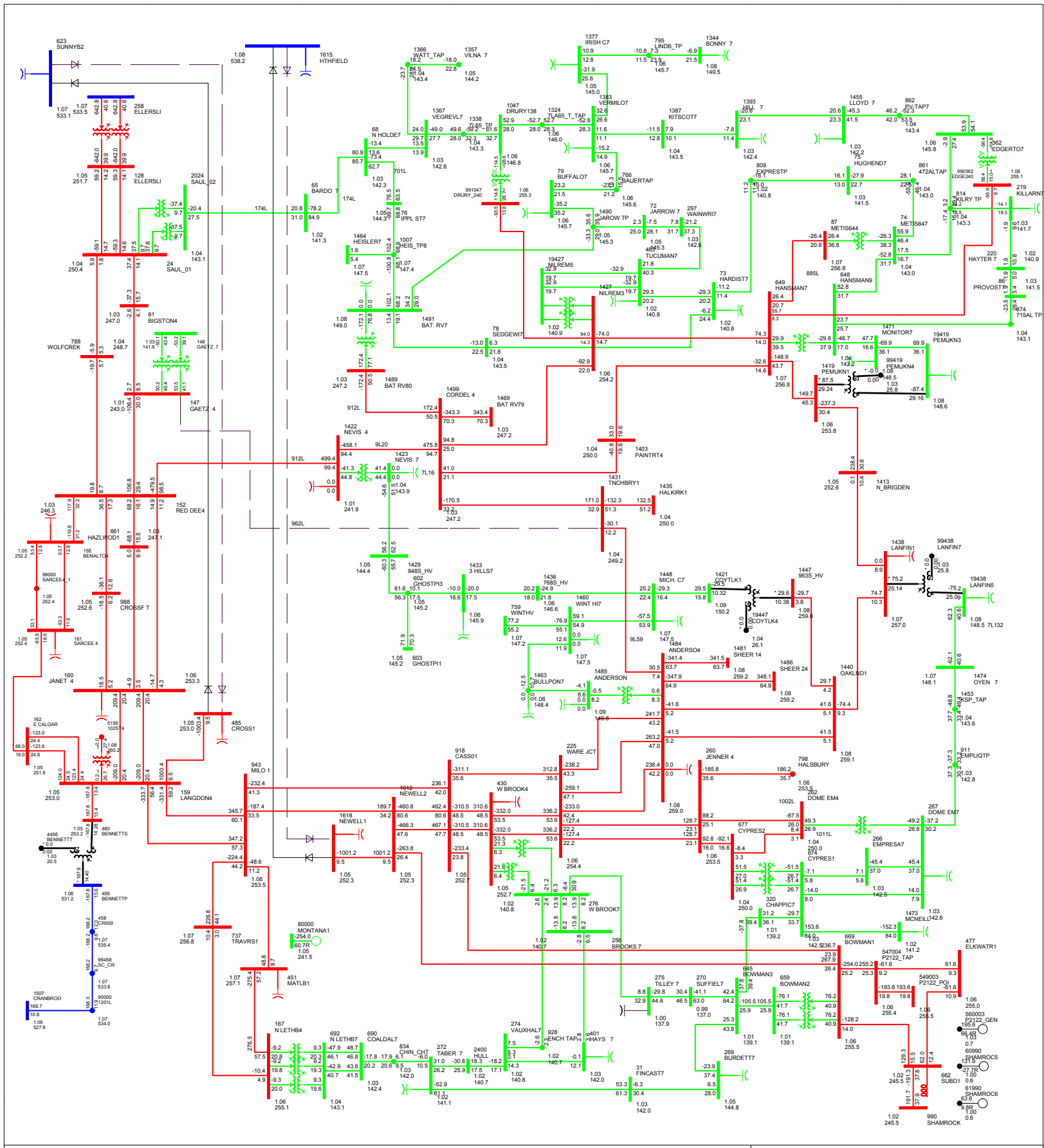
Branch Loading: >=100.0%
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00

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



New Generation in Study Area and SW Sub-region
 South East: 562.1 MW Central East: 187.4 MW South West: 522.5 MW
 FIG. D-9 YR2031S; CASE: H11; GEN: SCN2
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 THU, APR 02 2020 14:21
 Contingency Basis: Trip Action: None

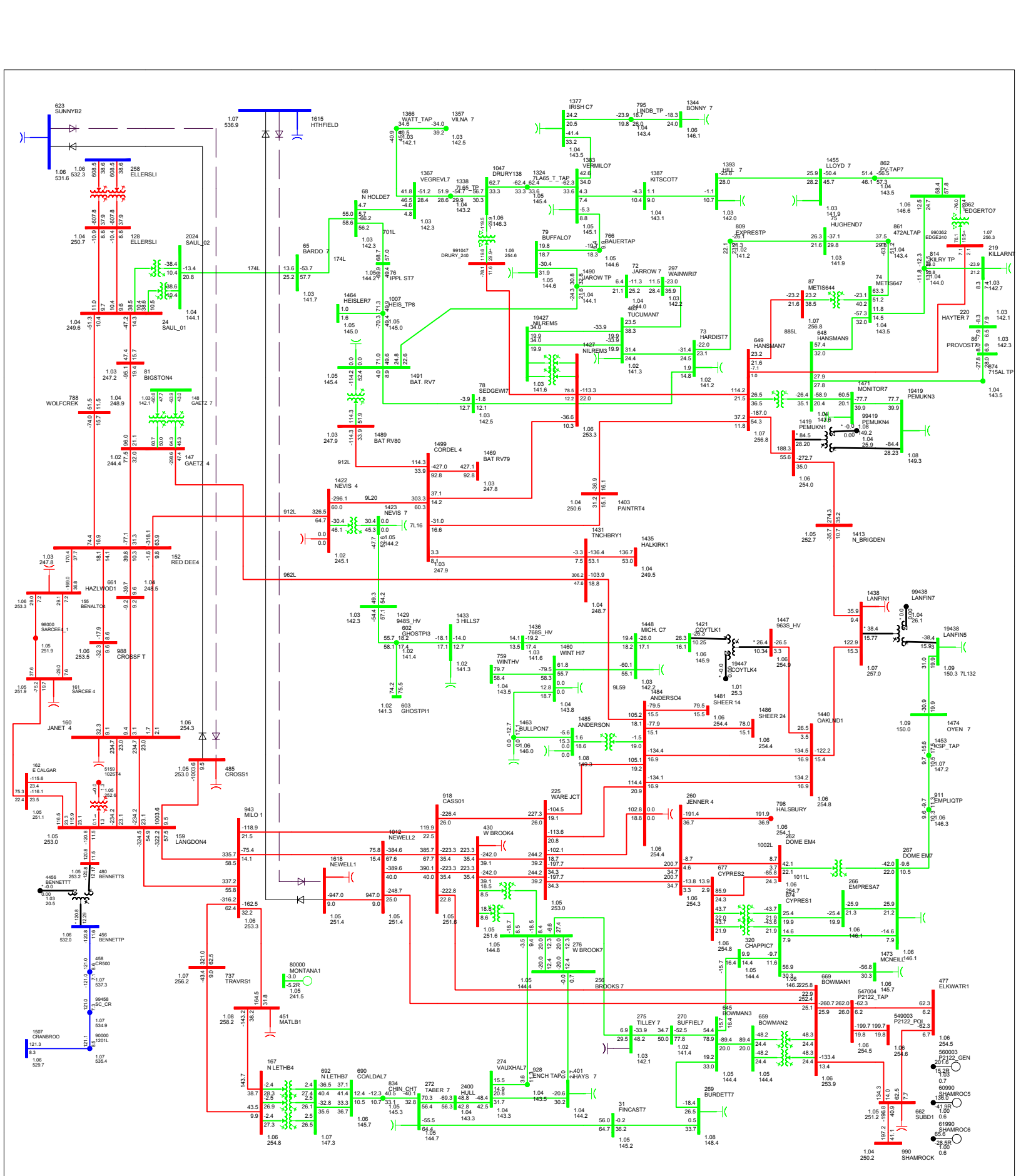
Branch Loading: >=100.0%
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00
 Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 562.1 MW Central East: 187.4 MW South West: 522.5 MW
 FIG. D-10-YR-2035-CASE: H11-GEN SCN 2
 PROJECT: CETO STAGE 1
 CAP: MAXIMIZE
 TRIP: APR 02 2020 14:21
 Contingency: CETO_LOAD_1_Trip Action: None

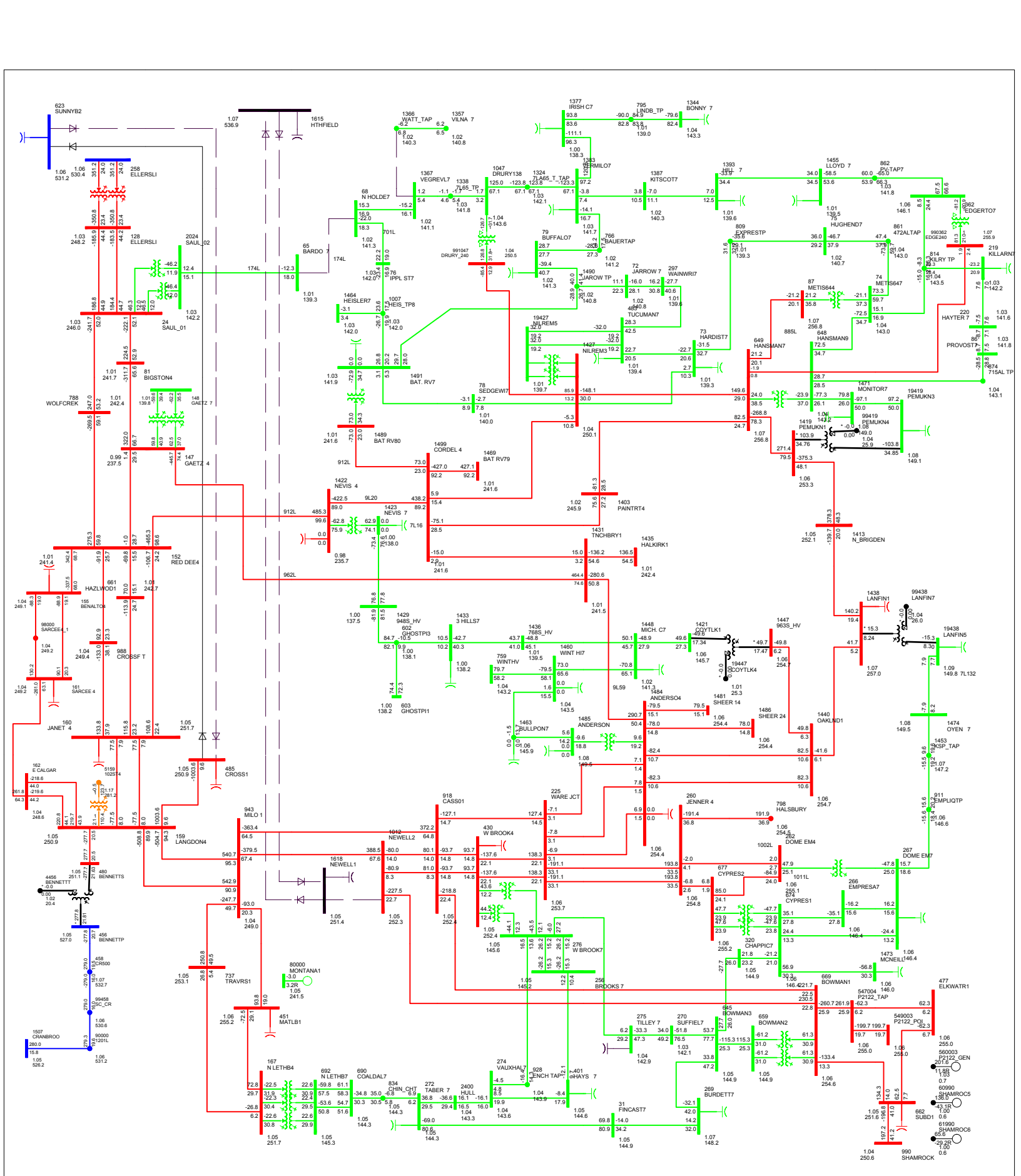
Branch Loading: $\geq 100.0\%$
 kV: < 25.000 ≤ 69.000 < 138.000 ≤ 240.000 < 500.000

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



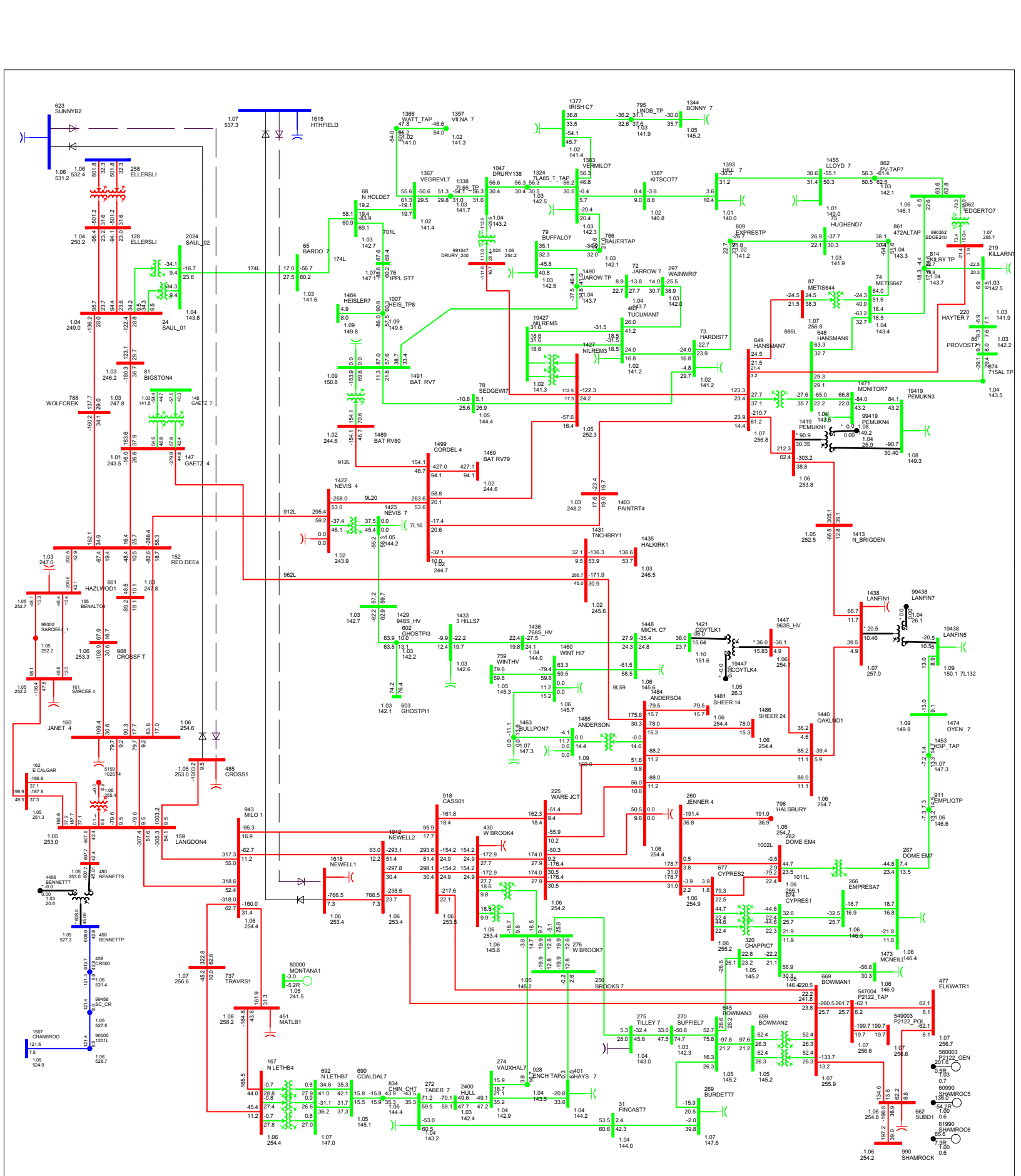
New Generation in Study Area and SW Sub-region
 South East: 745.8 MW Central East: 395.9 MW South West: 421.0 MW
 FIG. D-11-YR2033 CASE: M13_GEN SCN 1
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 THU APR 02 2020 14:21
 Contingency Basis: Trip Action: None

Branch Loading: $\geq 100.0\%$
 kV: $<=25.000$ $<=69.000$ $<=138.000$ $<=240.000$ $<=500.000$
 Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 745.8 MW Central East: 395.9 MW South West: 421.0 MW
 FIG. D-12-VR-2013-5 CASE: M13_GEN SCN 1
 PROJECT: CETO STAGE 1
 CAP: MAXIMIZE
 THU APR 02 2020 14:21
 Contingency: SATL, TP Action: 174L overload tp, 7192 overload tp

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

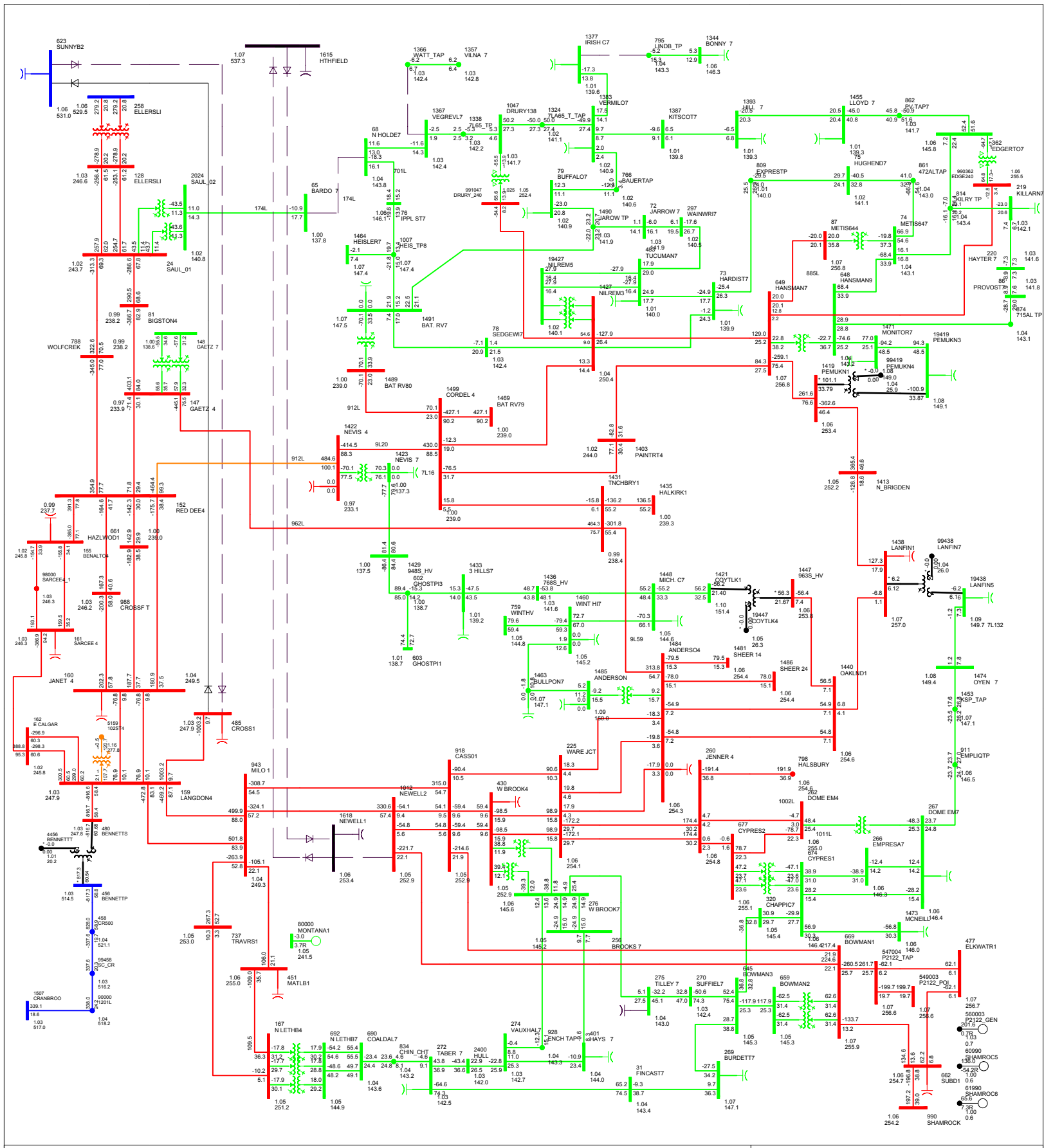


New Generation in Study Area and SW Sub-region
 South East: 698.2 MW Central East: 202.6 MW South West: 999.3 MW

FIG. D-13. YR-2035: CASE: M13; GEN SCN 1
 PROJECT: CRIC (R-CRR OPT), CETO STAGE 1
 CAP: MAXIMIZE
 THU, APR 02 2020 14:23
 Contingency Basis: Trip Action: None

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

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

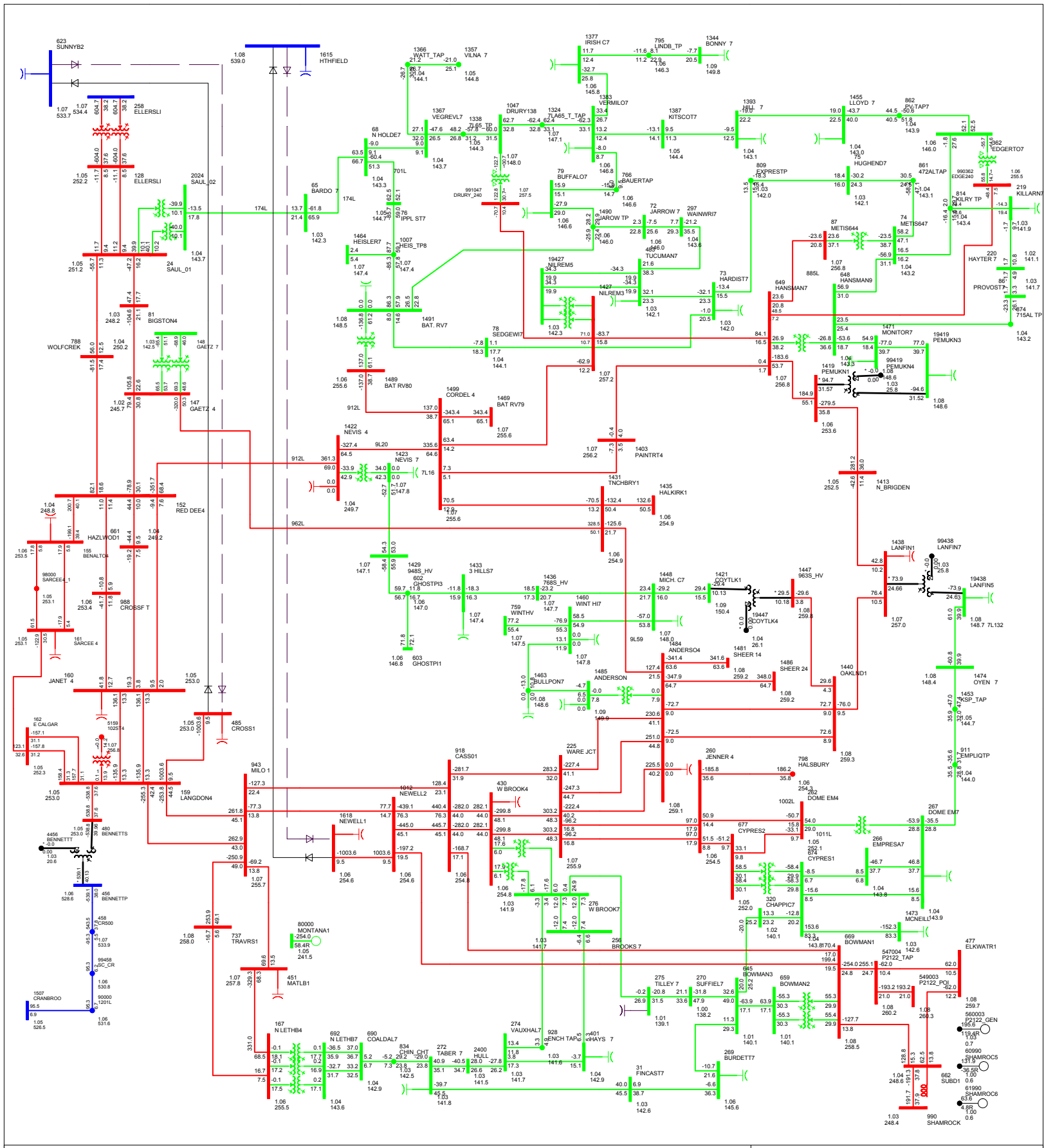


New Generation in Study Area and SW Sub-region
 South East: 698.2 MW Central East: 202.6 MW South West: 999.3 MW

FIG. D-14: VYR-2013S: CASE: M13: GEN SCN 1
 PROJECT: CRPC (R-CRR OPT), CETO STAGE 1
 CAP: MAXIMIZE
 TUD: APR 02 2020 14:22
 Contingency: SNTL, Trip Action: T14L overload trip, T192 overload trip, L274 BC 138V Tie, T153 overload trip

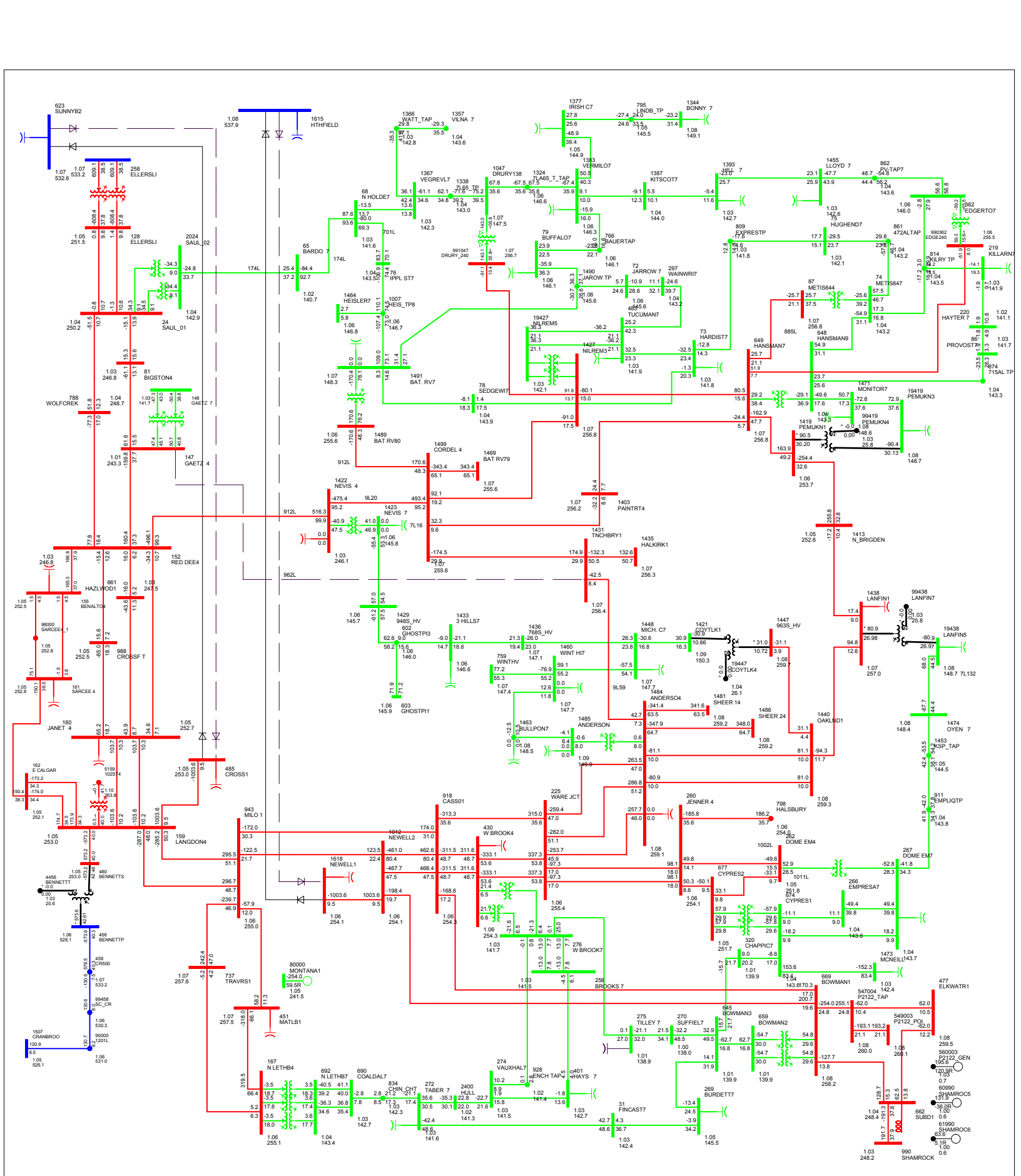
Branch Loading: $\geq 100.0\%$
 kV: < 25.000 ≤ 69.000 < 138.000 ≤ 240.000 < 500.000

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



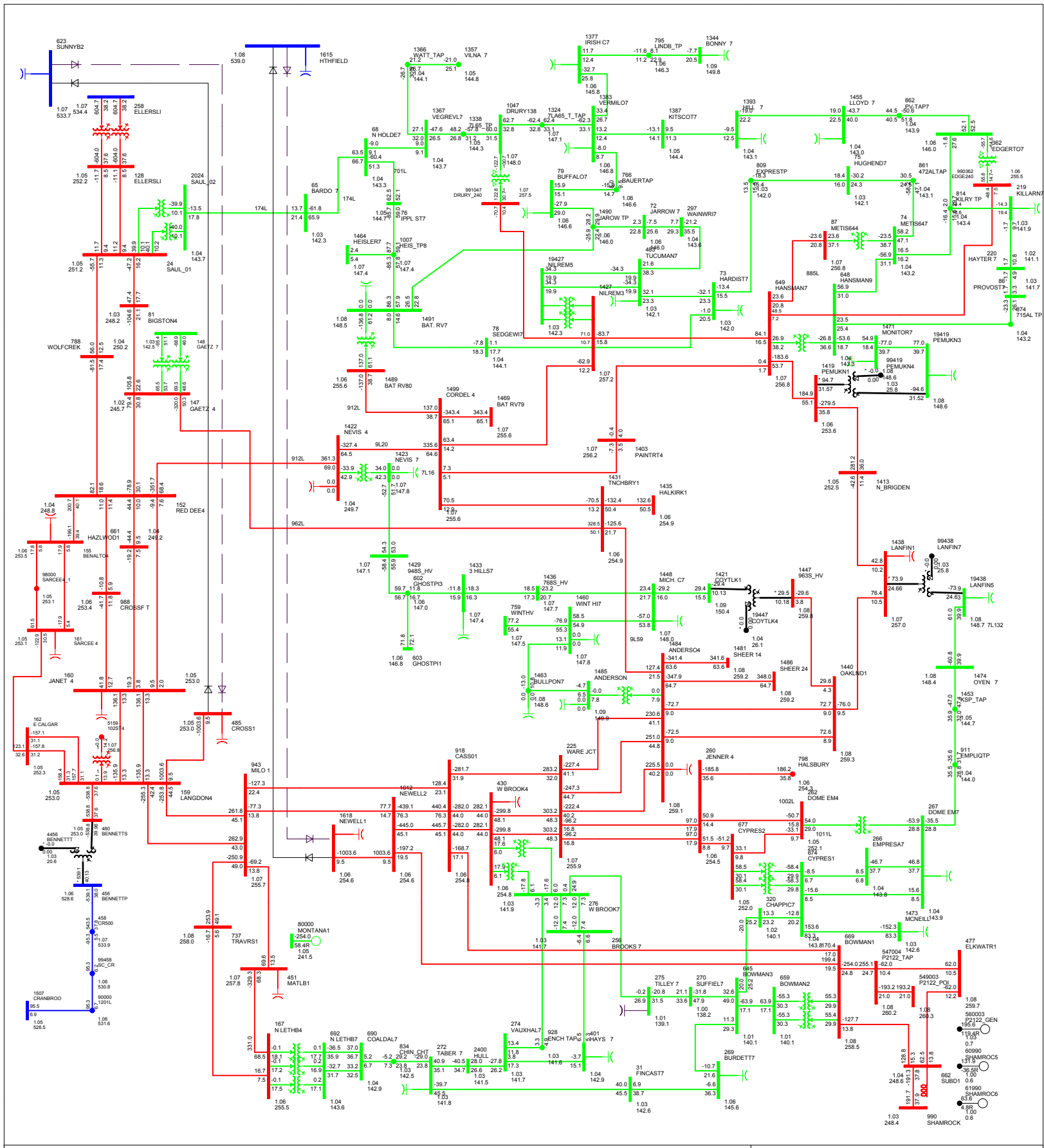
New Generation in Study Area and SW Sub-region
 South East: 399.2 MW Central East: 255.1 MW South West: 999.2 MW
 FIG. D-15: YR-2035: CASE: H11; GEN SCN 2
 PROJECT: CRIC (CR-CRR OPT); CETO STAGE 1
 CAP: MAXIMIZE
 THU APR 02 2020 14:23
 Courtesy: Bates; Trip Action: None

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



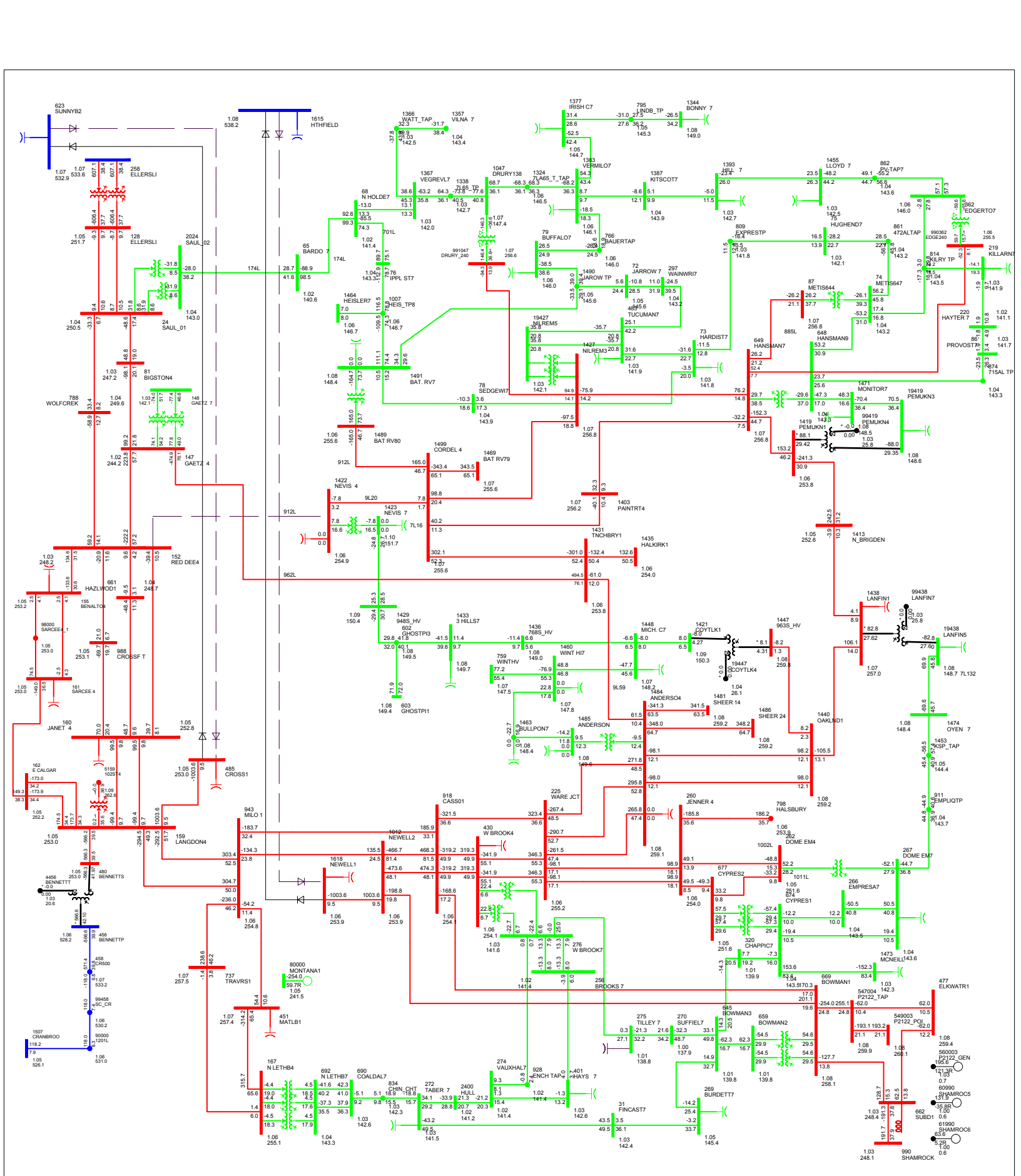
New Generation in Study Area and SW Sub-region
 South East: 399.2 MW Central East: 255.1 MW South West: 999.2 MW
 FIG. D-16: YR-2033S CASE: H11; GEN SCN 2
 PROJECT: CRIC (CR-CRR OP2), CETO STAGE1
 CAP: MAXIMIZE
 TRIP: APR 02 2020 14:22
 Contingency: CETO_L1_Trip Action: None

Branch Loading: $\geq 100.0\%$
 kV: $<=25.000$ ≤ 69.000 $<=138.000$ $<=240.000$ $<=500.000$
 Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 399.2 MW Central East: 255.1 MW South West: 999.2 MW
 FIG. D-17.YR.2035.CASE.H11.GEN.SCN 2
 PROJECT: CRIC (CR-CRR OPT), CETO STAGE 1
 CAP: MAXIMIZE
 THU APR 02 2020 14:22
 Copyright: Bates Trip Action: None

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

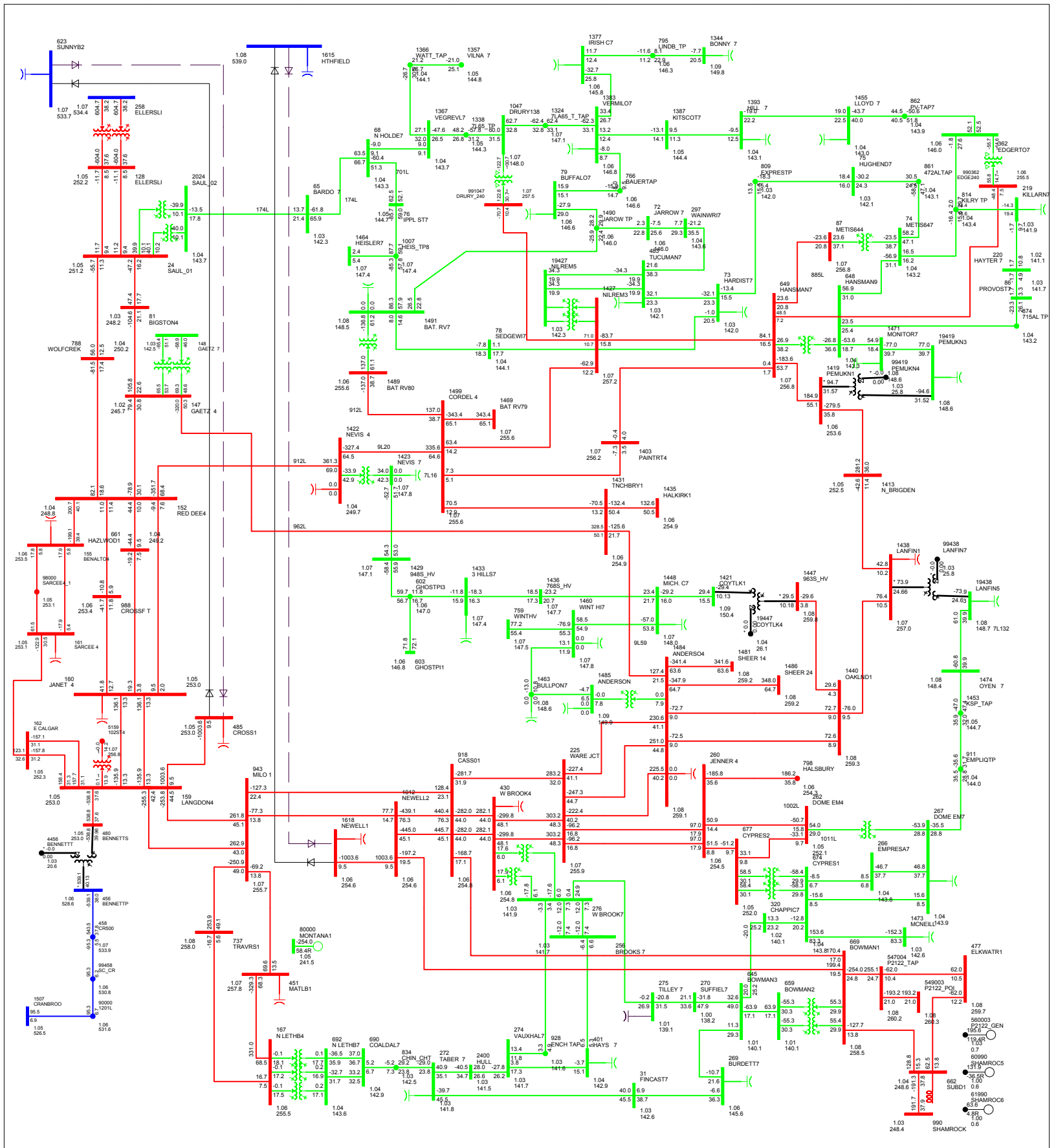


New Generation in Study Area and SW Sub-region
 South East: 399.2 MW Central East: 255.1 MW South West: 999.2 MW

FIG. D-18. YR-2035. CASE: H11. GEN SCN 2
 PROJECT: CRIC (CR-CRR OPT). CETO STAGE 1
 CAP. MAXIMIZE
 THU, APR 02 2020 14:22
 Copyright: 9/16/17. Trip Action: None

Branch Loading: $\geq 100.0\%$
 kV: $<=25.000$ $<=69.000$ $<=138.000$ $<=240.000$ $<=500.000$

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

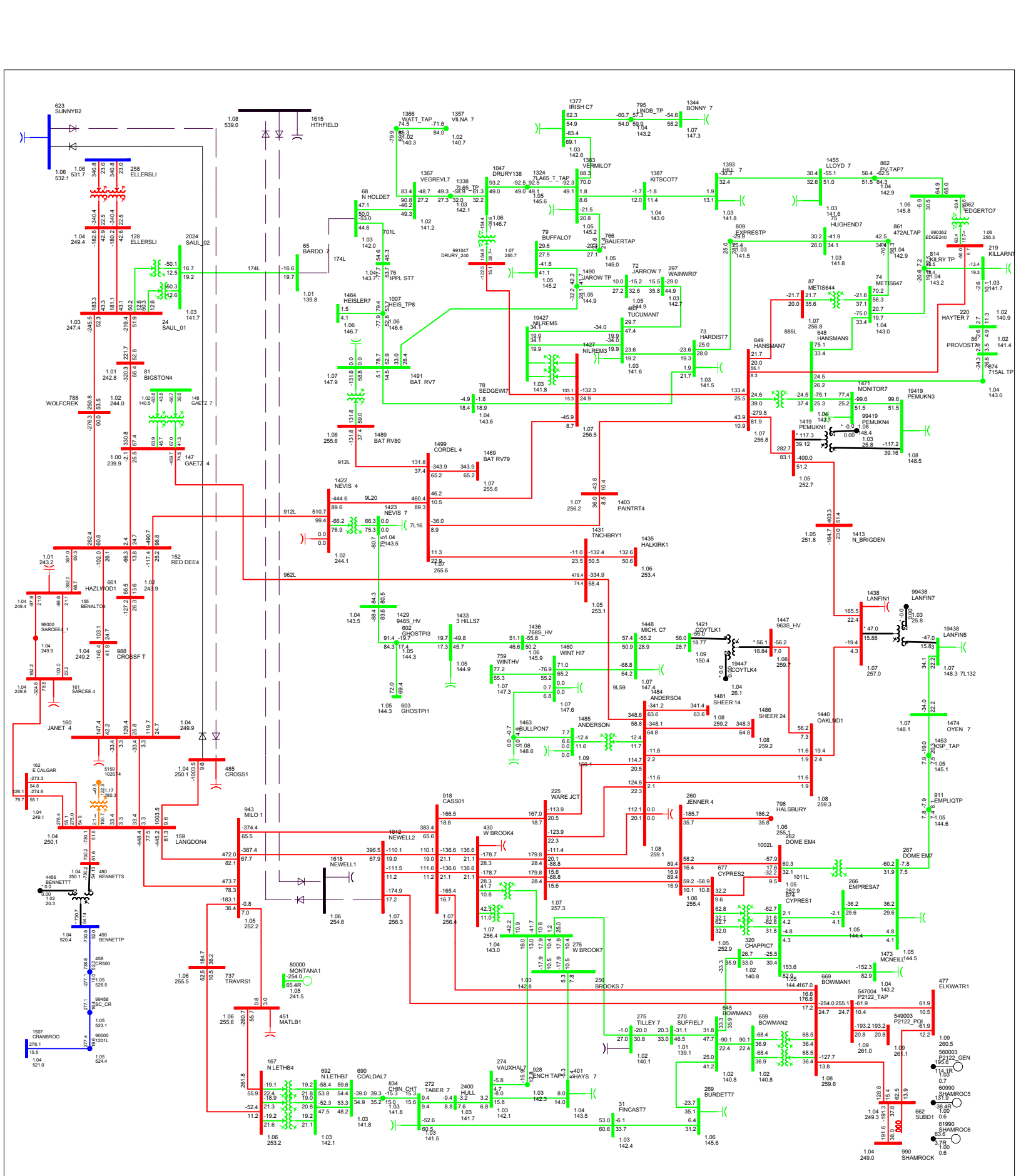


New Generation in Study Area and SW Sub-region
 South East: 399.2 MW Central East: 255.1 MW South West: 999.2 MW

FIG. D-19-YR2035 CASE: H11; GEN SCN 2
 PROJECT: CRIC (CR-CRR OPT), CETO STAGE 1
 CAP: MAXIMIZE
 THU APR 02 2020 14:22
 Copyright: Bates Trip Action: None

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

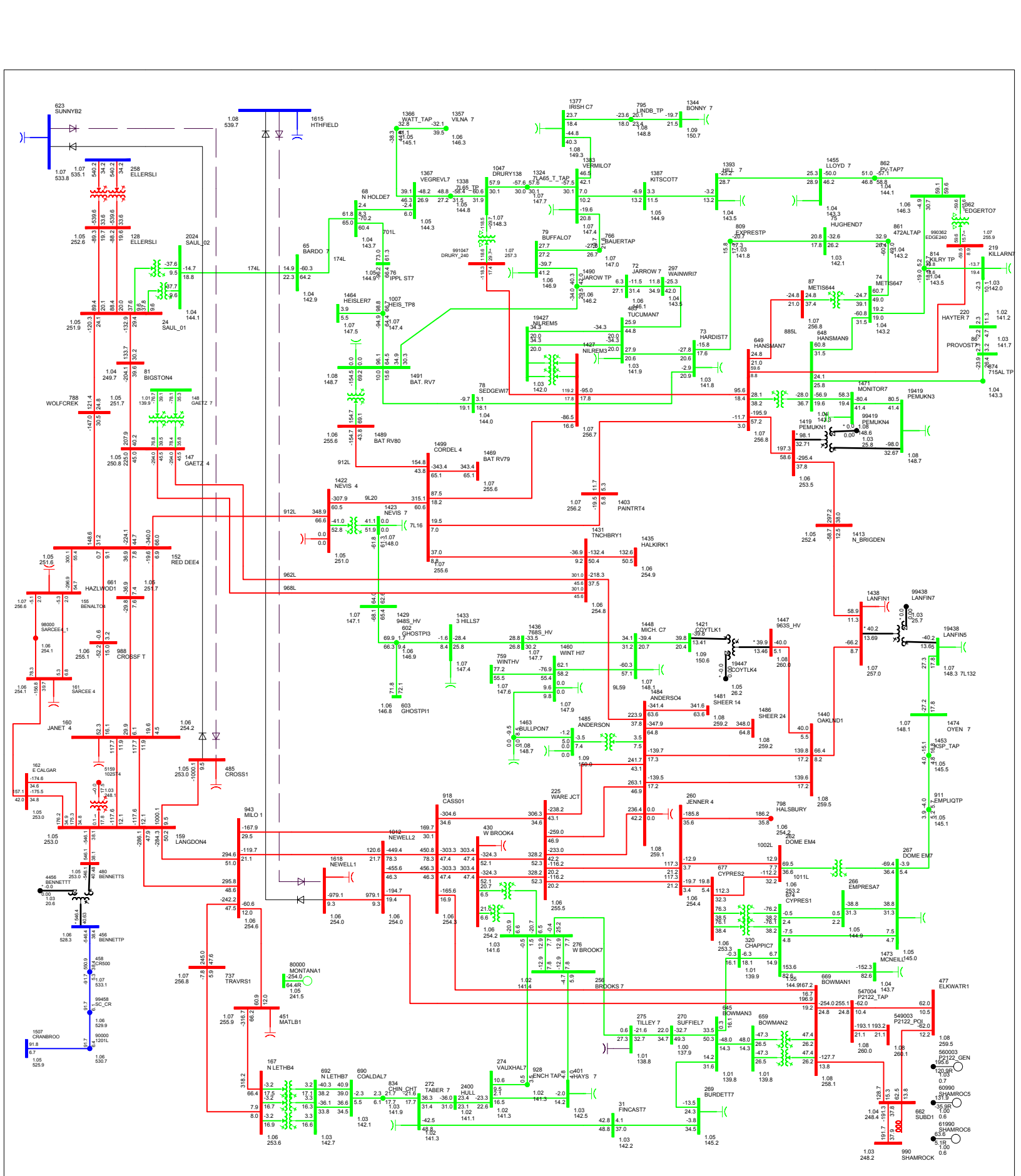
Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 399.2 MW Central East: 255.1 MW South West: 999.2 MW
 FIG. D-20 YR-2035 CASE: H11 GEN SCN 2
 PROJECT: CRIC (R-CRR OPT), CETO STAGE 1
 CAP: MAXIMIZE
 TRN: APR 02 2020 14:22
 Contingency: SATL, Trn Action: T14L overload pin, L274 BC 138V Tie

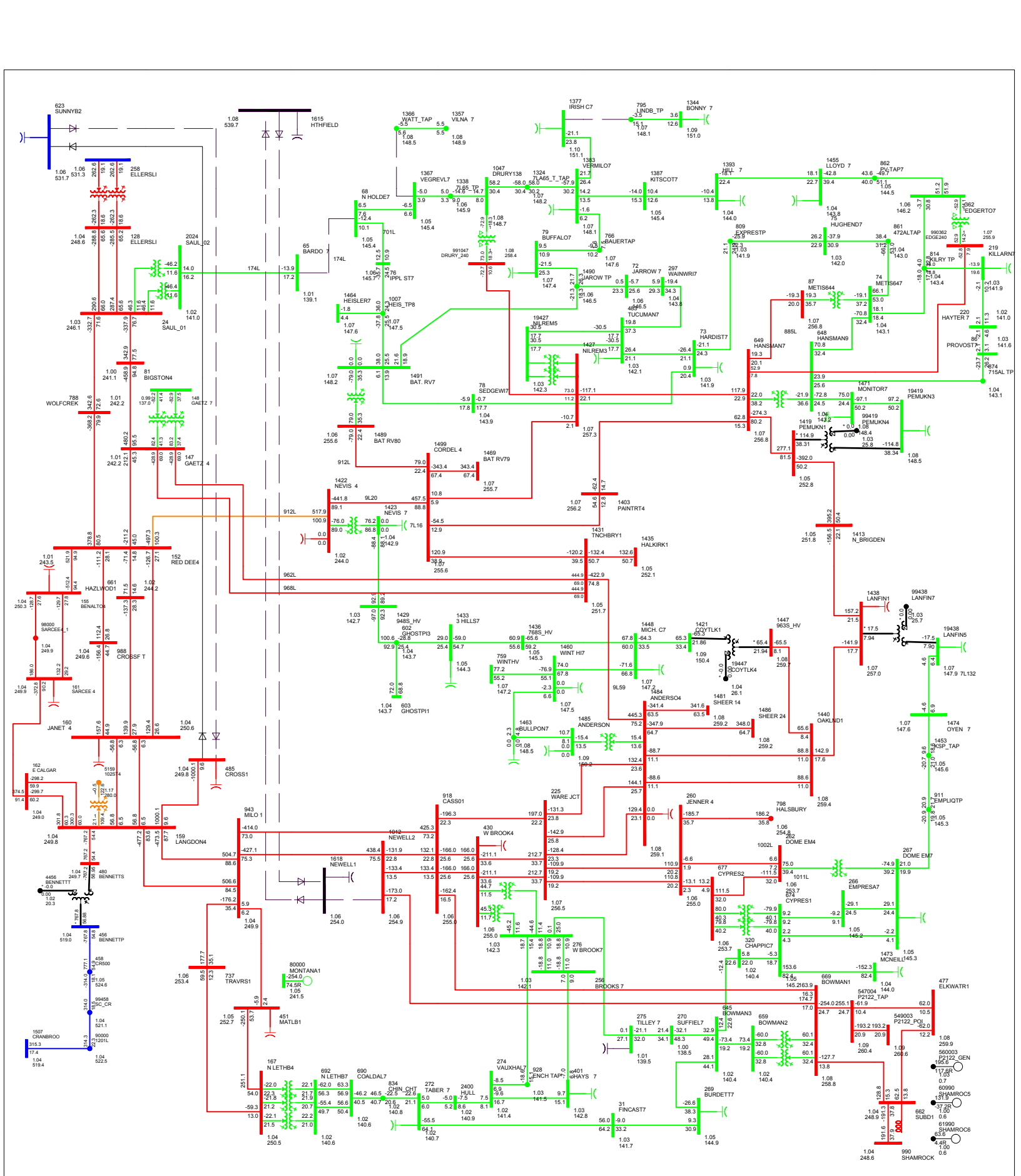
Branch Loading: $\geq 100.0\%$
 kV: $<=25.000$ $<=69.000$ $<=138.000$ $<=240.000$ $<=500.000$

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



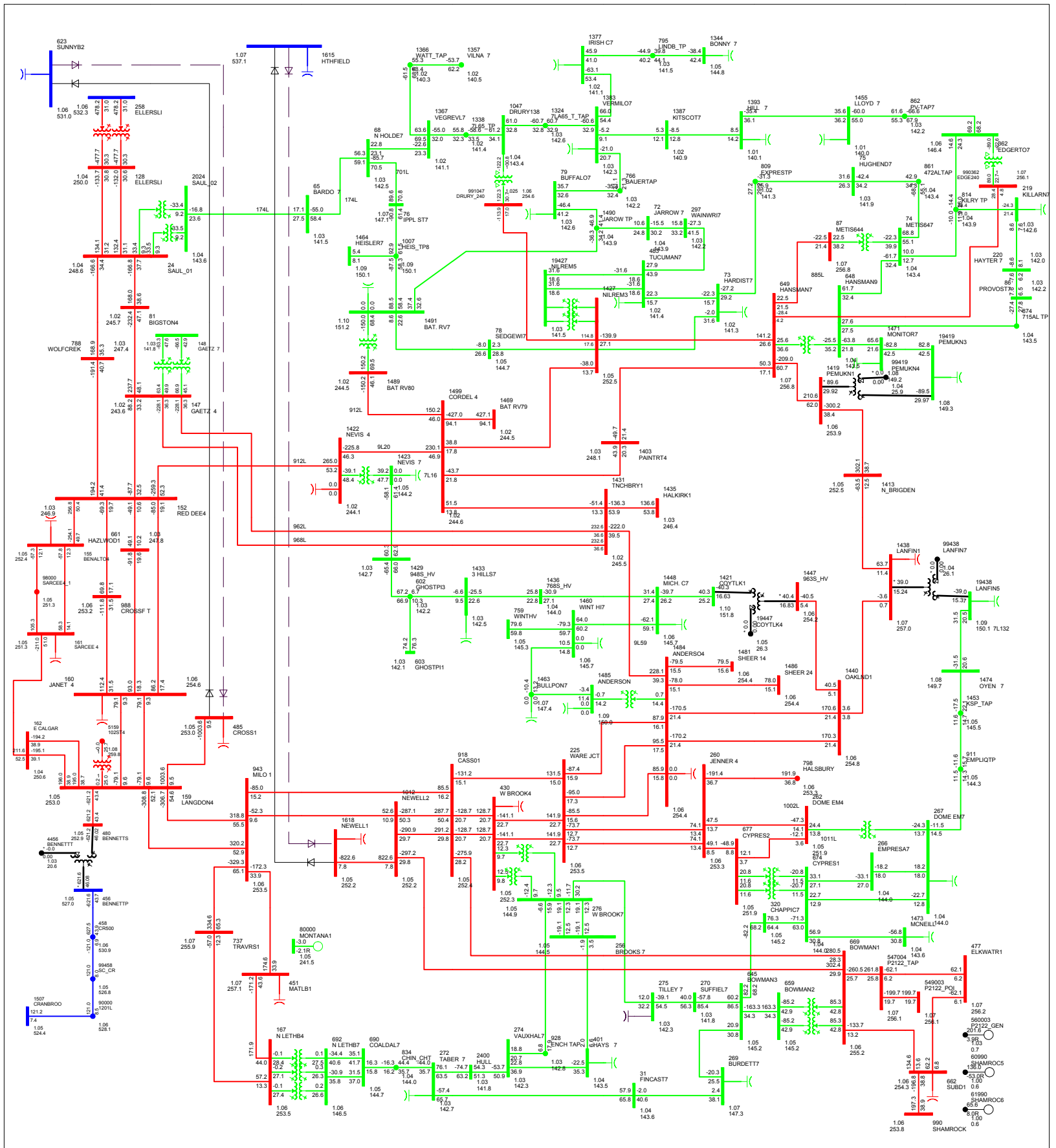
New Generation in Study Area and SW Sub-region
 South East: 759.9 MW Central East: 264.1 MW South West: 1017.5 MW
 FIG. D-21: YR-2035: CASE: H11; GEN SCN 2
 PROJECT: CRIC (CR-CRR OPT), CETO STAGE1&2
 CAP: MAXIMIZE
 THU APR 02 2020 14:22
 Copyright: Bates, Trip Adren: None

Branch Loading: $\geq 100.0\%$
 kv: <=25.000 <=69.000 <=138.000 <=240.000 <=500.000
 Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 759.9 MW Central East: 264.1 MW South West: 1017.5 MW
 FIG. D-22: YR-2013: CASE: H11; GEN SCN 2
 PROJECT: CRIC (CR-CRR OPT), CETO STAGE1&2
 CAP: MAXIMIZE
 THU, APR 02 2020 14:22
 Contingency: SATL; Trip Action: T14L overload trip, T192 overload trip, L274 BC 138V TIE, T153 overload trip

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

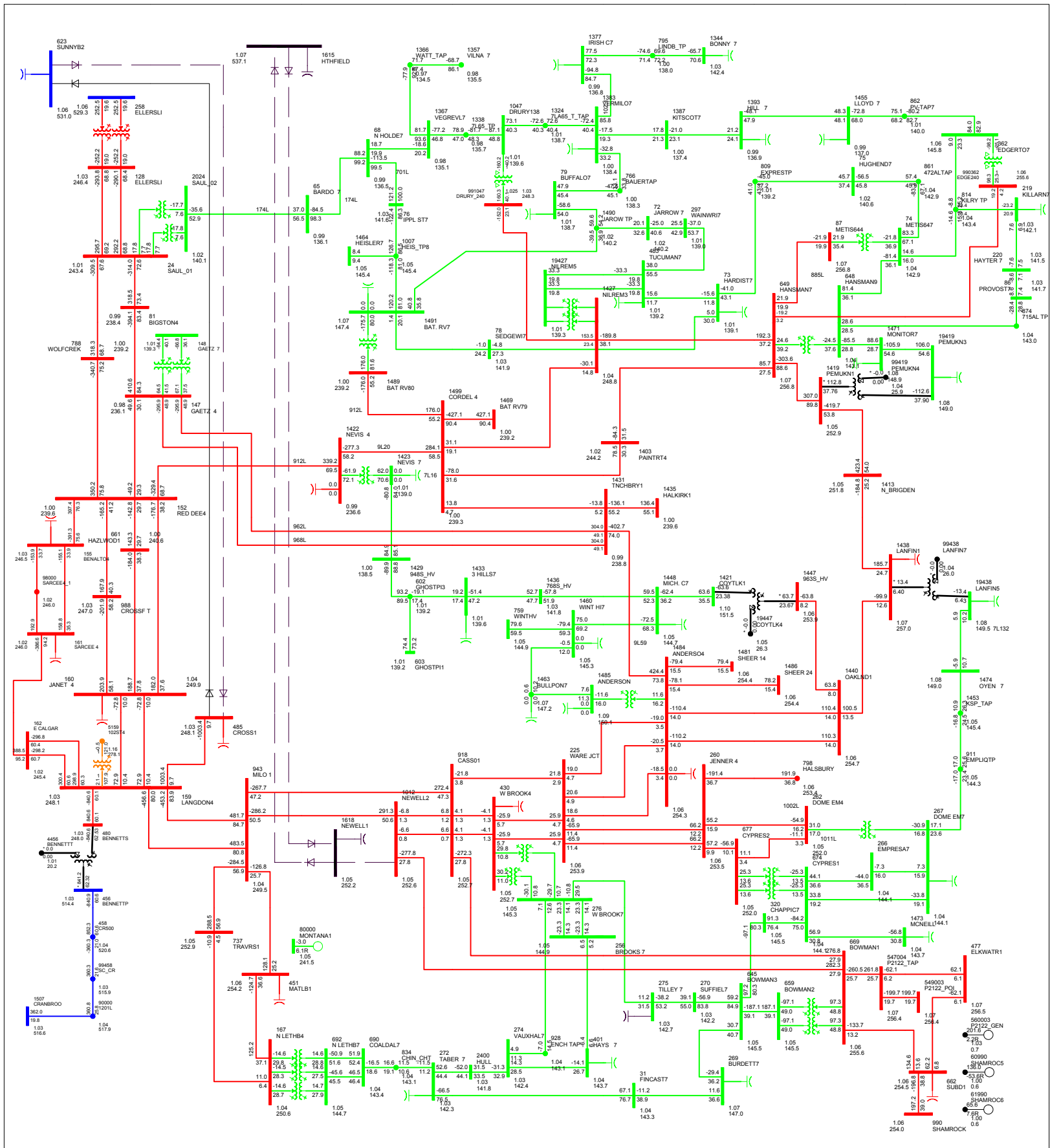


New Generation in Study Area and SW Sub-region
 South East: 821.3 MW Central East: 290.1 MW South West: 1064.8 MW

FIG. D-23 YR-2035 CASE: M13_GEN SCN 1
 PROJECT: CRIC (CR-CRR OPT), CETO STAGE1&2
 CAP: MAXIMIZE
 THU, APR 02 2020 14:22
 Contingency Basis: 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

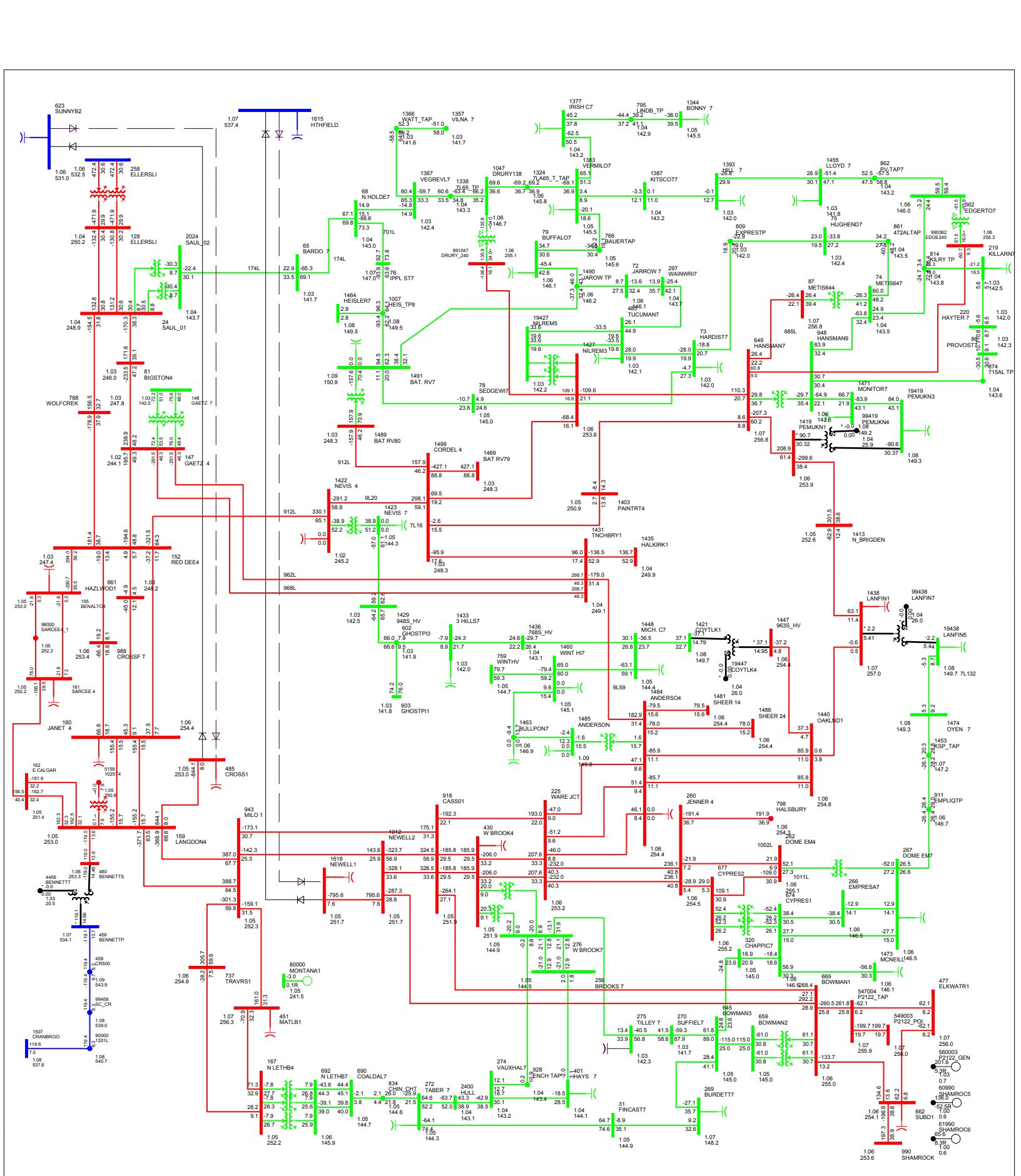


New Generation in Study Area and SW Sub-region
 South-East: 821.3 MW Central-East: 290.1 MW South-West: 1064.8 MW

FIG. D-24 VYR2013 CASE: M13, GEN SCN 1
 PROJECT: CRIC (CR-CRR OPT), CETO STAGE1&2
 CAP: MAXIMIZE
 TRM: APR 02 2020 14:22
 Copyright: ENTP, TRM: Adcon; L274 BC 138KV Tie

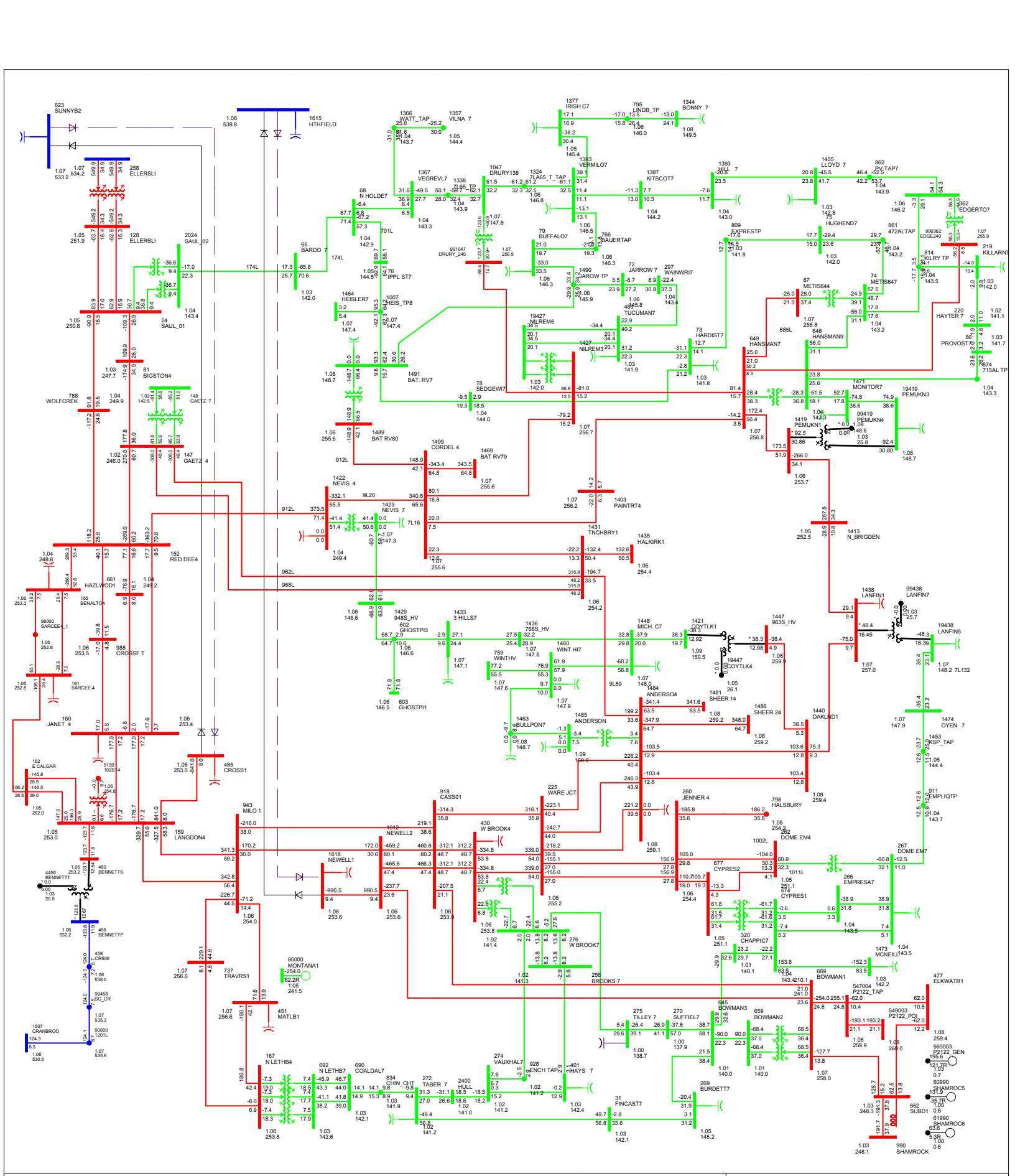
Branch Loading: $\geq 100.0\%$
 kv: $<=25.00$ $<=69.00$ $<=138.00$ $<=240.00$ $<=500.00$

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



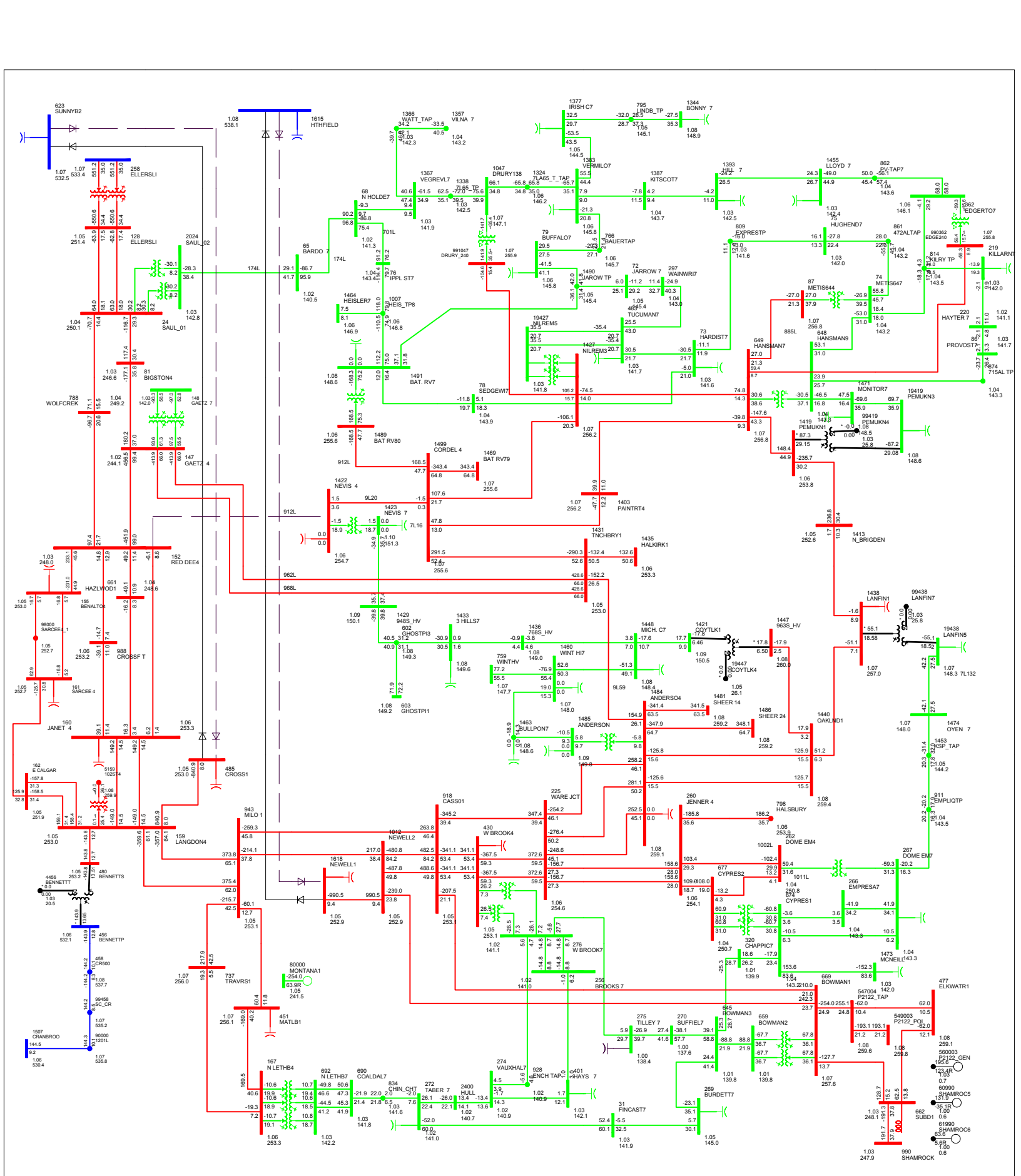
New Generation in Study Area and SW Sub-region
 South East: 991.2 MW Central East: 507.6 MW South West: 403.8 MW
 FIG. D-25-YR-2013S_CASE: M13_GEN SCN 1
 PROJECT: CETO STAGE1A2
 CAP: MAXIMIZE
 THU APR 02 2020 14:21
 Contingency Basis: Trip Action: None

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



New Generation in Study Area and SW Sub-region
 South East: 868.5 MW Central East: 332.6 MW South West: 503.1 MW
 FIG. D-27 YR-2013 CASE: H11 GEN SCN 2
 PROJECT: CETO STAGE1A2
 CAP: MAXIMIZE
 THU APR 02 2020 14:22
 Contingency Basis: Trip Action: None

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

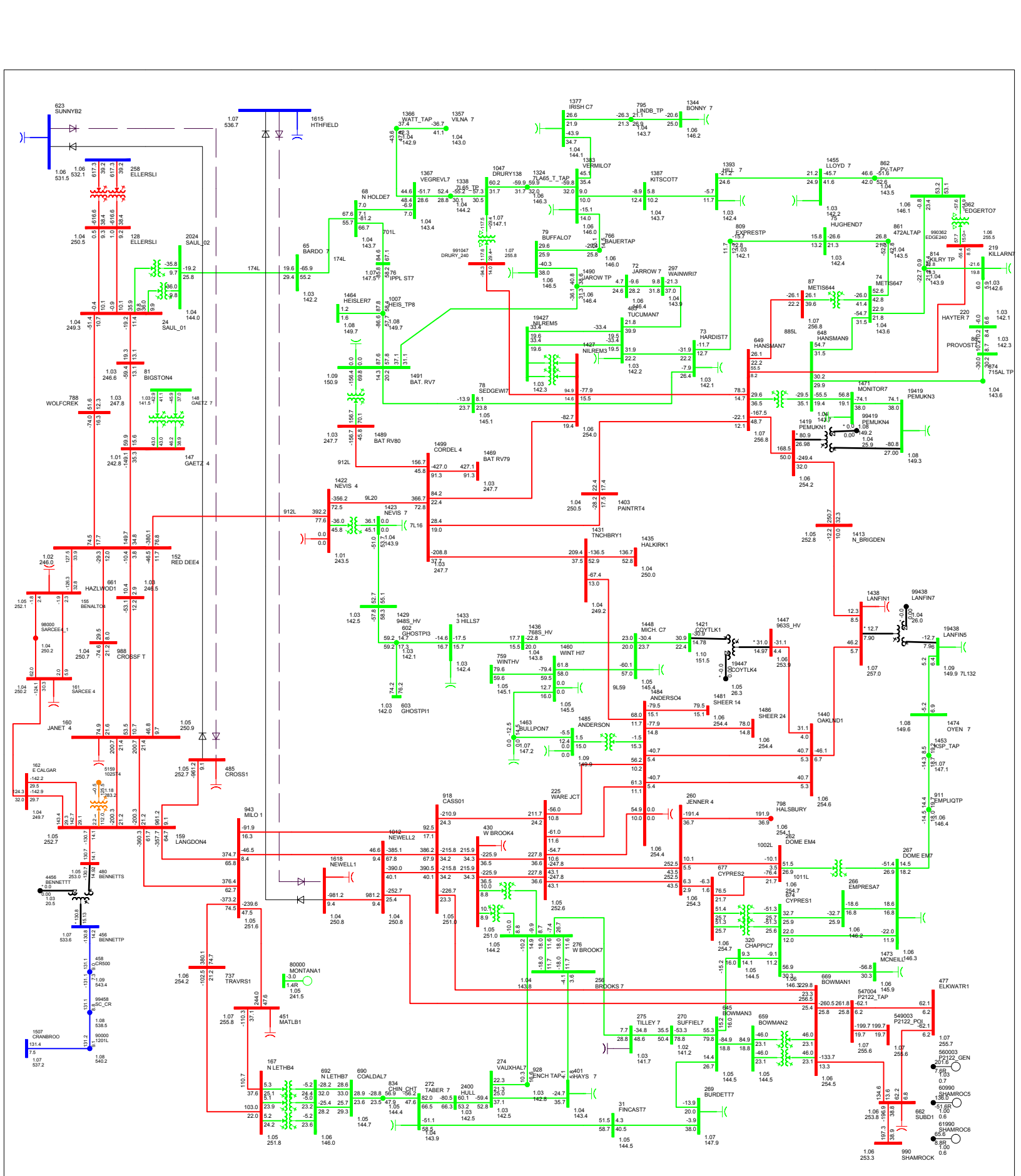


New Generation in Study Area and SW Sub-region
 South East: 868.5 MW Central East: 332.6 MW South West: 503.1 MW

FIG. D-28 YR-2013 CASE: H11 GEN SCN 2
 PROJECT: CETO STAGE1A2
 CAP: MAXIMIZE
 THU APR 02 2020 14:22
 Contingency: 91% Trip Action: None

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

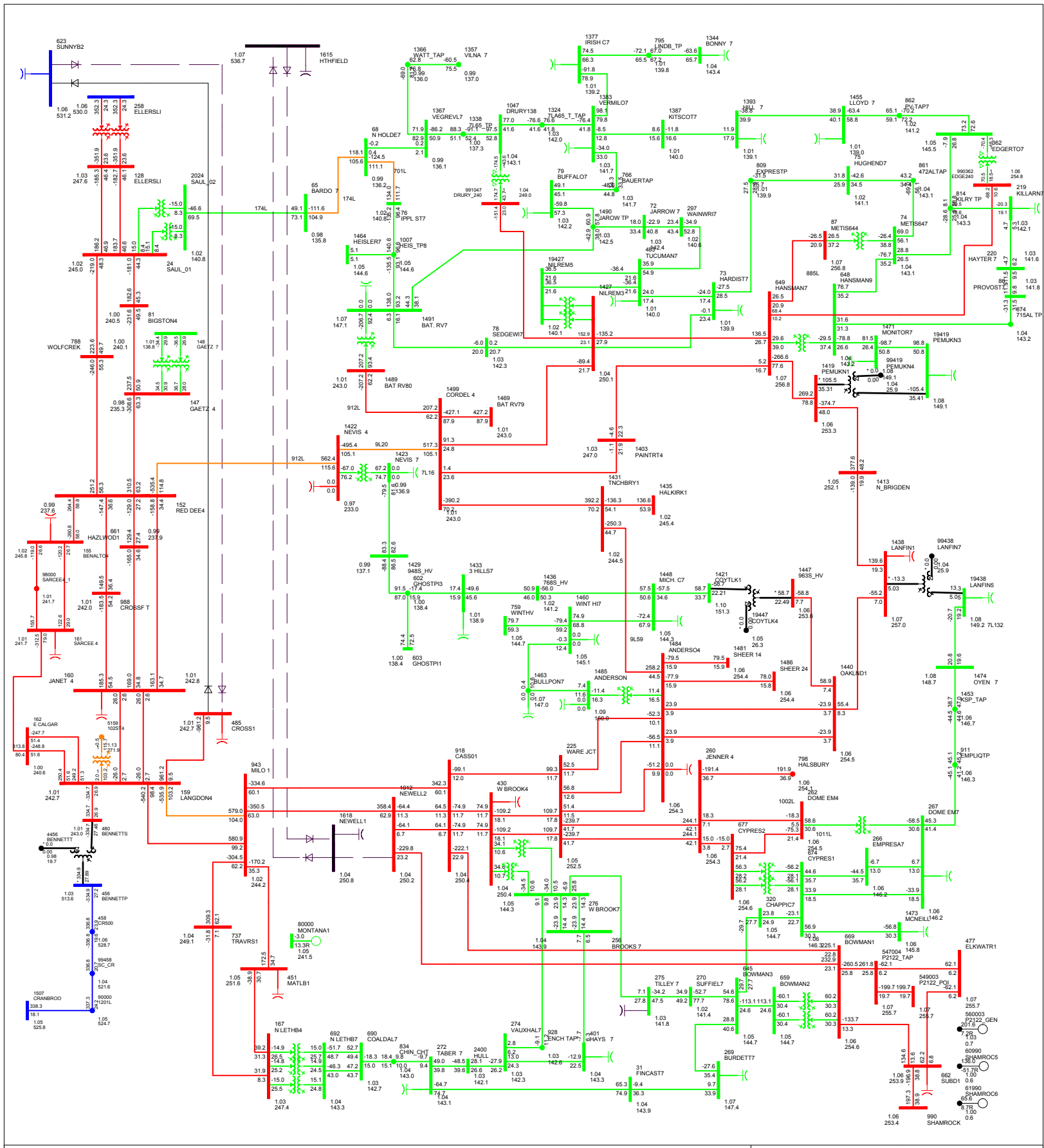
Bus - Voltage (kV/bv)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 771.5 MW Central East: 108.6 MW South West: 723.4 MW
 FIG. D-29 - VR2023S, CASE: M13-GEN-SCN.1
 PROJECT: PSE PROJECT (NO CSPG OR LOTO)
 CAP: MAXIMIZE
 HULL APR. 02 2020 14:35
 Contingency Base
 Tip Action: None
 Genshed=Not Applied

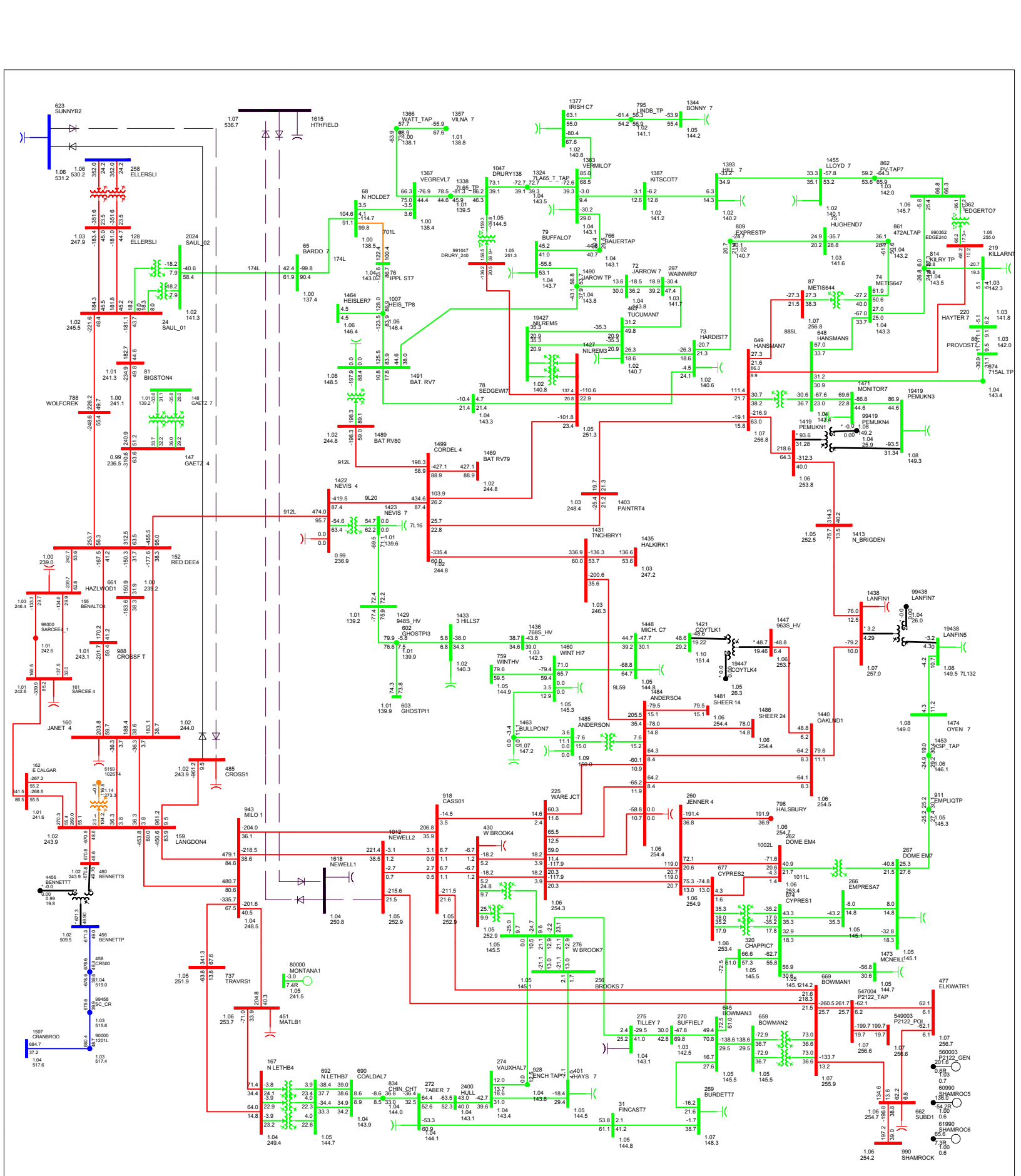
Branch Loading: $\geq 100.0\%$
 kV: $<=25.000$ $<=69.000$ $<=138.000$ $<=240.000$ $<=500.000$

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



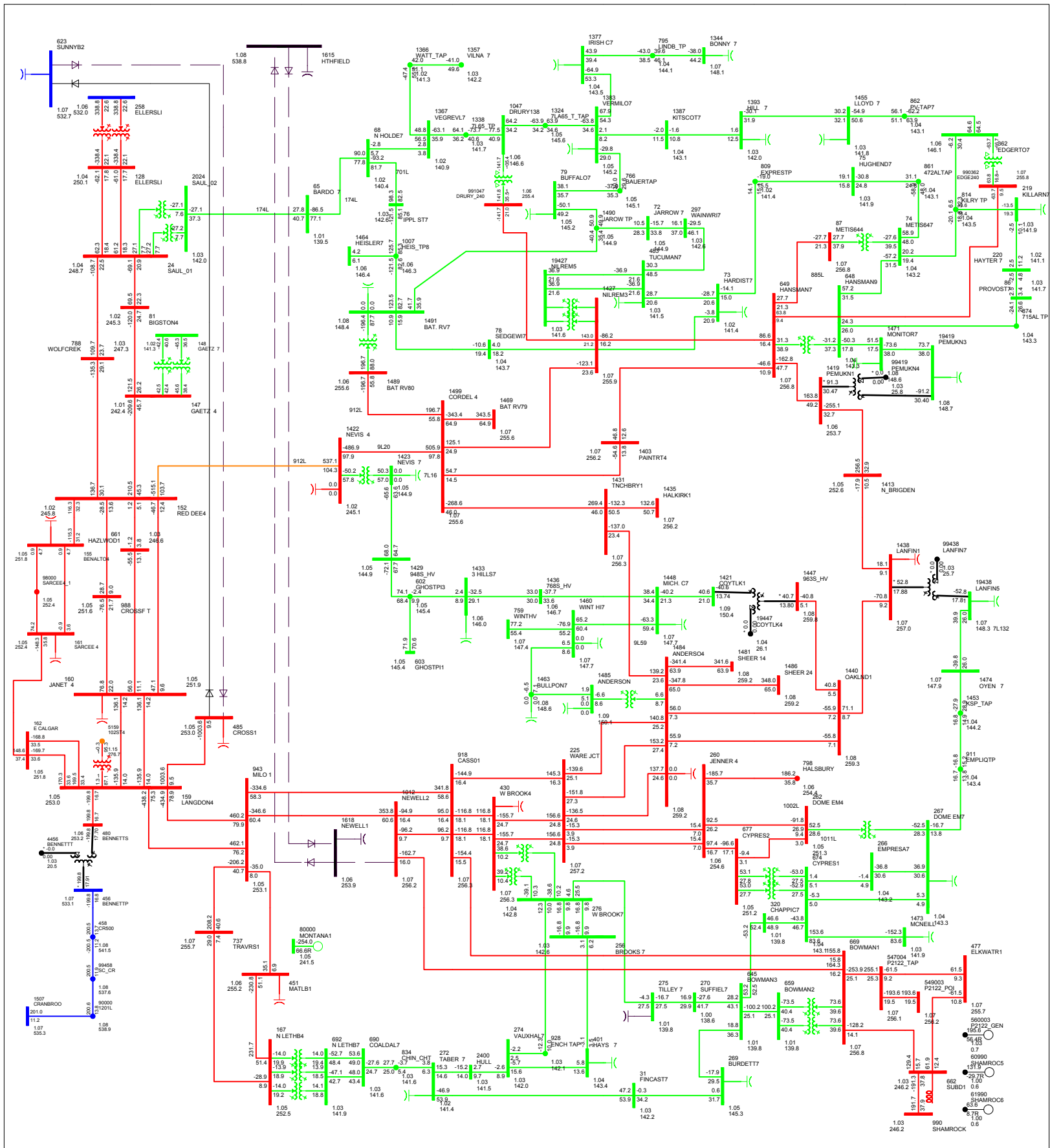
New Generation in Study Area and SW Sub-region
 South East: 771.5 MW Central East: 108.6 MW South West: 723.4 MW
 FIG. D-30.01.1R.2018.15, CASE: M13, GEN: SCN 1
 PROJECT: PRE-PROJECT (NO. CDRS OR LETO)
 CAP: MAXIMIZE
 HULL: APR. 02 2020 14:35
 Contingency: EATL
 Tip Action: None
 Genshed: Not Applied

Branch Loading: $\geq 100.0\%$
 kV: ≤ 25.000 ≤ 69.000 ≤ 138.000 ≤ 240.000 ≤ 500.000
 Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



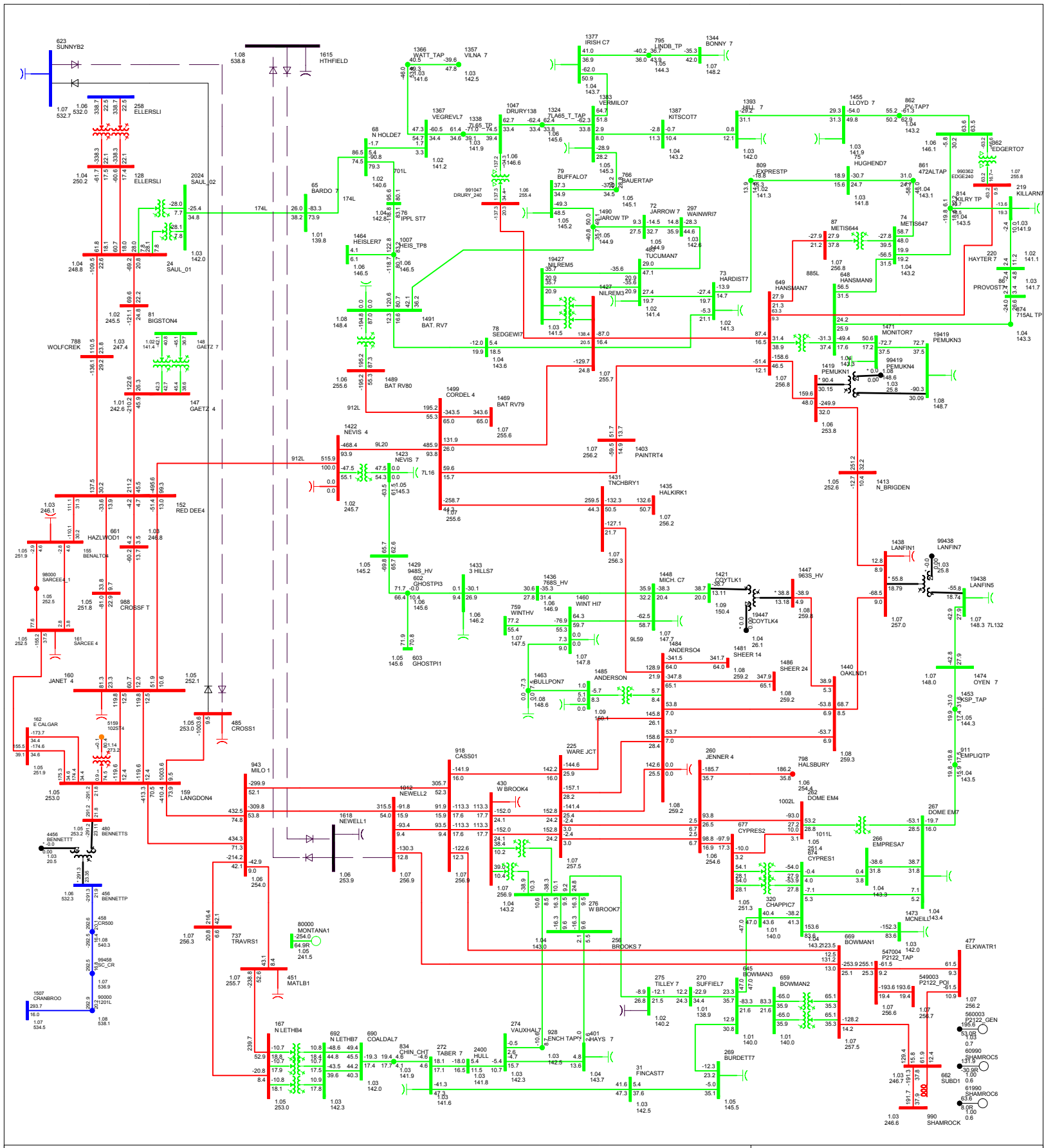
New Generation in Study Area and SW Sub-region
 South East: 391.5 MW Central East: 23.5 MW South West: 723.4 MW
 FIG. D-30.02 FIG. D-30.01 VR2015 CASE M13 GEN SCN 1
 PROJECT: PSE PROJECT (NO CSPC OR LOTO)
 CAP: MAXIMIZE
 HULL APR. 02 2020 14:35
 Contingency EATL
 Tip Action None
 Genshed: JNR-138, CPRS-174, OKLD-66, TCH-156, LFN-71, NLR-5, EDGN-2, Total: 465 MW

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



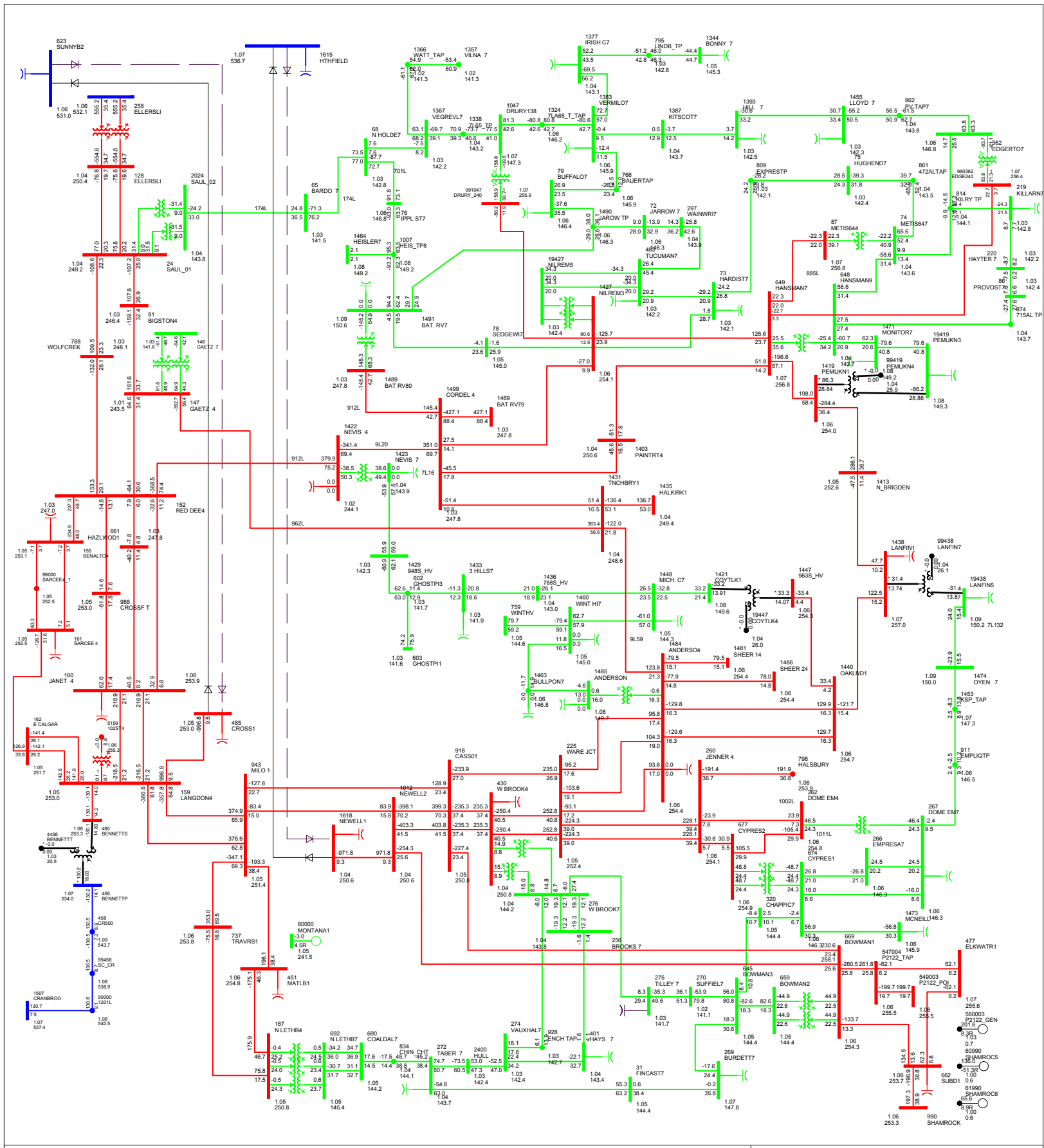
New Generation in Study Area and SW Sub-region
 South East: 109.2 MW Central East: 15.2 MW South West: 609.5 MW
 FIG. D-32 01 YR 2018/19 CASE: H11 GEN SCN 2
 PROJECT: PRE PROJECT (NO CPCB OR LTO)
 CAP: MAXIMIZE
 HULL APR 02 2020 14:35
 Contingency: EATL
 Tip Action: None
 Genshed: Not Applied

Branch Loading: $\geq 100.0\%$
 kV: $<=25.000$ $<=69.000$ $<=138.000$ $<=240.000$ $<=500.000$
 Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 2.9 MW Central East: 0.5 MW South West: 609.5 MW
 FIG 0-32 02 FIG 0-32 01 VR2015 CASE-H11 GEN SCN 2
 PROJECT: PRE PROJECT (NO CSC OR GETO)
 CAP: MAXIMIZE
 TML APR 02 2020 14:35
 Contingency: EATL
 Tip Action: None
 Genshed: BOWM-83, JNR-23, LNR-14, Total: 121 MW

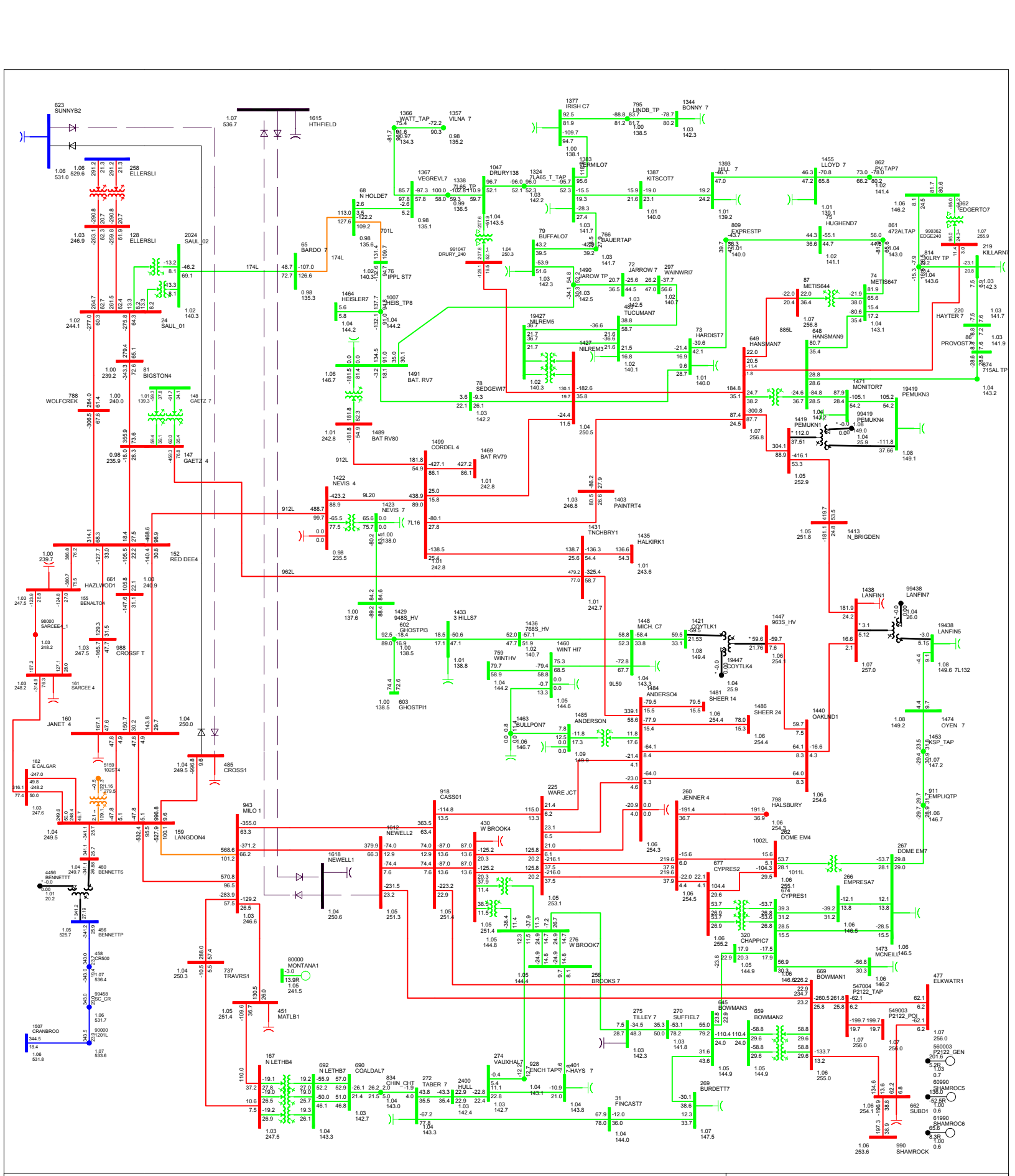
Branch Loading: >=100.0%
 kV: <=25.00 <=69.00 <=138.00 <=240.00 <=500.00
 Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 818.1 MW Central East: 556.7 MW South West: 648.1 MW
 FIG. D-33 - VR-2018; CASE: M13; GEN: SCN 1
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 FULL: APR. 02 2020 14:35
 Contingency Base
 Tip Action: None
 Genshed: Not Applied

Branch Loading: $\geq 100.0\%$
 kV: $<=25.000$ $<=69.000$ $<=138.000$ $<=240.000$ $<=500.000$

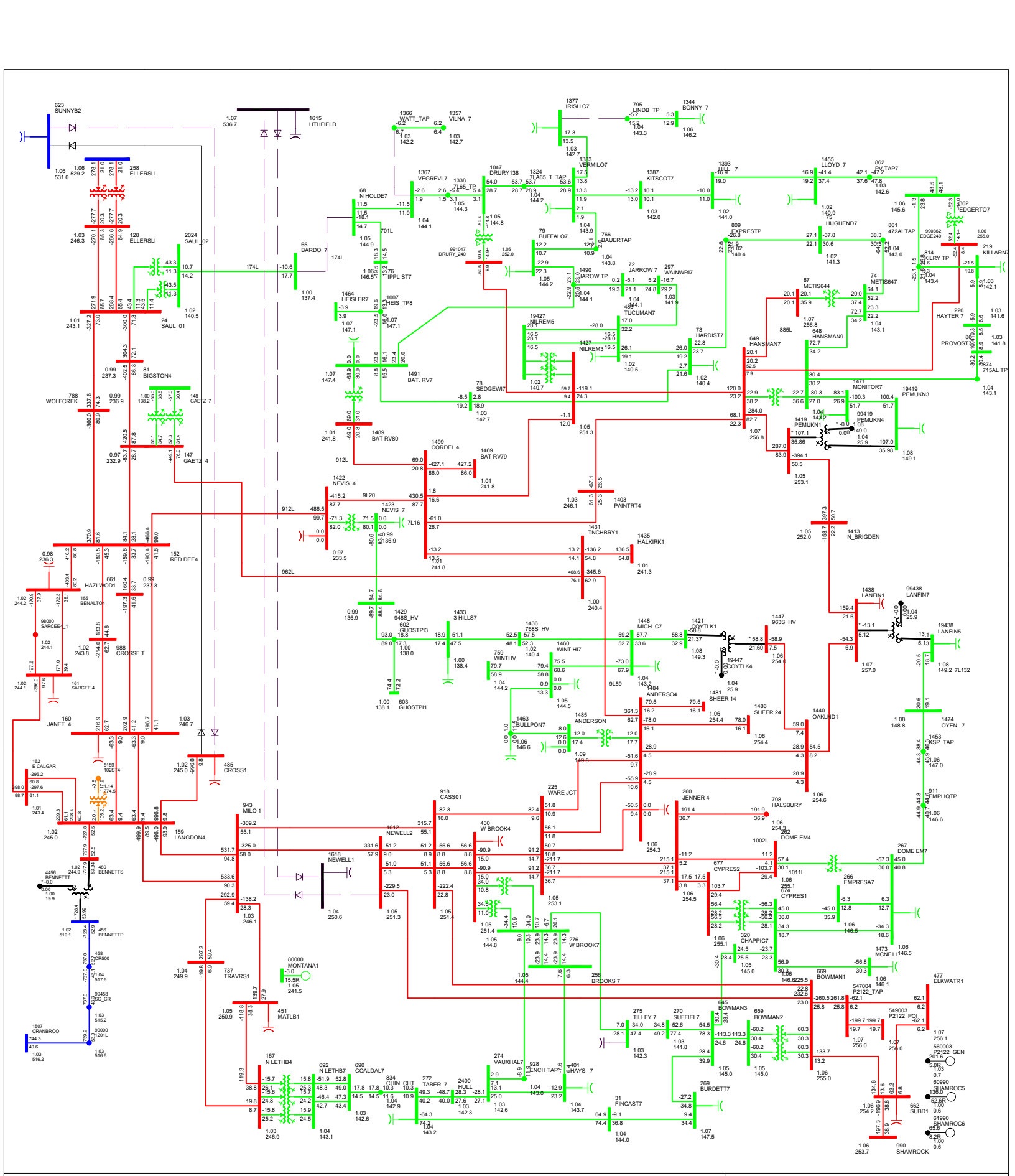
Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 818.1 MW Central East: 556.7 MW South West: 648.1 MW
 FIG. D-34.01 (R2020)S-CASE: M13; GEN SCN 1
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 HULL APR. 02 2020 14:35
 Contingency: EATL
 Tip Action: None
 Genshed=Not Applied

Branch Loading: $\geq 100.0\%$
 kV: $<=25.000$ $<=69.000$ $<=138.000$ $<=240.000$ $<=500.000$

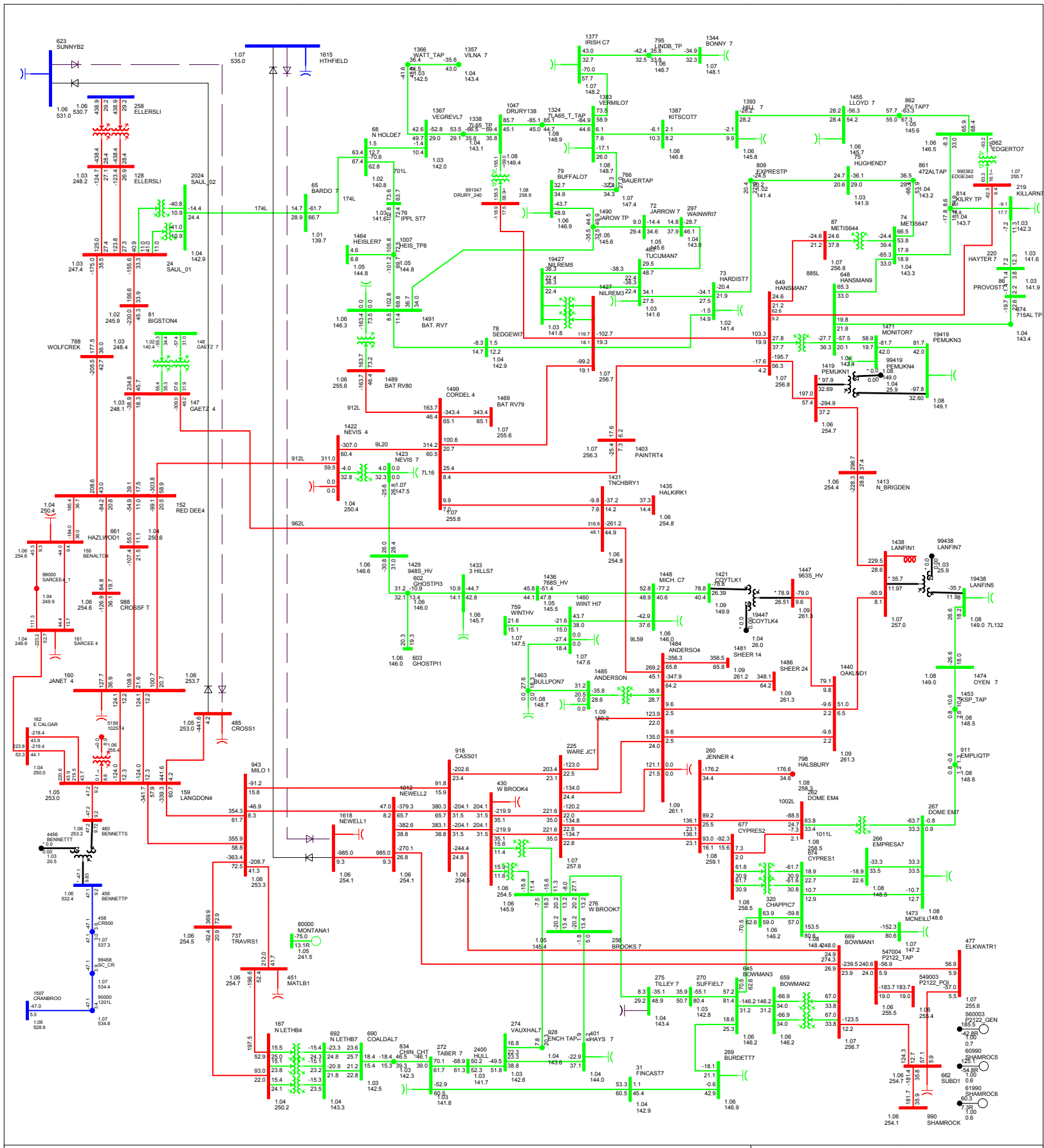
Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 818.1 MW Central East: 92.5 MW South West: 648.1 MW
 FIG. D-34 (REV. 03/2020), YR2015, CASE: M3; GEN: SCN1
 PROJECT: KESTO STAGE1
 CAP: MAXIMIZE
 HULL APR. 02 2020 14:35
 Contingency: EATL
 Trip Action: T34, overload trip, T52 overload trip, T53 overload trip
 Genshed: HSM-7, TCHB-158, LNF-111, NLR: DRURY-79, EDGN-107, Total: 464 MW

Branch Loading: $\geq 100.0\%$
 kV: $<=25.00$ $<=69.00$ $<=138.00$ $<=240.00$ $<=500.00$

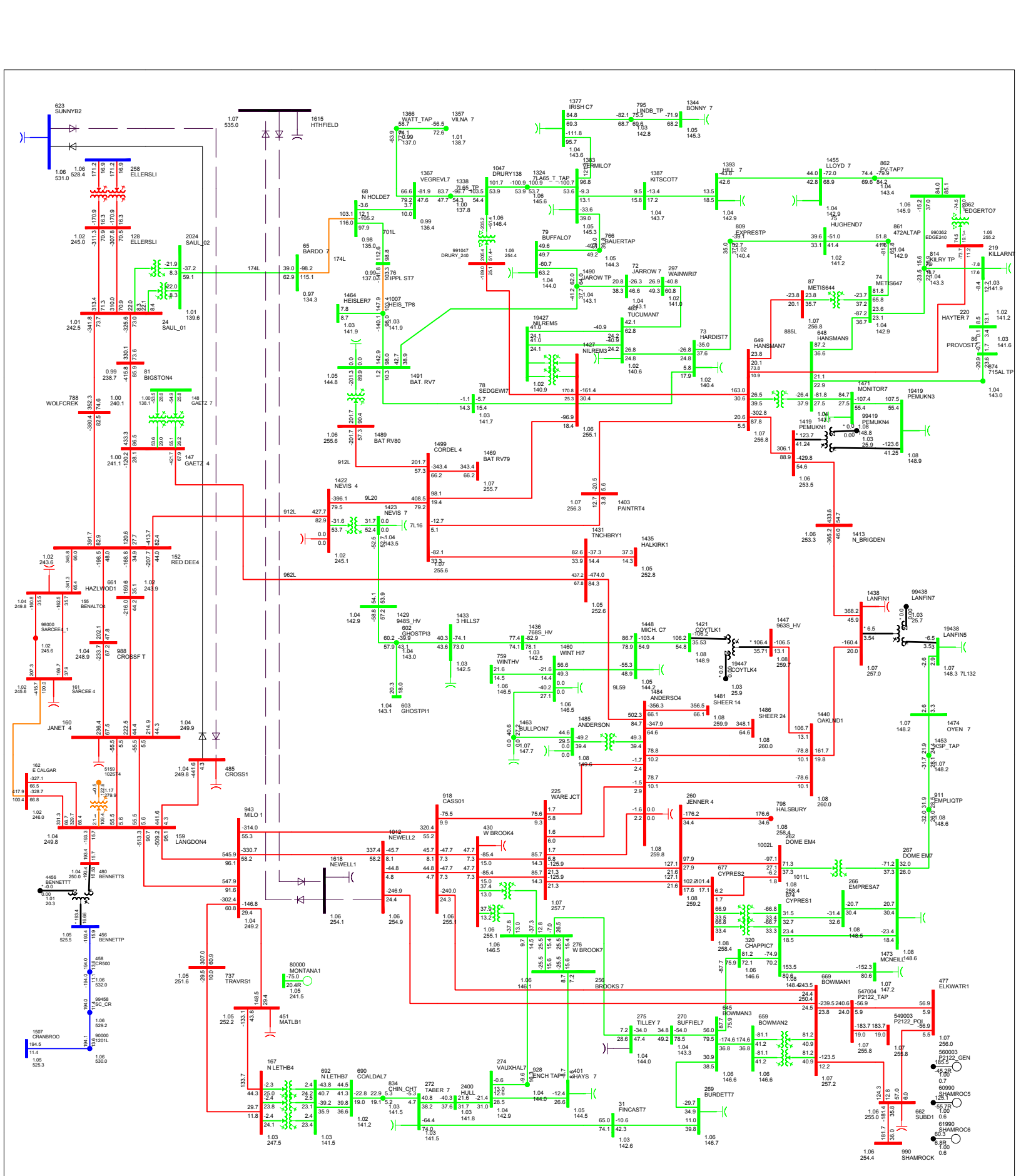
Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 746.7 MW Central East: 267.6 MW South West: 671.9 MW
 FIG. D-35 - NR-2013; CASE: H10; GEN SCN 2
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 HULL: APR 02 2020 14:36
 Contingency: Base
 Tip Action: None
 Genshed: Not Applied

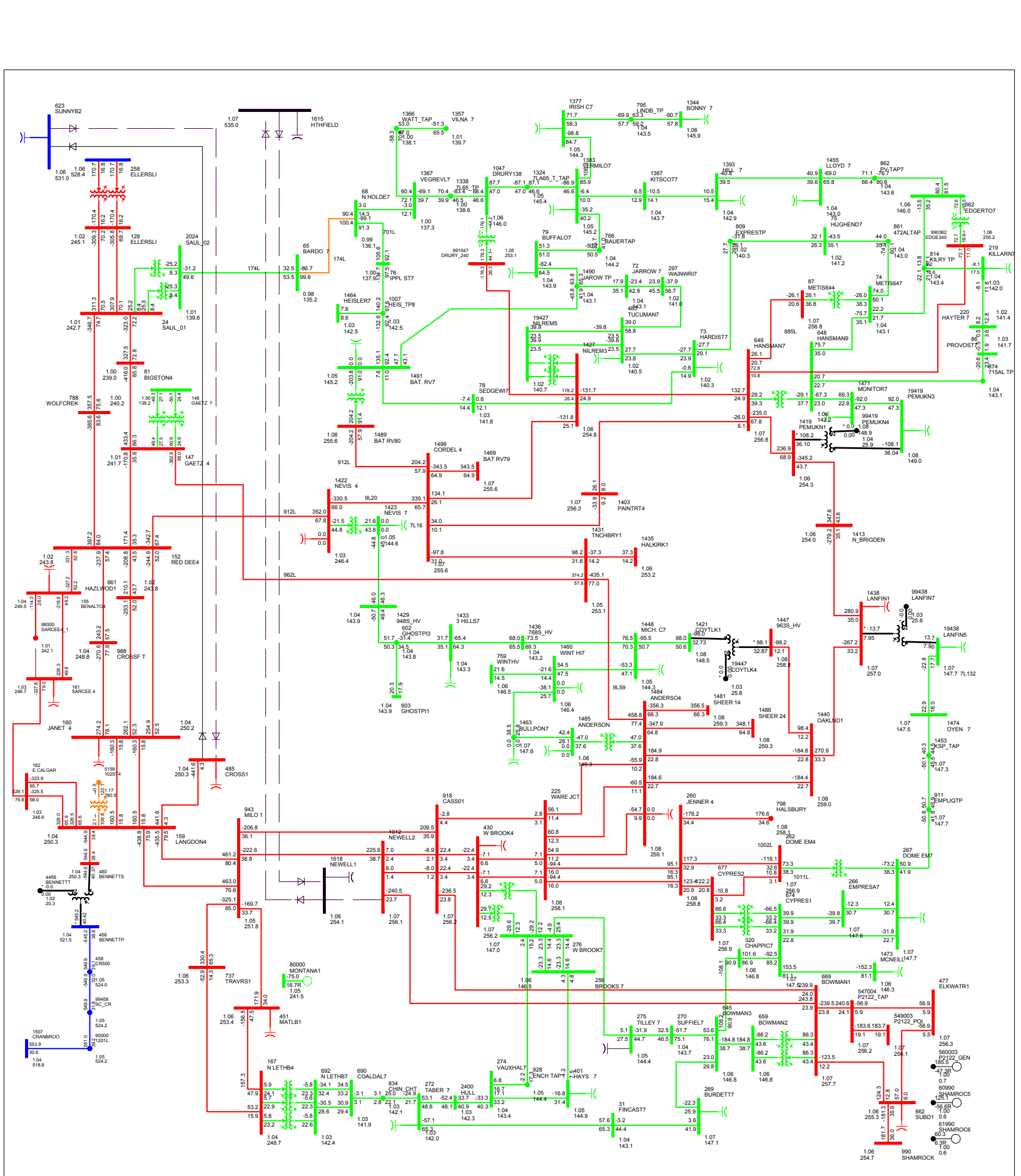
Branch Loading: $\geq 100.00\%$
 kv: $<=25.00$ $<=69.00$ $<=138.00$ $<=240.00$ $<=500.00$

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



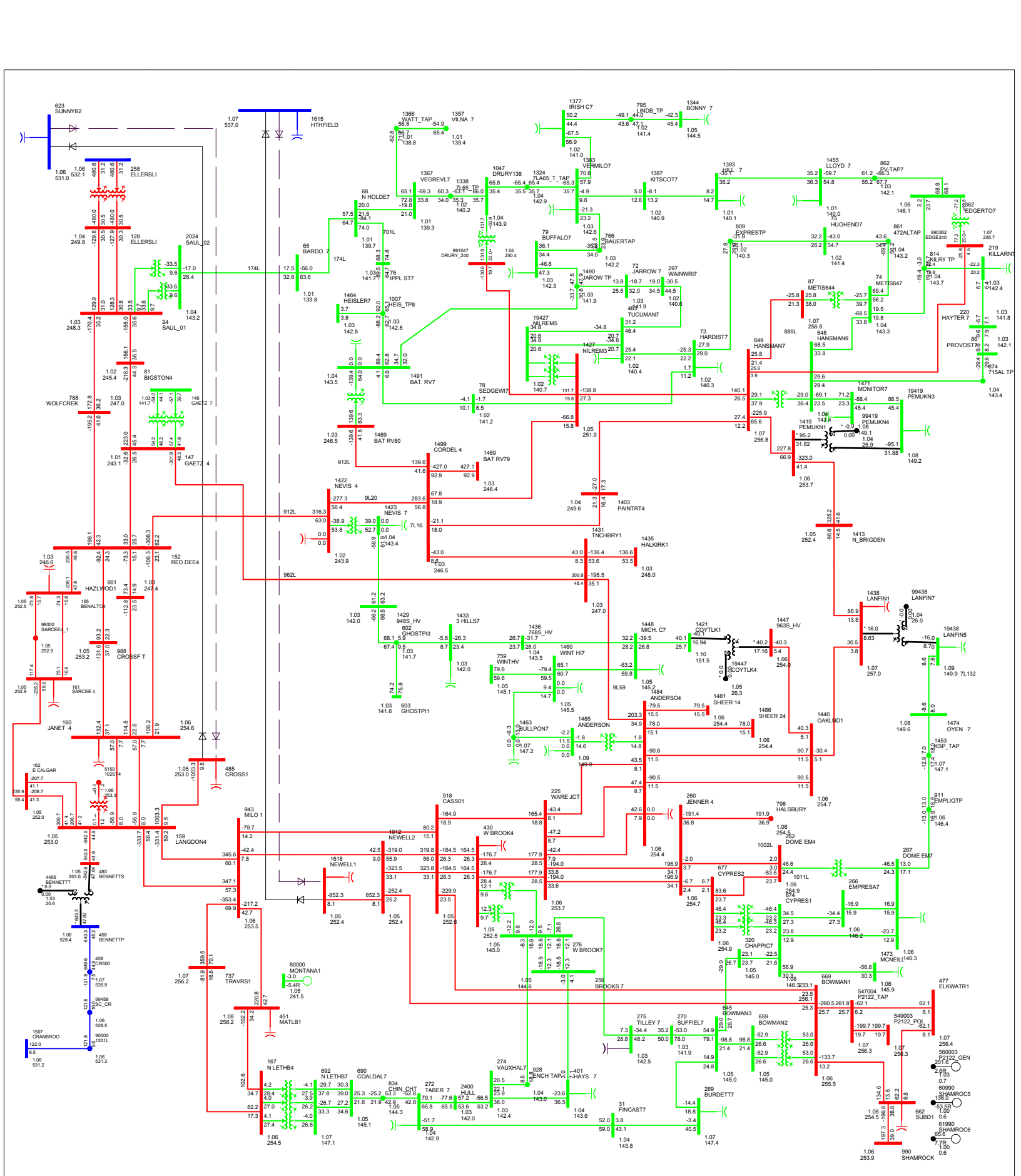
New Generation in Study Area and SW Sub-region
 South East: 746.7 MW Central East: 267.6 MW South West: 671.9 MW
 FIG. D-36.011 (R2021)S, CASE: H10; GEN SCN 2
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 HULL APR. 02 2020 14:36
 Contingency: EATL
 Tip Action: None
 Genshed=Not Applied

Branch Loading: $\geq 100.0\%$
 kv: $<=25.000$ $<=69.000$ $<=138.000$ $<=240.000$ $<=500.000$
 Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



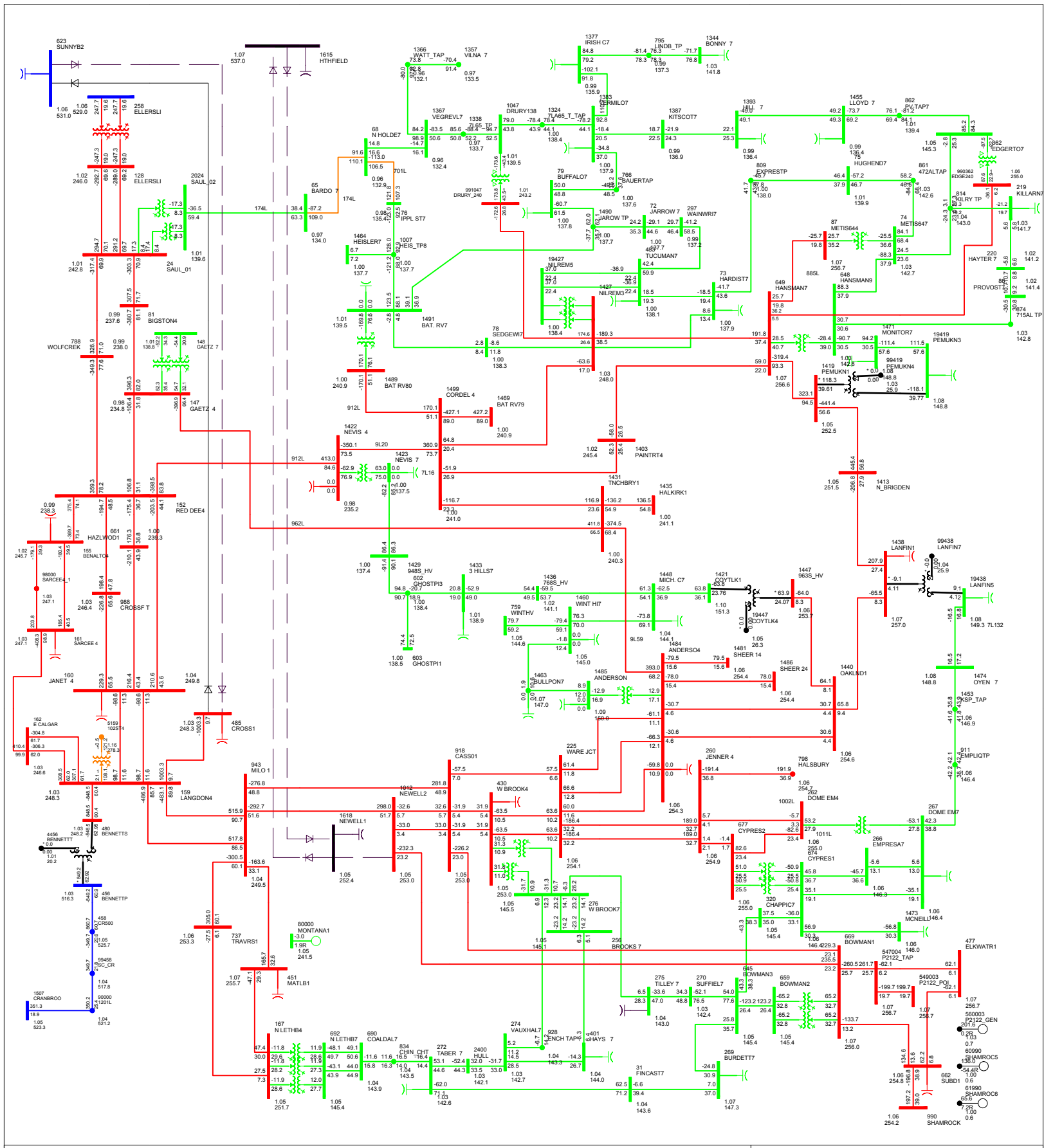
New Generation in Study Area and SW Sub-region
 South East: 572.0 MW Central East: 0.1 MW South West: 671.9 MW
 FIG. D-36.02 FIG. D-36.01 YR2035, CASE: H10; GEN SCN 2
 PROJECT: CETO STAGE1
 CAP: MAXIMIZE
 TBL: APR. 02 2020 14:36
 Contingency: EATL
 Tip Action: 916, overload: Sarcoc bus split
 Genshed: JNR-23, CPRS-38, OKLD-112, HMS-6, 5TCH-8, LNF-216, DRURY-36, EDGN-0, Totab-442 MW

Branch Loading: $\geq 100.0\%$
 kv: ≤ 25.000 ≤ 69.000 ≤ 138.000 ≤ 240.000 ≤ 500.000
 Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



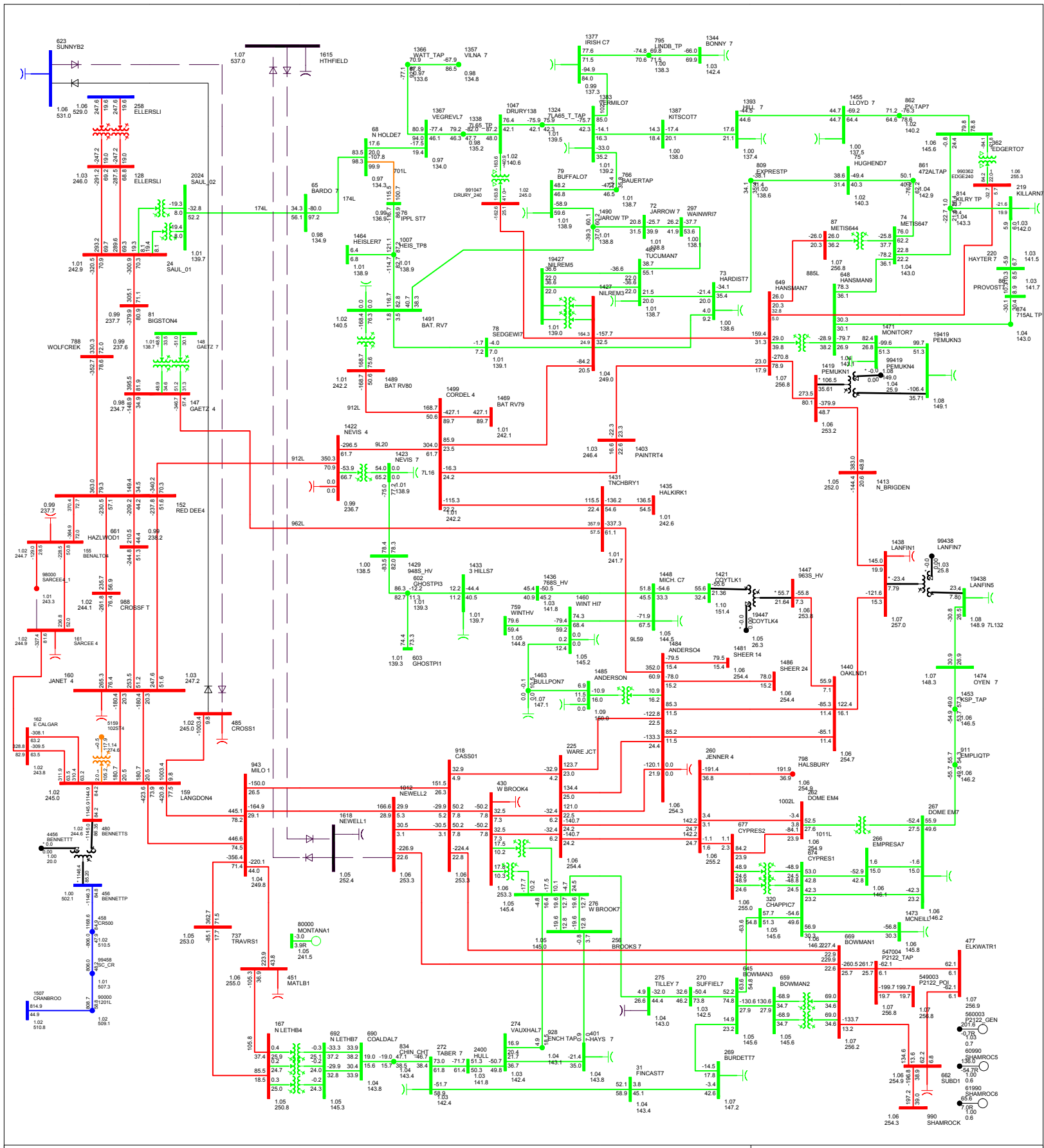
New Generation in Study Area and SW Sub-region
 South East: 786.8 MW Central East: 228.6 MW South West: 1227.4 MW
 FIG. D-37 - YR2018 CASE MIX GEN SCEN 1
 PROJECT: CDRP (CDR-COR) DPT1, GEN0 STAGE1
 CAP: MAXIMIZE
 HULL: APR 02 2020 14:36
 Contingency Base
 Tip Action: None
 Genshed=Not Applied

Branch Loading: $\geq 100.0\%$
 kV: $<=25.000$ $<=69.000$ $<=138.000$ $<=240.000$ $<=500.000$
 Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



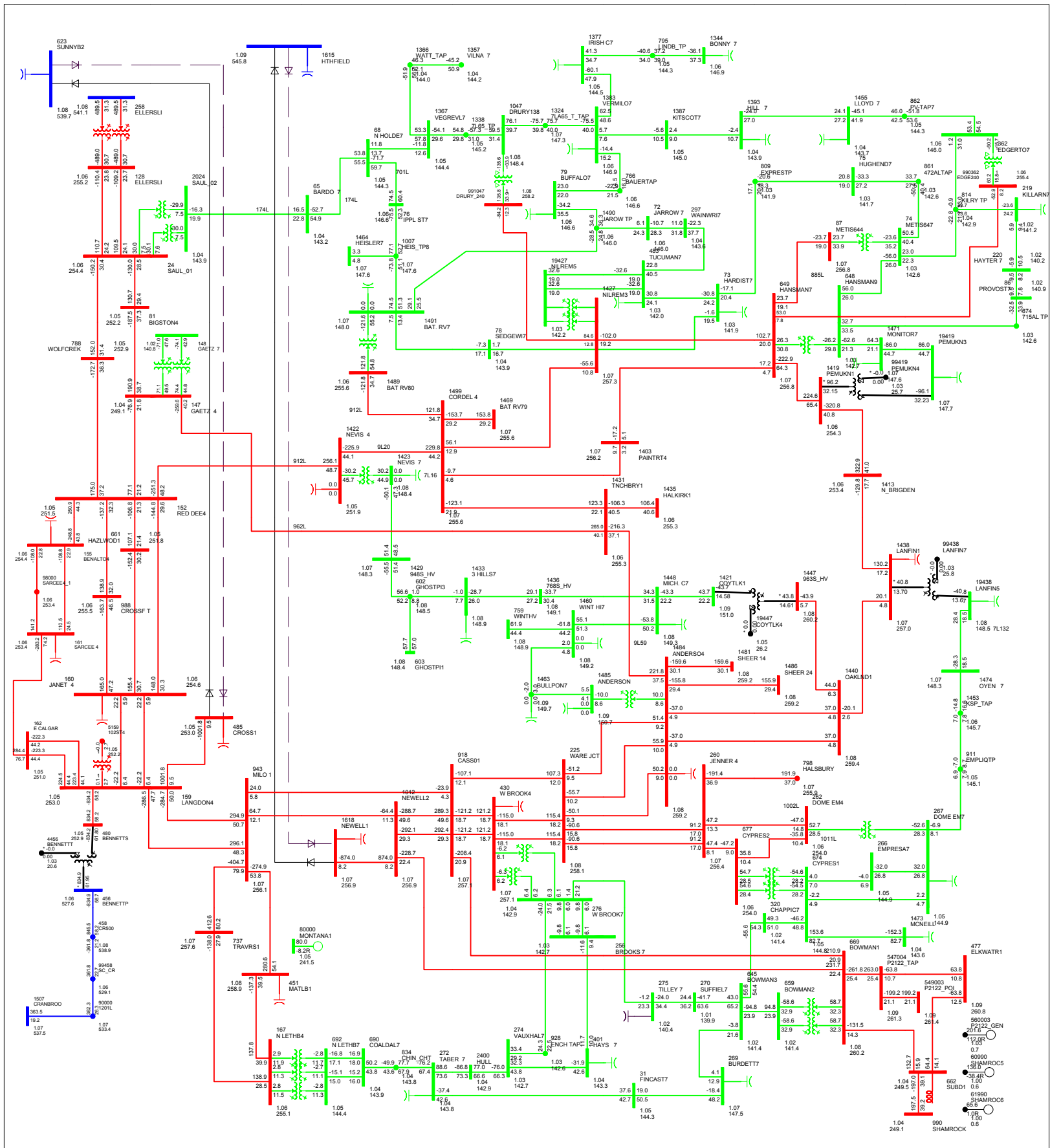
New Generation in Study Area and SW Sub-region
 South East: 786.8 MW Central East: 228.6 MW South West: 1227.4 MW
 FIG. D-38.01 7/6/2015, CASE: M13 - GEN SCN 1
 PROJECT: CBPC - CB-CR (DFT) - GEN STAGE1
 CAP: MAXIMIZE
 HULL: APR. 02 2020 14:35
 Contingency: EATL
 Tip Action: None
 Genshed: Not Applied

Branch Voltage: $\geq 100.0\%$
 kV: < 25.000 ≤ 69.000 < 138.000 < 240.000 < 500.000
 Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



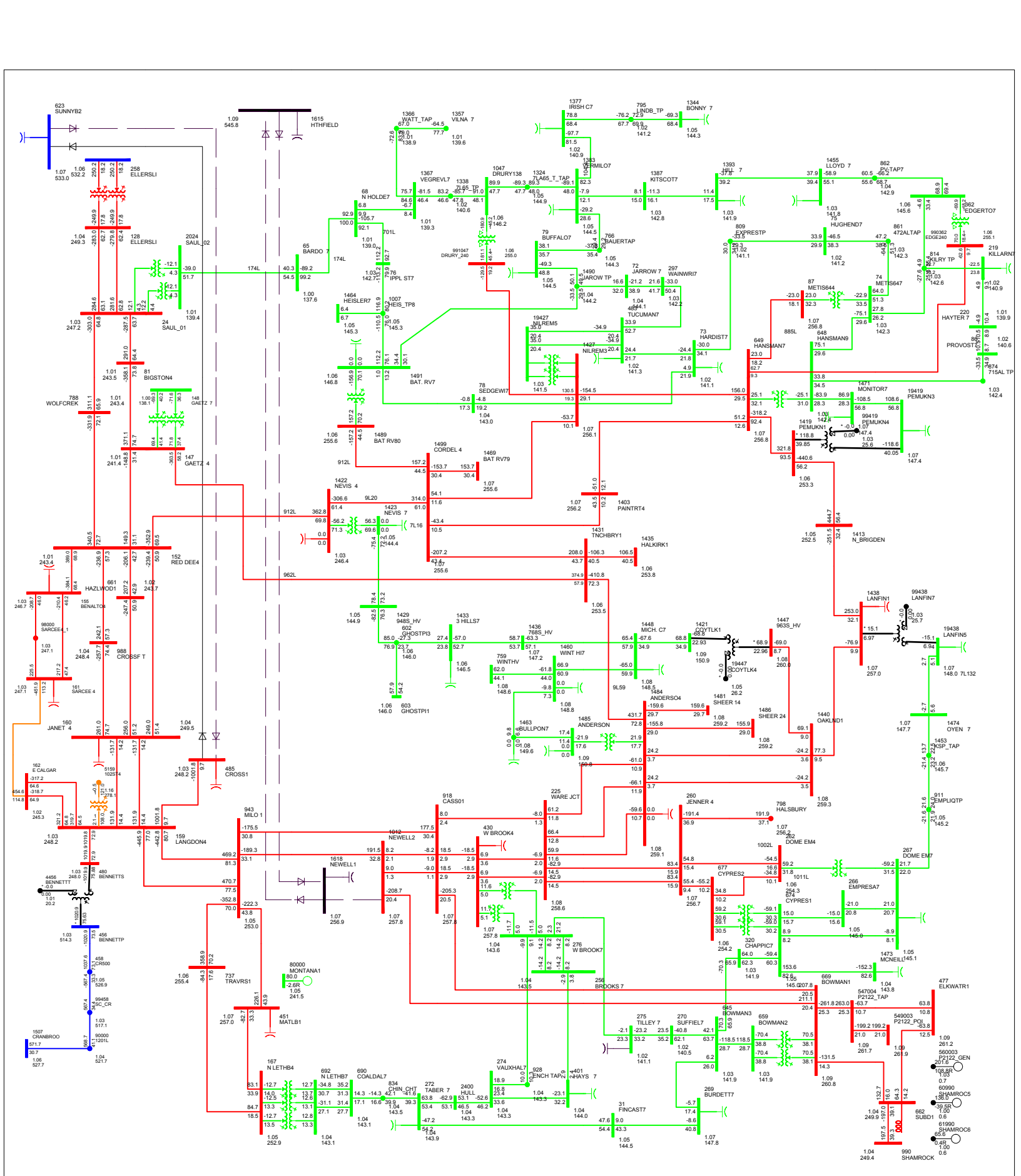
New Generation in Study Area and SW Sub-region
 South East: 501.8 MW Central East: 53.2 MW South West: 1227.4 MW
 FIG. D-38.02 FIG. D-38.01-VR-2015.1, CASE: M13, GEN SCN 1
 PROJECT: CRPC - CR-CR (DFT), GEN STAGE1
 CAP: MAXIMIZE
 TUD: APR.02.2020 14:35
 Contingency EATL
 Tip Action: L274-B-C 138kV Tie, 916 overload, Sarcoc bus split
 Genshed-JNR-100, OKLD-185, HSM-22, TCHB-18, LNF-134, TAD-460 MW

Branch Loading: $\geq 100.0\%$
 kV: $<=25.00$ $=69.00$ $<=138.00$ $<=240.00$ $<=500.00$
 Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 464.6 MW Central East: 318.7 MW South West: 1204.3 MW
 FIG. D-39 - VR 2018 CASE HP GEN SCN 2
 PROJECT: CRPC (CR-CR-CP1) GEN1 STAGE1
 CAP: MAXIMIZE
 HULL APR 02 2020 14:36
 Contingency Base
 Tip Action: None
 Genshed: Not Applied

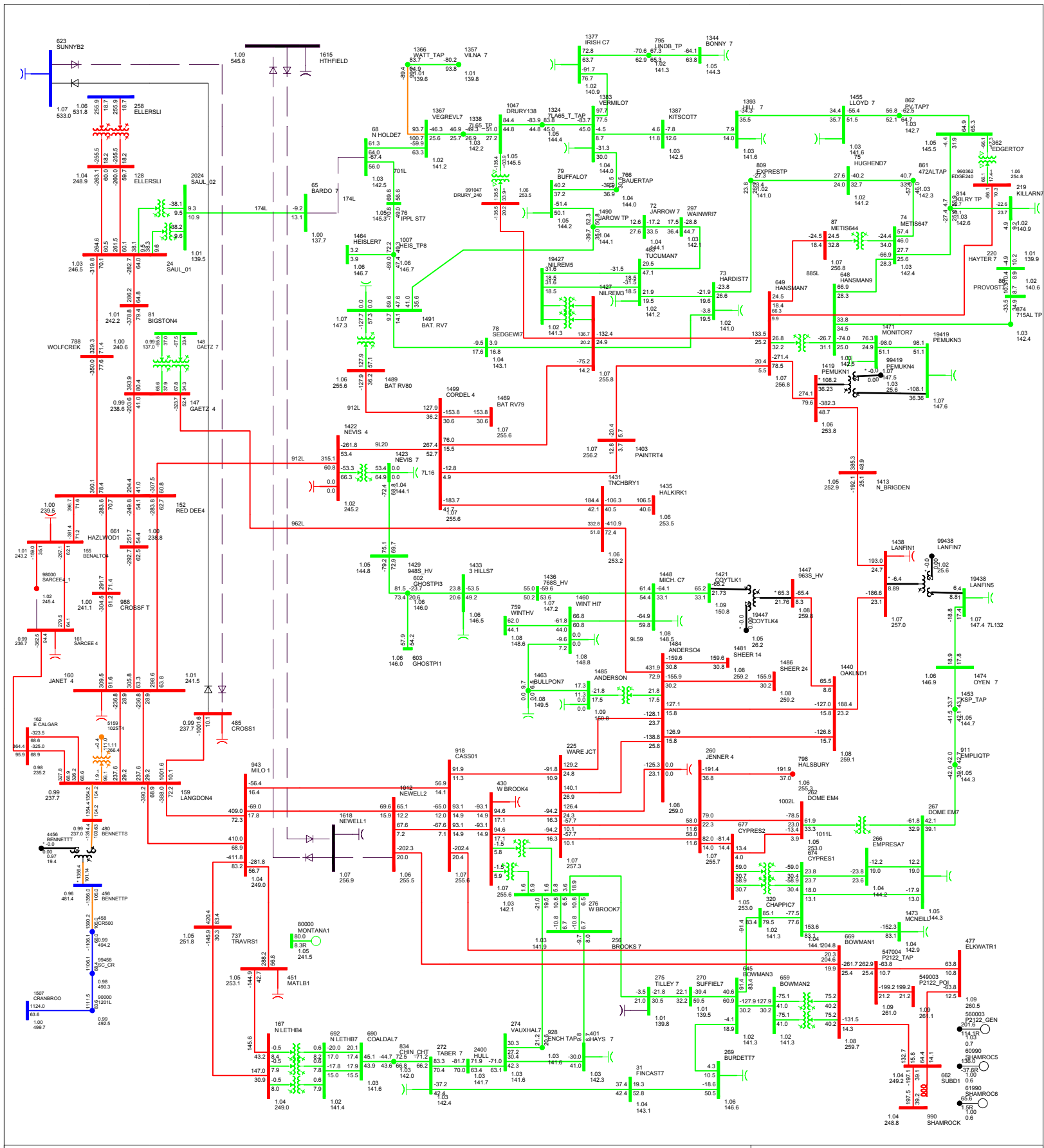
Branch Loading: $\geq 100.0\%$
 kV: $<=25.000$ ≤ 69.000 $<=138.000$ $<=240.000$ $<=500.000$
 Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 464.6 MW Central East: 318.7 MW South West: 1204.3 MW
 FIG. D-01 7R-2019-15_CASE-HV_GEN2
 PROJECT: CBPC (CB-CR) (DTP) GEN2 STAGE1
 CAP: MAXIMIZE
 HULL APR. 02 2020 14:36
 Contingency: EATL
 Tip Action: None
 Genshed-Net Applied

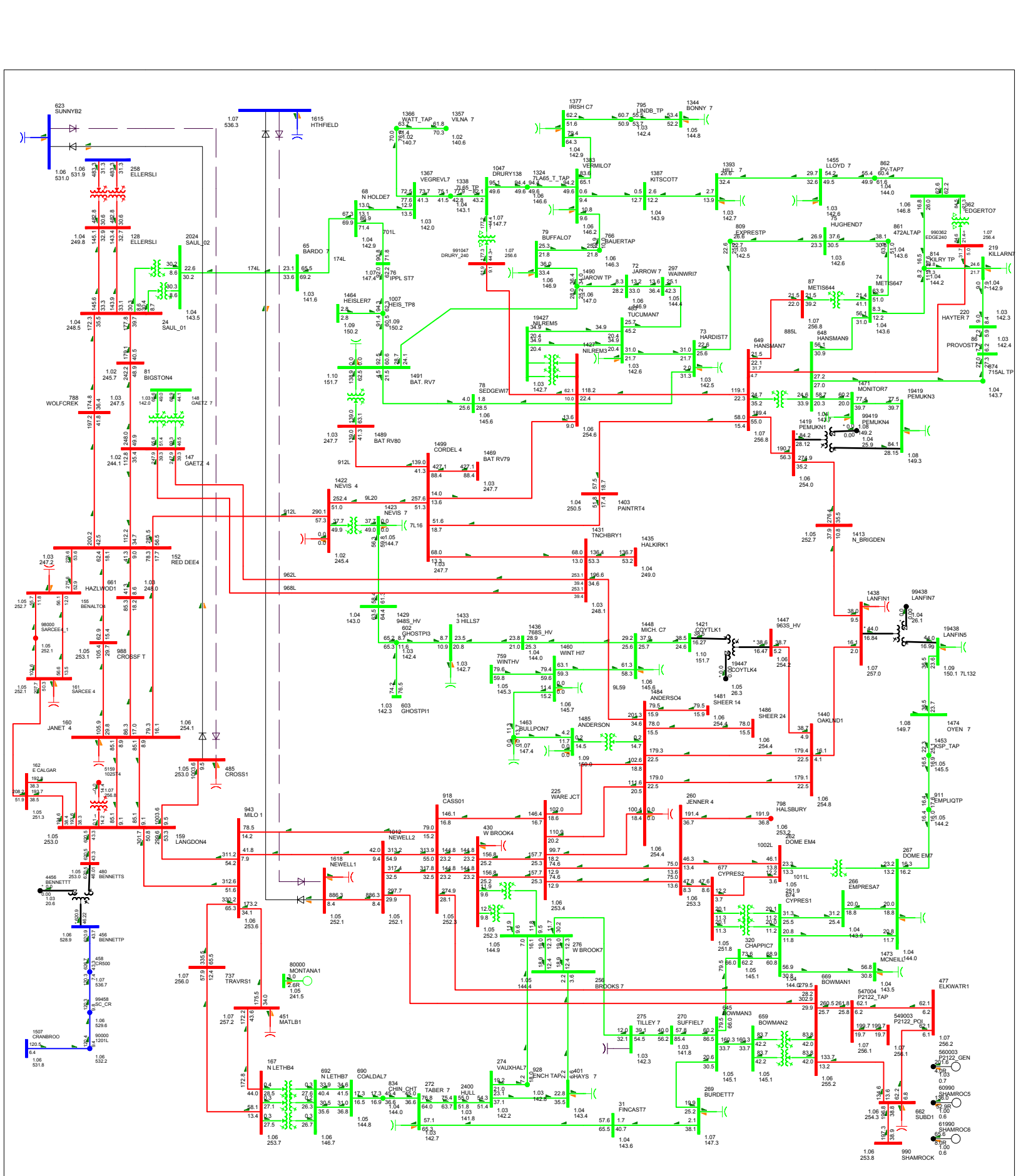
Branch Loading: $\geq 100.0\%$
 kV: $<=25.000$ $<=69.000$ $<=138.000$ $<=240.000$ $<=500.000$

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



New Generation in Study Area and SW Sub-region
 South East: 317.2 MW Central East: 0.2 MW South West: 1204.3 MW
 FIG. D-40-02 FIG. D-40-01 VR-2015, CASE: HE, GEN SCN 2
 PROJECT: CRPC - CR-CR (CRP), CSD10 STAGE1
 CAP: MAXIMIZE
 TUD: APR 02 2020 14:36
 Contingency EATL
 Tip Action: L274-B0C-138kV Tie, 916L overload, Sarcos bus split
 Genshed-CRPS-48, OKLD-98, TCHB-66, LNF-192, DRURY-01, EDGN-7, Total: 465 MW

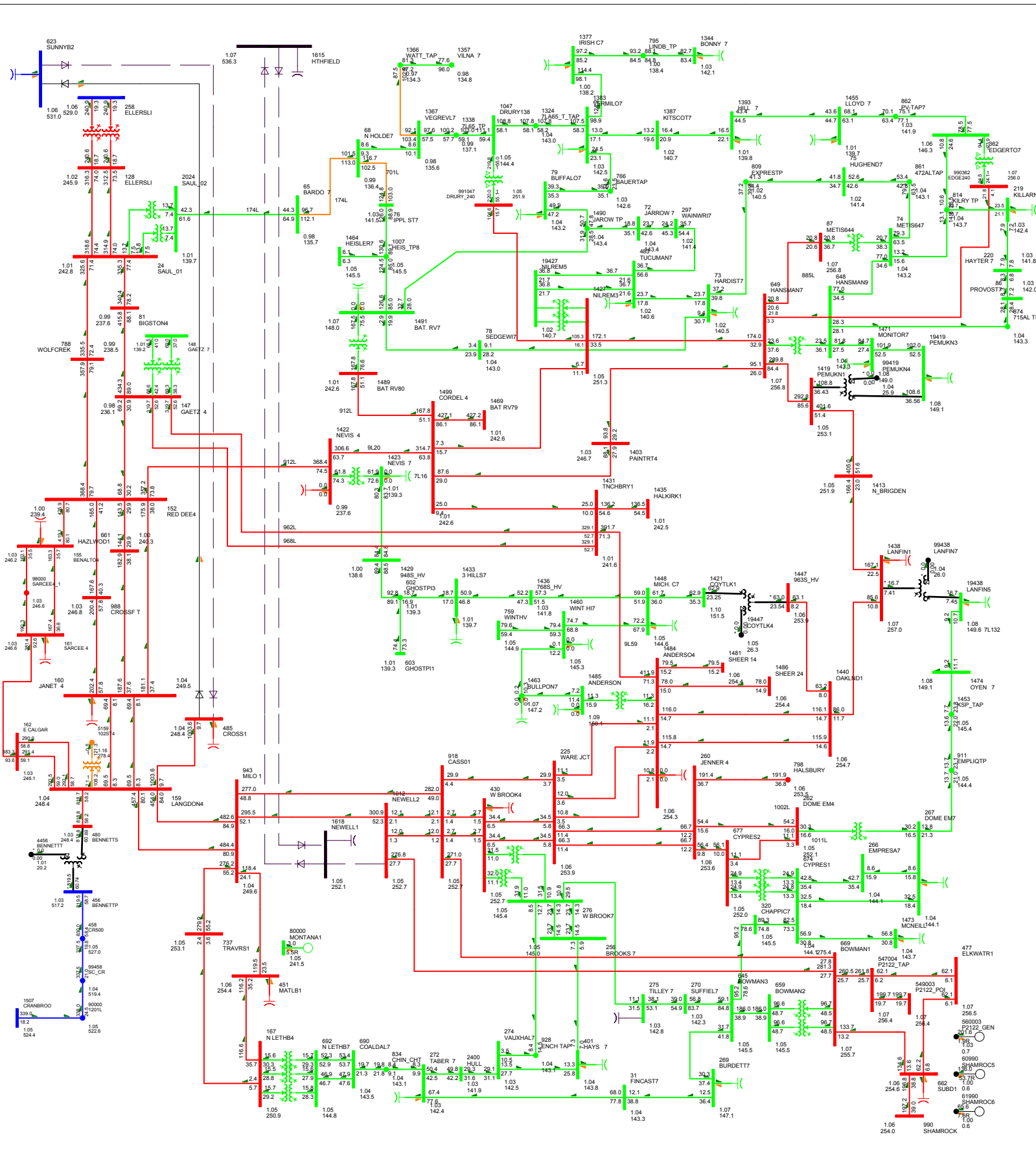
Branch Loading: $\geq 100.0\%$
 kV: $<=25.000$ ≤ 69.000 $<=138.000$ $<=240.000$ $<=500.000$
 Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 813.1 MW Central East: 446.4 MW South West: 1054.1 MW
 FIG. D-41 - YR2018: CASE MIX3 - GEN SCEN 1
 PROJECT: CDPIC (CD-CORR-DPT) - GEN1 STAGE1&2
 CAP: MAXIMIZE
 TML: APR 02 2020 14:35
 Contingency Base
 Tip Action: None
 Genshed=Not Applied

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

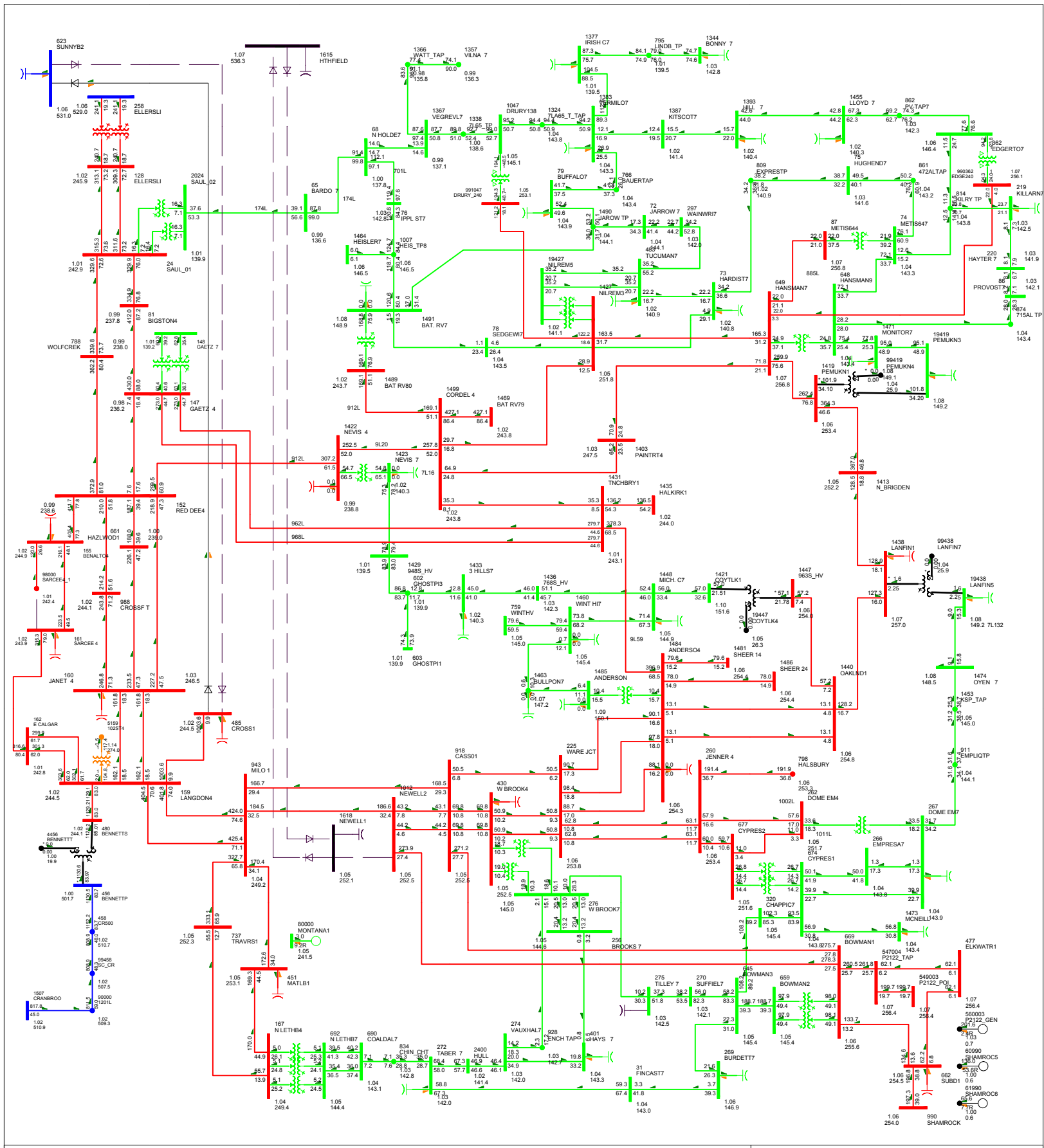
Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 813.1 MW Central East: 446.4 MW South West: 1054.1 MW
 FIG. D-42 01 YR2020-15 CASE: M13-GEN SCN 1
 PROJECT: CBAC-NSR-CRR-DFTL-GEN0 STAGE: b2
 CAP: MAXIMIZE
 HULL APR. 02 2020 14:35
 Contingency: EATL
 Tip Action: None
 Genshed: Not Applied

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

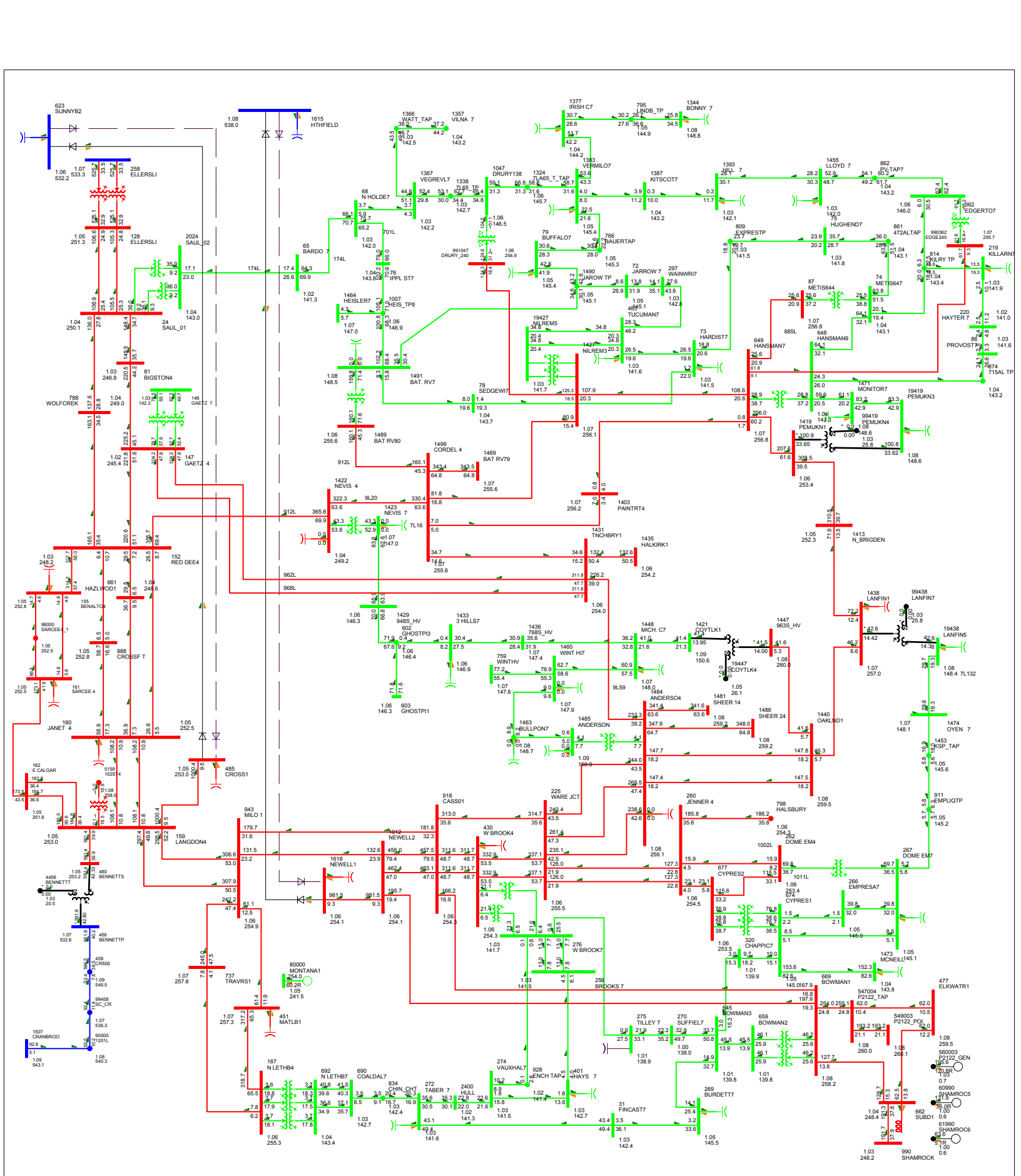
Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 587.8 MW Central East: 208.0 MW South West: 1054.1 MW
 FIG. D-42 (02) FIG. D-42 (01) VR-2015 (1), CASE: M13, GEN: SCN 1
 PROJECT: C2PC - C2CR (C2PL) - C2S10 STAGE 1B
 CAP: MAXIMIZE
 TML APR 02 2020 14:35
 Contingency EATL
 Tap Action: L274 B0C 138kV Tie, 916L overload, SARC bus split
 Genshed: OKL2, 225, TCHB, 96, LNF, 99, DRURY, 43, Total, 463 MW

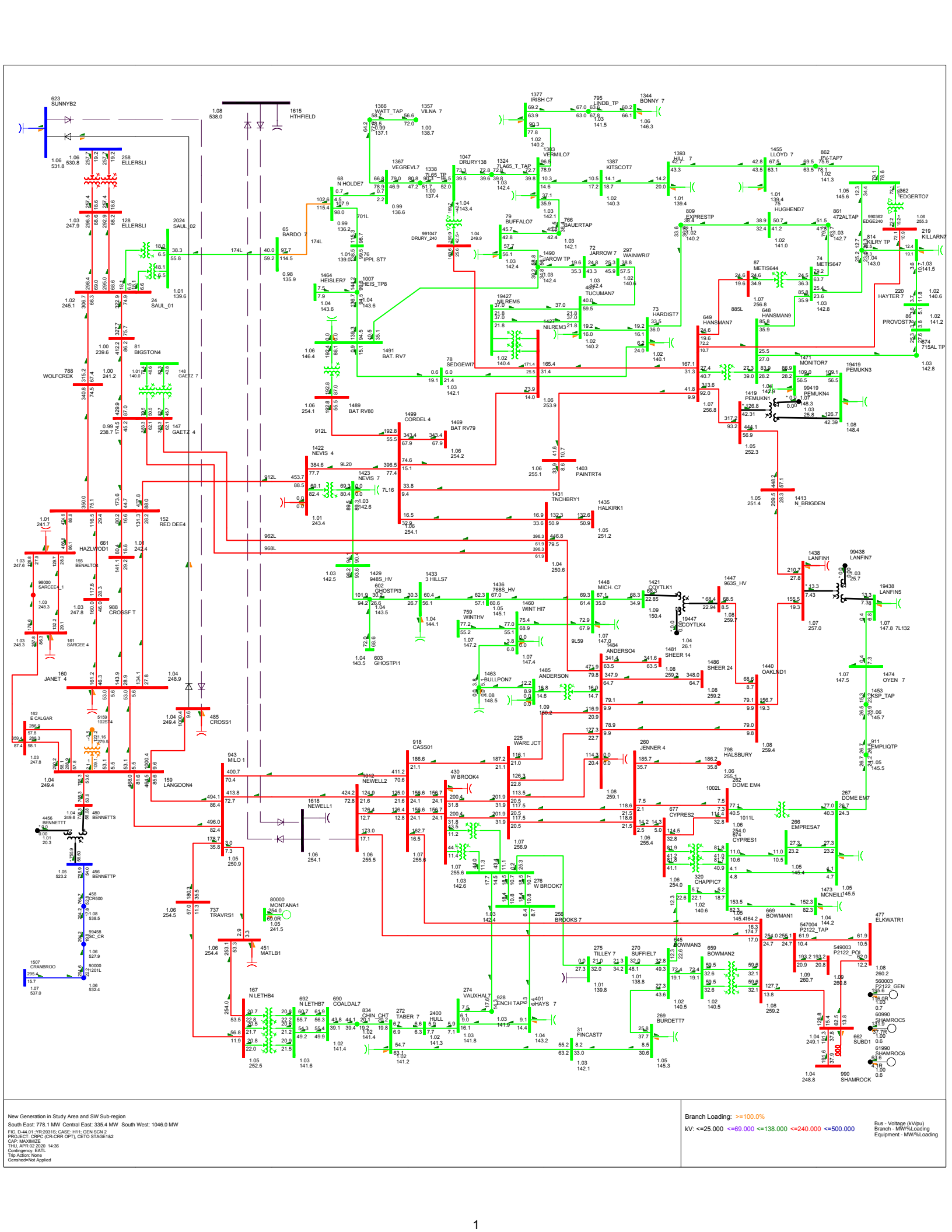
Branch Loading: $\geq 100.0\%$
 kV: ≤ 25.000 ≤ 69.000 ≤ 138.000 ≤ 240.000 ≤ 500.000

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



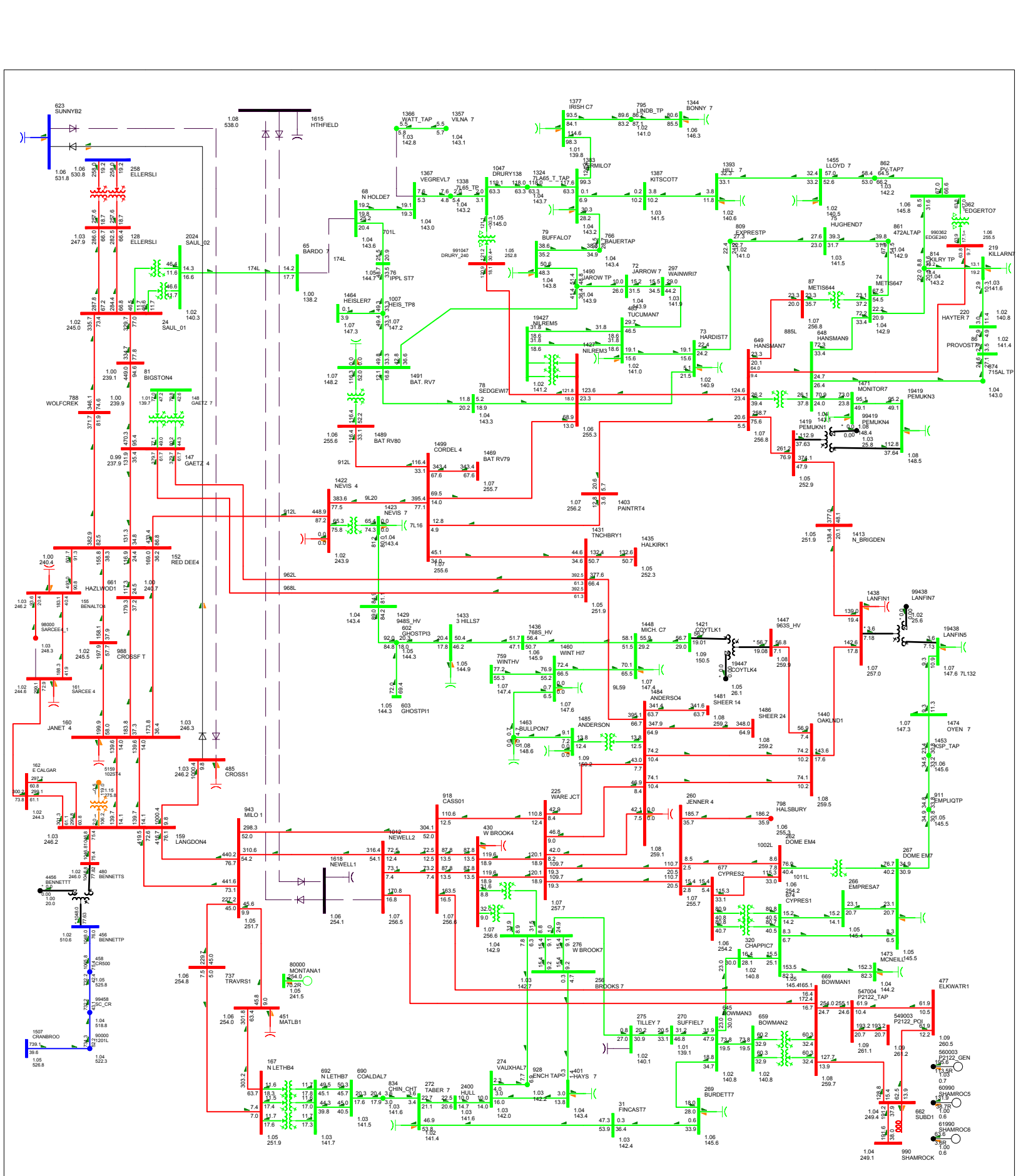
New Generation in Study Area and SW Sub-region
 South East: 778.1 MW Central East: 335.4 MW South West: 1046.0 MW
 FIG. D-43 - YR2018, CASE H11, GEN SCEN 2
 PROJECT: CDPIC (CD-CORR-0371), GEN10 STAGE1&2
 CAP: MAXIMIZE
 HULL APR. 02 2020 14:36
 Contingency Base
 Tip Action: None
 Genshed=Not Applied

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



New Generation in Study Area and SW Sub-region
 South East: 778.1 MW Central East: 335.4 MW South West: 1046.0 MW
 FIG. D-44-01 7/8/2015, CASE: H11, GEN SCN 2
 PROJECT: CBPC, ICA-COR (D11), GEN0 STAGE1a2
 CAP: MAXIMIZE
 TUDL APR. 02 2020 14:36
 Contingency: EATL
 Tip Action: None
 Genshed: Not Applied

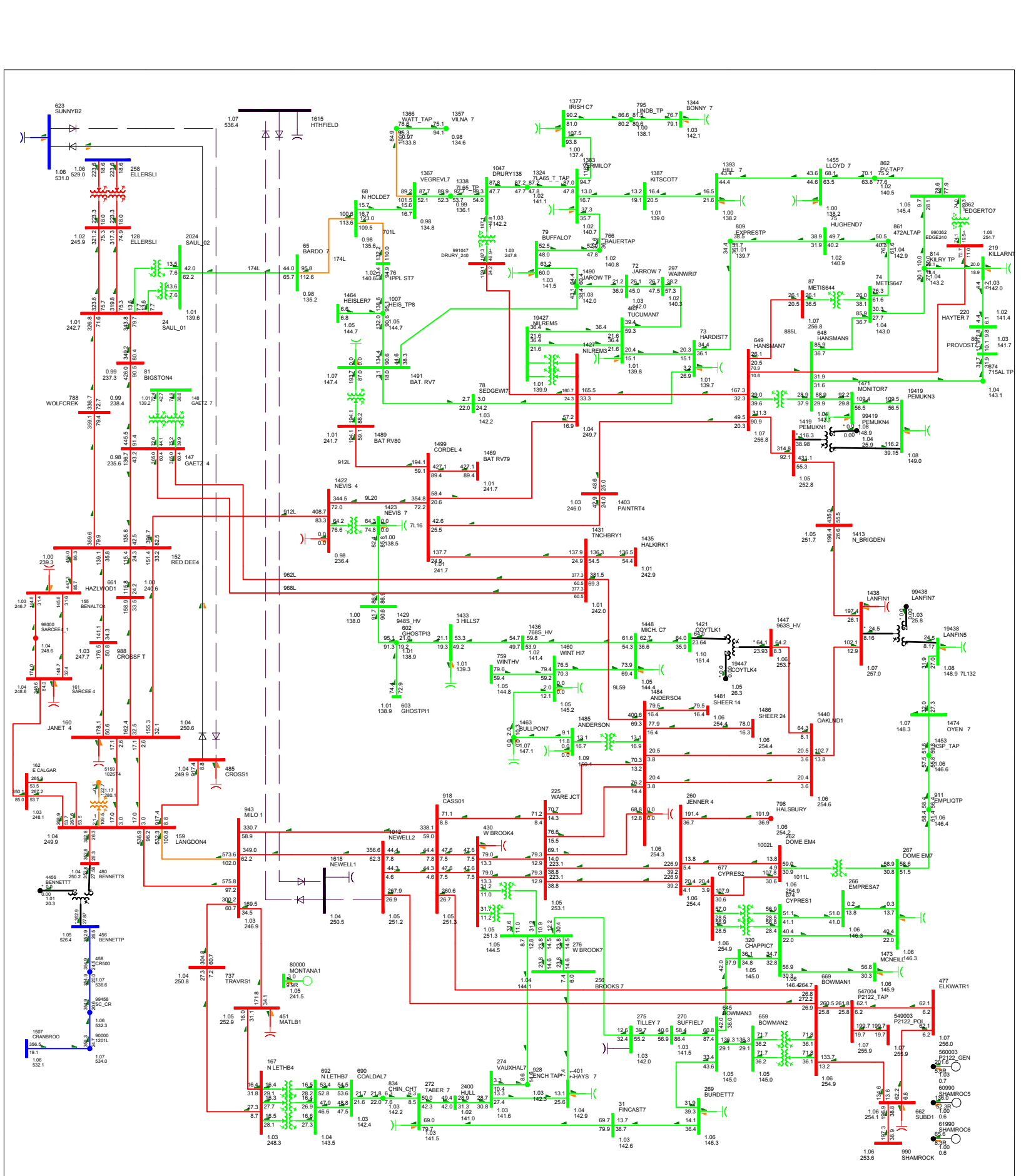
Branch Loading: $\geq 100.0\%$
 kV: ≤ 25.000 ≤ 69.000 ≤ 138.000 ≤ 240.000 ≤ 500.000
 Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 425.0 MW Central East: 233.1 MW South West: 1046.0 MW
 FIG 3-4-02 FIG 0-4-01 VR-2015 CASE H11: GEN SCN 2
 PROJECT: CRPC (CR-CR) (CR-TP) CR10 STAGE 1B
 CAP: MAXIMIZE
 TML APR 02 2020 14:36
 Contingency EALT
 Tap Action: L274 BC: 138kV Tie, 174L overload trip, 916L overload, Sarcee bus split, 7L32 overload trip
 Genshed-JNR-18, OKLD-334, HSM-19, LNF-69, NLR-13, Total-455 MW

Branch Loading: $\geq 100.0\%$
 kv: ≤ 25.000 ≤ 69.000 ≤ 138.000 ≤ 240.000 ≤ 500.000

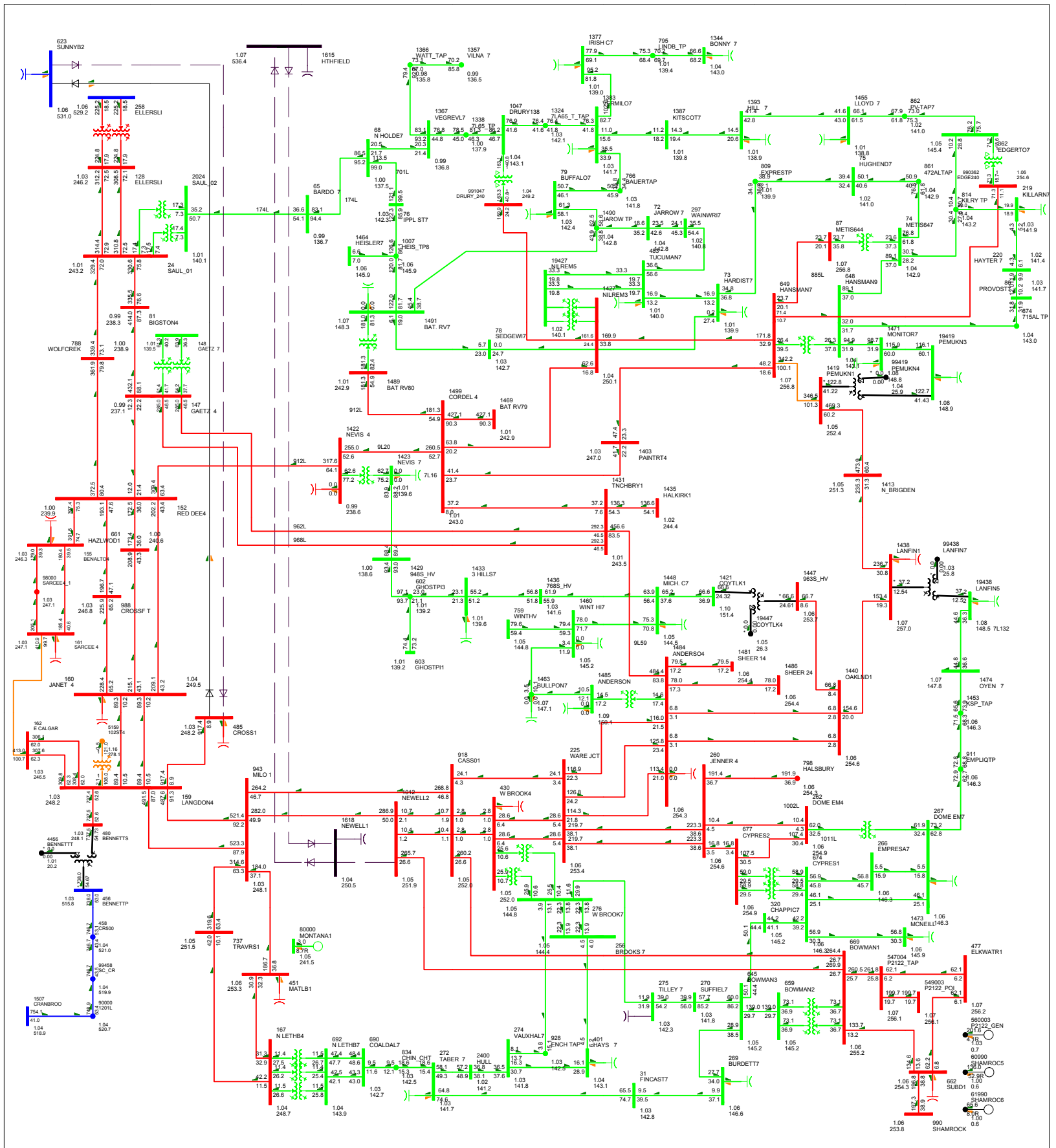
Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 984.4 MW Central East: 530.4 MW South West: 715.5 MW
 FIG. D-46.01: 1/18/2015, CASE: M13, GEN SCN 1
 PROJECT: CETO STAGES 1&2
 CAP: MAXIMIZE
 HULL APR. 02 2020 14:36
 Contingency: EATL
 Tip Action: None
 Genshed: Not Applied

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

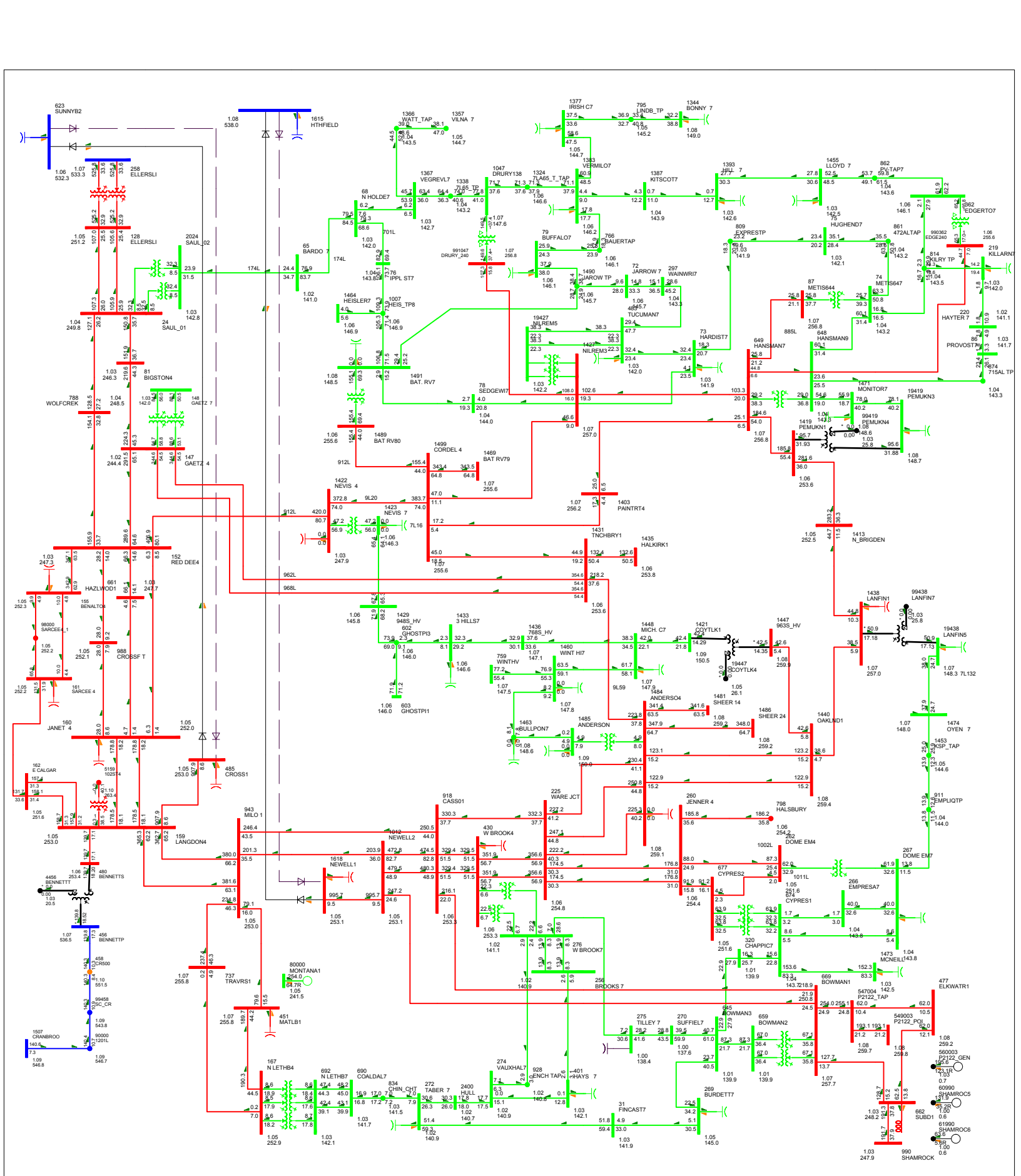
Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 984.4 MW Central East: 79.3 MW South West: 715.5 MW
 FIG 0-46-02 FIG 0-46-01 VR-2015, CASE: M13; GEN SCN 1
 PROJECT: KETO STAGE1&2
 CAP: MAXIMIZE
 HULL APR 02 2020 14:36
 Contingency: EATL
 Tip Action: None
 Genshed:HSM-32,TCHB-350,LNF-25,NLR-15,DRURY-25,EDGN-3,Total-451 MW

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

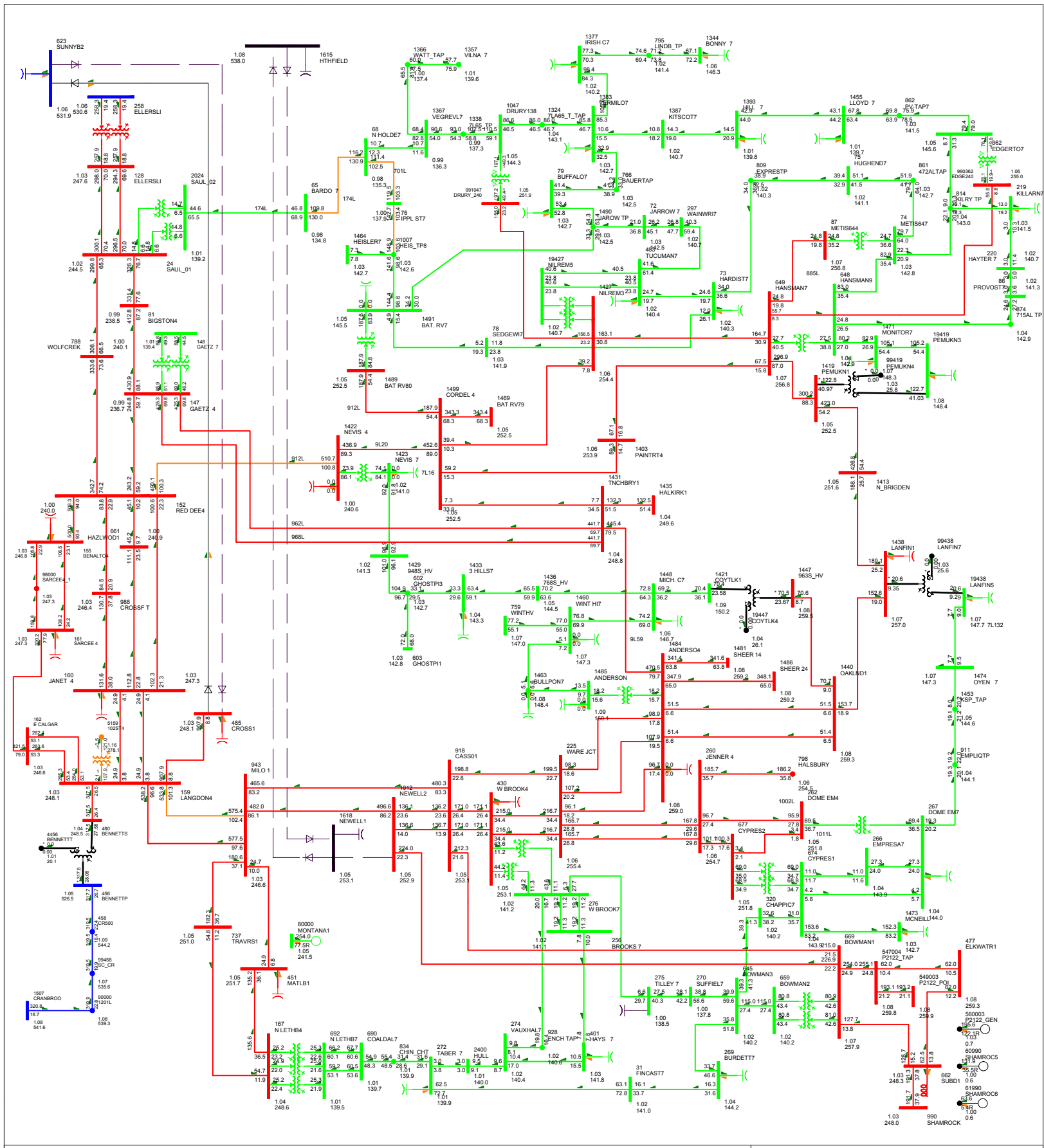
Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading



New Generation in Study Area and SW Sub-region
 South East: 936.2 MW Central East: 524.9 MW South West: 603.9 MW
 FIG. D-47 - VR-2018; CASE: H11; GEN: SCN 2
 PROJECT: CETO STAGES1&2
 CAP: MAXIMIZE
 HULL: APR. 02 2020 14:36
 Contingency Base
 Tip Action: None
 Genshed=Not Applied

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

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



New Generation in Study Area and SW Sub-region
 South East: 936.2 MW Central East: 524.9 MW South West: 603.9 MW
 FIG. D-48 (1) 1R/2015, CASE: H11; GEN SCN 2
 PROJECT: GEN STAGES 1&2
 CAP: MAXIMIZE
 HULL APR 02 2020 14:36
 Contingency EATL
 Tip Action: None
 Genshed=Not Applied

Branch Loading: $\geq 100.0\%$
 kV: ≤ 25.000 ≤ 69.000 ≤ 138.000 ≤ 240.000 ≤ 500.000
 Bus - Voltage (kV/bu)
 Branch - MW/Loading
 Equipment - MW/Loading

