

**ANEXO III-3**  
**ANÁLISIS DE CORTOCIRCUITO DE CORTO PLAZO**

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Año 2015 – Época Lluviosa en Demanda Máxima

OUTPUT FOR OWNER 20 [ETESA ]

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

```

                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
    6000 [FRONTPRO   230.00] 3PH   1779.12  4466.0  -97.36
                        LG      2021.50  5074.4  -98.21
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/29.877/82.883, 8.00945  Z-:/29.135/83.683, 9.03366  Z0:/19.881/85.071, 11.59632

```

```

                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
    6001 [PAN230     230.00] 3PH   2976.21  7470.9 -118.86
                        LG      3253.30  8166.5 -123.06
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/17.843/68.602, 2.55201  Z-:/17.539/70.896, 2.88722  Z0:/13.775/80.677, 6.09113

```

```

                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
    6002 [PAN115     115.00] 3PH   2822.56  14170.5 -119.81
                        LG      3179.21  15961.0 -124.26
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.787/66.027, 2.24884  Z-:/4.727/67.879, 2.46014  Z0:/3.307/80.644, 6.06937

```

```

                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG

```

```

6003 [PANII230    230.00] 3PH    2918.27    7325.5   -119.12
                                LG    3213.42    8066.4   -123.18
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/18.396/69.520, 2.67749  Z-:/18.128/71.561, 2.99922  Z0:/13.789/81.659, 6.82016

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6004 [PANII115    115.00] 3PH    1983.26    9956.8   -123.80
                                LG    2248.52    11288.5  -127.91
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/6.974/71.220, 2.94083  Z-:/6.924/72.669, 3.20446  Z0:/4.654/85.502, 12.71105

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6005 [CHO230      230.00] 3PH    2489.42    6249.0   -118.70
                                LG    2745.82    6892.6   -123.35
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/21.259/71.346, 2.96212  Z-:/20.736/74.587, 3.62715  Z0:/16.059/83.985, 9.48996

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6008 [LSA230      230.00] 3PH    2566.39    6442.2   -111.44
                                LG    2603.75    6536.0   -114.39
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/20.600/75.688, 3.91959  Z-:/20.234/77.378, 4.46585  Z0:/20.168/82.891, 8.01821

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6009 [LSA115      115.00] 3PH    1398.75    7022.3   -117.00
                                LG    1767.17    8872.0   -119.09
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/9.442/78.703, 5.00592  Z-:/9.248/80.162, 5.76658  Z0:/3.764/87.594, 23.80029

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6011 [MDN230      230.00] 3PH    2832.67    7110.6   -100.07
                                LG    3950.97    9917.8   -99.06
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/18.663/82.209, 7.30856  Z-:/18.174/83.357, 8.58594  Z0:/3.472/64.176, 2.06642

```

```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
 6012 [MDN115      115.00] 3PH   1810.33  9088.7  -100.14
                               LG    1380.31  6929.8   53.24
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/7.355/84.546, 10.47439  Z-:/6.947/86.401, 15.89872  Z0:/42.281/-77.276, 4.42851

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
 6014 [PRO230      230.00] 3PH   1935.87  4859.4  -97.39
                               LG    2301.00  5776.0  -98.81
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/27.450/83.110, 8.27616  Z-:/26.653/84.053, 9.60036  Z0:/15.215/87.950, 27.93602

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
 6015 [PRO115      115.00] 3PH   896.30  4499.8  -100.78
                               LG    1683.38  8451.3  -100.75
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/14.766/85.901, 13.95545  Z-:/13.883/87.341, 21.52952  Z0:/5.071/-89.997, 9999.999

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
 6018 [CAC115      115.00] 3PH   2788.51  13999.5 -120.02
                               LG    3137.64  15752.3 -124.13
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.842/66.169, 2.26401  Z-:/4.783/67.985, 2.47323  Z0:/3.345/79.544, 5.41865

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
 6024 [CHI115      115.00] 3PH   1355.61  6805.8  -126.54
                               LG    1347.79  6766.5  -130.68
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/9.810/71.574, 3.00156  Z-:/9.744/72.364, 3.14551  Z0:/10.170/82.928, 8.06104

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
 6059 [LM1115      115.00] 3PH   2202.42  11057.1 -129.37
                               LG    2738.12  13746.6 -131.00

```

THEVENIN IMPEDANCE, X/R (OHM) Z+:/6.071/76.260, 4.08977 Z-:/5.946/77.452, 4.49287 Z0:/2.644/82.638, 7.73928

-----<br><-SCMVA-> <-Sym I''k rms--><br>  /I/      AN(I)<br>X----- BUS -----X                  MVA      AMP      DEG<br>  6060 [LM2115      115.00] 3PH      2204.22  11066.2  -129.39<br>  LG      2735.97  13735.8  -131.08<br>THEVENIN IMPEDANCE, X/R (OHM) Z+:/6.067/76.288, 4.09855 Z-:/5.942/77.480, 4.50340 Z0:/2.666/82.939, 8.07288<br>-----

-----<br><-SCMVA-> <-Sym I''k rms--><br>  /I/      AN(I)<br>X----- BUS -----X                  MVA      AMP      DEG<br>  6087 [CAL115      115.00] 3PH      1474.71   7403.7   -97.01<br>  LG      1551.97   7791.6   -78.60<br>THEVENIN IMPEDANCE, X/R (OHM) Z+:/9.098/85.345, 12.28051 Z-:/8.852/86.070, 14.55473 Z0:/10.643/34.070, 0.67630<br>-----

-----<br><-SCMVA-> <-Sym I''k rms--><br>  /I/      AN(I)<br>X----- BUS -----X                  MVA      AMP      DEG<br>  6088 [LES115      115.00] 3PH      1246.25   6256.7   -95.89<br>  LG      1057.33   5308.3   -81.12<br>THEVENIN IMPEDANCE, X/R (OHM) Z+:/10.804/84.703, 10.78535 Z-:/10.579/85.211, 11.93650 Z0:/18.403/52.422, 1.29955<br>-----

-----<br><-SCMVA-> <-Sym I''k rms--><br>  /I/      AN(I)<br>X----- BUS -----X                  MVA      AMP      DEG<br>  6092 [LVA115      115.00] 3PH      1386.37   6960.2   -96.53<br>  LG      1335.41   6704.3   -79.68<br>THEVENIN IMPEDANCE, X/R (OHM) Z+:/9.682/85.071, 11.59556 Z-:/9.443/85.707, 13.32071 Z0:/13.153/42.808, 0.92627<br>-----

-----<br><-SCMVA-> <-Sym I''k rms--><br>  /I/      AN(I)<br>X----- BUS -----X                  MVA      AMP      DEG<br>  6096 [FOR230      230.00] 3PH      2736.71   6869.7   -100.07<br>  LG      3362.93   8441.7   -99.28<br>THEVENIN IMPEDANCE, X/R (OHM) Z+:/19.356/82.584, 7.68258 Z-:/19.001/83.414, 8.66169 Z0:/8.943/76.644, 4.21197<br>-----

-----<br><-SCMVA-> <-Sym I''k rms--><br>  /I/      AN(I)<br>-----

```

X----- BUS -----X          MVA      AMP      DEG
 6100 [BAY230      230.00] 3PH   2117.48   5315.3  -124.16
                               LG      2358.38   5920.0  -127.15
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/25.765/77.070, 4.35569  Z-:/25.607/78.052, 4.72590  Z0:/18.219/87.149, 20.08332

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6170 [CPA115      115.00] 3PH   1345.80   6756.5  -128.27
                               LG      1401.08   7034.1  -131.02
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/9.955/74.800, 3.68062  Z-:/9.862/75.539, 3.87767  Z0:/8.926/82.832, 7.95191

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6171 [PAC230      230.00] 3PH   2315.54   5812.5  -122.16
                               LG      2362.05   5929.3  -125.46
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/23.378/73.508, 3.37772  Z-:/23.168/74.905, 3.70754  Z0:/22.358/82.236, 7.33450

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6173 [STR115      115.00] 3PH   2039.02  10236.8  -129.18
                               LG      2468.74  12394.2  -130.97
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/6.573/76.297, 4.10110  Z-:/6.466/77.363, 4.46011  Z0:/3.264/83.093, 8.25511

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6179 [GUA230      230.00] 3PH   2852.47   7160.3  -100.70
                               LG      3296.27   8274.3  -100.19
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/18.521/82.901, 8.02990  Z-:/18.239/83.659, 8.99943  Z0:/11.341/79.510, 5.40099

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6182 [VEL230      230.00] 3PH   2767.96   6948.2  -104.74
                               LG      2518.64   6322.3  -100.24
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/19.042/80.063, 5.70773  Z-:/18.698/81.198, 6.45824  Z0:/25.409/68.042, 2.48032

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6240 [EHIG230      230.00] 3PH  2123.90  5331.4  -115.13
          LG      1974.96  4957.6  -117.93
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/24.808/74.235, 3.54210  Z-:/24.426/76.104, 4.04188  Z0:/30.876/80.019, 5.68223
-----

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6260 [CHA230      230.00] 3PH  1502.44  3771.5  -97.15
          LG      1774.59  4454.6  -99.10
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/35.777/82.762, 7.87369  Z-:/35.574/83.004, 8.14935  Z0:/19.689/91.342, 42.67826
-----

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6261 [CHA115      115.00] 3PH  530.05   2661.1  -101.46
          LG      843.37   4234.1  -101.28
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/25.196/86.120, 14.74251  Z-:/25.150/86.214, 15.11294  Z0:/2.845/-90.101, 567.06110
-----

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6263 [ESP230      230.00] 3PH  1724.23  4328.2  -97.37
          LG      2029.57  5094.7  -88.72
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/31.220/83.945, 9.42683  Z-:/31.032/84.195, 9.83585  Z0:/20.395/47.520, 1.09208
-----

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6290 [CATIII115   115.00] 3PH  2121.57  10651.2 -129.43
          LG      2620.20  13154.5 -131.59
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/6.304/76.345, 4.11607  Z-:/6.182/77.489, 4.50650  Z0:/2.854/85.505, 12.72060
-----

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6340 [CAN230      230.00] 3PH  1656.41  4158.0  -99.48

```



LG 1589.91 3991.0 -99.16  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/32.053/82.609, 7.70935 Z-:/31.802/82.987, 8.12871 Z0:/36.332/81.417, 6.62559

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6350 [PM115-8 115.00] 3PH 2292.77 11510.7 -121.08  
 LG 2307.40 11584.2 -123.80  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/5.857/66.339, 2.28228 Z-:/5.803/67.850, 2.45657 Z0:/5.820/73.001, 3.27114

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6380 [BOQIII230 230.00] 3PH 2180.37 5473.2 -98.16  
 LG 2350.85 5901.2 -99.90  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/24.319/82.599, 7.69841 Z-:/23.745/83.451, 8.71102 Z0:/19.648/87.576, 23.62647

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6400 [FRONTCHA 230.00] 3PH 1229.06 3085.2 -96.75  
 LG 1273.08 3195.7 -96.78  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/43.795/82.350, 7.44488 Z-:/43.589/82.546, 7.64349 Z0:/39.457/82.225, 7.32355

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6401 [PM230-29 230.00] 3PH 2169.66 5446.3 -100.37  
 LG 2010.38 5046.5 -98.27  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/24.402/82.912, 8.04170 Z-:/24.132/83.458, 8.72026 Z0:/30.579/77.051, 4.34896

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6440 [DOM230 230.00] 3PH 1562.57 3922.4 -99.30  
 LG 1963.44 4928.7 -99.25  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/33.956/83.489, 8.76167 Z-:/33.539/83.927, 9.39960 Z0:/13.580/82.110, 7.21615

-----  
 <-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6441 [PRIM230      230.00] 3PH
                               LG
MVA      /I/      AN(I)
1250.75  AMP      DEG
1363.16  3421.8   -97.29
THEVENIN IMPEDANCE, X/R (OHM) Z+:/42.421/82.460, 7.55486 Z-:/41.999/82.800, 7.91549 Z0:/32.411/78.475, 4.90414

```

-----  
<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6460 [ECO230      230.00] 3PH
                               LG
MVA      /I/      AN(I)
2239.12  AMP      DEG
2577.49  6470.1   -119.52
THEVENIN IMPEDANCE, X/R (OHM) Z+:/23.728/77.555, 4.53129 Z-:/23.471/78.896, 5.09514 Z0:/14.757/86.362, 15.72617

```

-----  
<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6470 [24DIC230    230.00] 3PH
                               LG
MVA      /I/      AN(I)
2488.42  AMP      DEG
2616.22  6567.3   -123.94
THEVENIN IMPEDANCE, X/R (OHM) Z+:/21.631/70.490, 2.82230 Z-:/21.379/72.140, 3.10345 Z0:/18.945/81.954, 7.07457

```

-----  
<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6500 [FRONTDOM    230.00] 3PH
                               LG
MVA      /I/      AN(I)
1520.81  AMP      DEG
1775.95  4458.0   -95.29
THEVENIN IMPEDANCE, X/R (OHM) Z+:/34.920/83.097, 8.26019 Z-:/34.431/83.572, 8.87647 Z0:/20.930/68.044, 2.48054

```

-----  
<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6601 [COP230      230.00] 3PH
                               LG
MVA      /I/      AN(I)
2441.80  AMP      DEG
2571.19  6454.3   -124.15
THEVENIN IMPEDANCE, X/R (OHM) Z+:/22.052/70.785, 2.86920 Z-:/21.804/72.393, 3.15110 Z0:/19.208/82.258, 7.35590

```

-----  
<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6760 [SBA230      230.00] 3PH
                               LG
MVA      /I/      AN(I)
2269.96  AMP      DEG
1635.81  4106.2   -109.98
THEVENIN IMPEDANCE, X/R (OHM) Z+:/23.199/79.570, 5.43271 Z-:/22.867/80.691, 6.10077 Z0:/50.532/82.271, 7.36833

```

Año 2016 – Época Seca en Demanda Máxima

OUTPUT FOR OWNER 20 [ETESA ]

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

```

                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6000 [FRONTPRO   230.00] 3PH   2104.51   5282.8  -105.61
                        LG      2230.18   5598.2  -106.26
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/25.357/83.758, 9.14304  Z-:/24.882/84.323, 10.06027  Z0:/21.551/85.285, 12.12305
  
```

```

                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6001 [PAN230     230.00] 3PH   3246.76   8150.1  -118.70
                        LG      3654.06   9172.5  -122.54
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/16.183/68.707, 2.56583  Z-:/15.882/70.332, 2.79776  Z0:/11.251/81.246, 6.49376
  
```

```

                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6002 [PAN115     115.00] 3PH   3185.66  15993.4 -118.68
                        LG      3684.53  18498.0 -122.71
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.190/66.460, 2.29545  Z-:/4.130/67.856, 2.45734  Z0:/2.609/81.182, 6.44621
  
```

```

                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  
```

```

6003 [PANII230    230.00] 3PH    3067.33    7699.7   -119.10
                                LG    3441.02    8637.7   -122.78
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/17.279/69.517, 2.67703  Z-:/17.002/70.965, 2.89846  Z0:/12.106/81.617, 6.78559

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6004 [PANII115    115.00] 3PH    2371.33   11905.1  -123.09
                                LG    2639.76   13252.8  -127.08
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/5.726/71.332, 2.95980  Z-:/5.669/72.409, 3.15412  Z0:/4.114/84.909, 11.22380

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6005 [CHO230      230.00] 3PH    2756.03   6918.2   -119.22
                                LG    3058.43   7677.3   -123.28
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/19.241/72.483, 3.16826  Z-:/18.700/74.824, 3.68666  Z0:/14.262/84.283, 9.98790

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6008 [LSA230      230.00] 3PH    2917.37   7323.2   -113.35
                                LG    2844.68   7140.8   -115.84
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/18.377/76.848, 4.27967  Z-:/18.079/77.996, 4.70298  Z0:/20.143/82.836, 7.95605

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6009 [LSA115      115.00] 3PH    1490.52   7483.0   -119.22
                                LG    1864.98   9363.0   -120.86
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/8.950/80.624, 6.05638  Z-:/8.767/81.664, 6.82493  Z0:/3.762/87.577, 23.63703

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6011 [MDN230      230.00] 3PH    3763.52   9447.3   -106.99
                                LG    5103.94   12812.0  -105.27
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/14.182/83.443, 8.70007  Z-:/13.916/84.212, 9.86534  Z0:/3.451/64.347, 2.08222

```

```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
 6012 [MDN115      115.00] 3PH  2036.35  10223.4 -109.37
          LG      1300.60   6529.6   46.72
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/6.604/85.517, 12.75568  Z-:/6.290/87.169, 20.21998  Z0:/43.175/-77.303, 4.43850

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
 6014 [PRO230      230.00] 3PH  2341.80   5878.4 -105.86
          LG      2753.32   6911.4 -106.67
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/22.784/84.243, 9.91909  Z-:/22.269/84.945, 11.30478  Z0:/13.091/86.650, 17.08556

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
 6015 [PRO115      115.00] 3PH   975.99   4899.9 -108.90
          LG      1861.73   9346.7 -108.91
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/13.609/86.607, 16.86595  Z-:/12.861/87.960, 28.07950  Z0:/5.072/-89.995, 9999.999

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
 6018 [CAC115      115.00] 3PH  3142.70  15777.7 -118.87
          LG      3629.70  18222.7 -122.57
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.244/66.596, 2.31044  Z-:/4.184/67.961, 2.47021  Z0:/2.645/79.984, 5.66189

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
 6024 [CHI115      115.00] 3PH  1421.11   7134.6 -125.67
          LG      1389.45   6975.7 -129.18
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/9.245/73.448, 3.36469  Z-:/9.194/73.969, 3.48030  Z0:/10.012/82.942, 8.07696

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
 6059 [LM1115      115.00] 3PH  3225.60  16193.9 -126.47
          LG      3683.96  18495.1 -127.89

```

THEVENIN IMPEDANCE, X/R (OHM) Z+:/4.114/78.331, 4.84194 Z-:/4.040/79.240, 5.26230 Z0:/2.657/82.728, 7.83647

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6060 [LM2115      115.00] 3PH  3217.73  16154.4  -126.48  
                                  LG      3670.15  18425.8  -127.97  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.124/78.358, 4.85371 Z-:/4.050/79.265, 5.27465 Z0:/2.679/83.023, 8.17153

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6087 [CAL115      115.00] 3PH  1558.06   7822.2  -107.75  
                                  LG      1618.23   8124.2   -88.18  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/8.660/85.561, 12.87997 Z-:/8.470/86.159, 14.89288 Z0:/10.638/32.823, 0.64503

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6088 [LES115      115.00] 3PH  1299.48   6524.0  -106.73  
                                  LG      1086.60   5455.2   -91.33  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/10.408/84.795, 10.97819 Z-:/10.233/85.209, 11.93010 Z0:/18.325/51.742, 1.26813

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6092 [LVA115      115.00] 3PH  1457.07   7315.1  -107.32  
                                  LG      1383.61   6946.3   -89.54  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/9.260/85.232, 11.98880 Z-:/9.075/85.753, 13.46725 Z0:/13.112/41.813, 0.89451

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6096 [FOR230      230.00] 3PH  4119.75  10341.5  -107.21  
                                  LG      4625.04  11609.9  -105.24  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/12.974/84.975, 11.37354 Z-:/12.823/85.436, 12.52847 Z0:/8.947/76.656, 4.21574

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/      AN(I)

```

X----- BUS -----X          MVA      AMP      DEG
 6100 [BAY230      230.00] 3PH  1604.89  4028.6  -123.14
                               LG   1904.14  4779.8  -126.33
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/33.195/73.603, 3.39841  Z-:/32.952/74.364, 3.57295  Z0:/18.160/87.074, 19.56433

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6170 [CPA115      115.00] 3PH  1664.23  8355.2  -126.55
                               LG   1609.17  8078.7  -128.37
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/8.019/78.138, 4.76106  Z-:/7.966/78.582, 4.95124  Z0:/8.913/82.816, 7.93385

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6171 [PAC230      230.00] 3PH  2200.54  5523.8  -122.00
                               LG   2293.54  5757.3  -125.25
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/24.200/72.664, 3.20344  Z-:/23.955/73.670, 3.41313  Z0:/21.682/82.000, 7.11531

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6173 [STR115      115.00] 3PH  2882.25  14470.2 -125.63
                               LG   3252.36  16328.3 -127.42
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.617/76.930, 4.30744  Z-:/4.553/77.770, 4.61352  Z0:/3.115/82.775, 7.88761

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6179 [GUA230      230.00] 3PH  3796.78  9530.8  -107.61
                               LG   4074.74  10228.5 -106.31
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/14.059/84.511, 10.40670  Z-:/13.929/84.911, 11.22895  Z0:/11.345/79.507, 5.39893

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6182 [VEL230      230.00] 3PH  3423.73  8594.3  -109.67
                               LG   2872.19  7209.8  -103.80
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/15.666/81.177, 6.44229  Z-:/15.463/81.874, 7.00321  Z0:/25.303/67.647, 2.43188

```



```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6240 [EHIG230      230.00] 3PH      2333.15    5856.7   -116.25
                LG      2102.96    5278.9   -118.53
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/22.806/75.194, 3.78329  Z-:/22.453/76.471, 4.15618  Z0:/30.697/79.900, 5.61400

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6245 [BNGA230      230.00] 3PH      2488.65    6247.1   -120.47
                LG      2404.62    6036.1   -122.54
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/21.262/73.599, 3.39738  Z-:/21.023/74.727, 3.66212  Z0:/23.774/78.358, 4.85373

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6260 [CHA230       230.00] 3PH      1718.08    4312.8   -102.96
                LG      1967.36    4938.5   -104.93
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/31.439/83.251, 8.44956  Z-:/31.352/83.346, 8.57172  Z0:/19.723/91.341, 42.70928

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6261 [CHA115       115.00] 3PH      608.77     3056.3   -106.73
                LG      976.78     4903.9   -106.52
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/21.932/86.679, 17.23110  Z-:/21.915/86.712, 17.40663  Z0:/2.844/-90.101, 566.42053

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6263 [ESP230       230.00] 3PH      1963.16    4928.0   -103.17
                LG      2241.51    5626.7   -93.49
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/27.540/84.314, 10.04369  Z-:/27.460/84.412, 10.22061  Z0:/20.394/47.513, 1.09181

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6290 [CATIII115    115.00] 3PH      3040.32    15263.8  -126.44

```

```

                LG      3477.20  17457.0  -128.49
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.366/78.237, 4.80240  Z-:/4.293/79.097, 5.19160  Z0:/2.807/85.316, 12.20405

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6340 [CAN230      230.00] 3PH  1928.01  4839.7  -105.50
                        LG      1750.45  4394.0  -104.81
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/27.760/83.292, 8.50185  Z-:/27.647/83.457, 8.71918  Z0:/36.334/81.419, 6.62689

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6350 [PM115-8    115.00] 3PH  2587.36  12989.7 -119.84
                        LG      2832.86  14222.2 -123.06
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/5.111/66.448, 2.29414  Z-:/5.056/67.586, 2.42454  Z0:/3.878/76.648, 4.21335

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6380 [BOQIII230  230.00] 3PH  2657.77  6671.6  -105.72
                        LG      2831.25  7107.1  -107.20
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/20.098/83.418, 8.66674  Z-:/19.759/83.989, 9.49734  Z0:/16.772/87.743, 25.37530

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6400 [FRONTCHA   230.00] 3PH  1371.32  3442.3  -102.42
                        LG      1370.57  3440.4  -102.27
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/39.442/82.698, 7.80369  Z-:/39.355/82.773, 7.88552  Z0:/39.595/82.195, 7.29560

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6401 [PM230-29   230.00] 3PH  2670.15  6702.6  -106.78
                        LG      2278.72  5720.1  -103.84
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/20.017/84.002, 9.51700  Z-:/19.893/84.263, 9.95308  Z0:/30.589/77.050, 4.34891

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->

```

```

X----- BUS -----X
 6440 [DOM230      230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	1786.30	4484.0	-107.39
LG	2236.20	5613.3	-107.08

Z+:/29.792/84.044, 9.58554    Z-:/29.551/84.292, 10.00469    Z0:/12.061/81.628, 6.79498

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6441 [PRIM230     230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	1391.23	3492.3	-106.12
LG	1489.62	3739.3	-104.84

Z+:/38.252/82.780, 7.89402    Z-:/38.008/82.965, 8.10337    Z0:/30.992/78.110, 4.74938

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6460 [ECO230      230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	2422.48	6081.0	-116.39
LG	2750.50	6904.4	-118.71

Z+:/22.017/78.284, 4.82204    Z-:/21.791/79.188, 5.23615    Z0:/14.463/86.295, 15.44335

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6470 [24DIC230    230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	2477.57	6219.2	-119.52
LG	2636.46	6618.1	-123.46

Z+:/21.404/69.816, 2.72027    Z-:/21.130/70.984, 2.90155    Z0:/18.055/81.678, 6.83606

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6500 [FRONTDOM    230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	1731.13	4345.5	-106.58
LG	2042.43	5126.9	-103.73

Z+:/30.781/83.600, 8.91470    Z-:/30.490/83.880, 9.32641    Z0:/17.376/70.172, 2.77329

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6601 [COP230      230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	2414.15	6060.0	-119.77
LG	2573.86	6461.0	-123.69

Z+:/21.970/70.066, 2.75740    Z-:/21.698/71.206, 2.93854    Z0:/18.407/81.980, 7.09711

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6760 [SBA230      230.00] 3PH    2665.54   6691.1  -112.00
                                LG      1778.38   4464.1  -113.05
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/20.141/80.644, 6.06967  Z-:/19.921/81.343, 6.56777  Z0:/50.509/82.247, 7.34474
-----

```

Año 2016 – Época Lluviosa en Demanda Máxima

OUTPUT FOR OWNER 20 [ETESA ]

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

```

                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
   6000 [FRONTPRO   230.00] 3PH   2082.77   5228.2  -102.35
                        LG      2211.93   5552.4  -103.17
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/25.497/83.300, 8.51203  Z-:/24.997/83.985, 9.49028  Z0:/21.537/85.246, 12.02472

```

```

                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
   6001 [PAN230    230.00] 3PH   2950.62   7406.7  -119.18
                        LG      3507.52   8804.6  -123.93
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/17.901/64.749, 2.12022  Z-:/17.481/67.134, 2.37124  Z0:/10.115/82.102, 7.20878

```

```

                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
   6002 [PAN115    115.00] 3PH   2780.44  13959.0 -120.19
                        LG      3378.64  16962.3 -124.89
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.837/62.813, 1.94691  Z-:/4.747/64.921, 2.13685  Z0:/2.456/81.945, 7.06655

```

```

                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG

```

```

6003 [PANII230    230.00] 3PH    2871.99    7209.3   -120.04
                                LG    3317.08    8326.6   -124.64
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/18.608/65.967, 2.24255  Z-:/18.235/68.113, 2.48923  Z0:/11.788/81.657, 6.81924

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6004 [PANII115    115.00] 3PH    2171.20   10900.4  -125.22
                                LG    2493.88   12520.3  -129.94
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/6.318/68.161, 2.49520  Z-:/6.239/69.835, 2.72306  Z0:/4.065/84.974, 11.37078

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6005 [CHO230      230.00] 3PH    2718.04   6822.9   -119.21
                                LG    3197.04   8025.3   -124.23
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/19.407/67.330, 2.39405  Z-:/18.843/70.101, 2.76265  Z0:/11.597/84.491, 10.36876

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6008 [LSA230      230.00] 3PH    3014.52   7567.1   -114.24
                                LG    3123.65   7841.0   -117.75
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/17.674/73.083, 3.28792  Z-:/17.327/74.949, 3.71871  Z0:/16.285/82.140, 7.24346

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6009 [LSA115      115.00] 3PH    1611.75   8091.7   -121.36
                                LG    2009.12   10086.7  -123.65
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/8.241/77.873, 4.65378  Z-:/8.112/79.215, 5.24985  Z0:/3.518/87.703, 24.92998

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6011 [MDN230      230.00] 3PH    3419.45   8583.6   -105.06
                                LG    4680.15   11748.2  -103.80
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/15.451/81.987, 7.10372  Z-:/15.131/83.086, 8.24648  Z0:/3.441/64.415, 2.08860

```

```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6012 [MDN115      115.00] 3PH  2050.29  10293.3 -105.79
                      LG  1262.23   6336.9   49.28
THEVENIN IMPEDANCE, X/R (OHM) Z+:/6.507/84.610, 10.59884 Z-:/6.183/86.447, 16.10684 Z0:/43.604/-77.268, 4.42591

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6014 [PRO230      230.00] 3PH  2306.09  5788.8 -102.51
                      LG  2718.91  6825.0 -103.48
THEVENIN IMPEDANCE, X/R (OHM) Z+:/23.016/83.738, 9.11274 Z-:/22.474/84.570, 10.52022 Z0:/13.086/86.633, 16.99706

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6015 [PRO115      115.00] 3PH  967.02   4854.9 -105.84
                      LG  1843.36  9254.5 -105.83
THEVENIN IMPEDANCE, X/R (OHM) Z+:/13.665/86.398, 15.88490 Z-:/12.907/87.798, 26.00494 Z0:/5.072/-89.995, 9999.999

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6018 [CAC115      115.00] 3PH  2742.39  13768.0 -120.43
                      LG  3325.12  16693.5 -124.81
THEVENIN IMPEDANCE, X/R (OHM) Z+:/4.899/62.965, 1.95962 Z-:/4.811/65.033, 2.14773 Z0:/2.496/80.500, 5.97548

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6024 [CHI115      115.00] 3PH  1295.39  6503.4 -130.06
                      LG  1310.53  6579.4 -134.28
THEVENIN IMPEDANCE, X/R (OHM) Z+:/10.217/71.079, 2.91735 Z-:/10.142/72.014, 3.08021 Z0:/10.070/82.888, 8.01433

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6059 [LM1115      115.00] 3PH  2281.96  11456.4 -130.58
                      LG  2817.58  14145.5 -132.97

```



THEVENIN IMPEDANCE, X/R (OHM) Z+:/5.834/73.136, 3.29879 Z-:/5.710/74.616, 3.63443 Z0:/2.657/82.724, 7.83261

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6060 [LM2115      115.00] 3PH  2280.28  11448.0  -130.62  
                                  LG      2811.97  14117.3  -133.06  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/5.838/73.192, 3.31052 Z-:/5.715/74.669, 3.64774 Z0:/2.678/83.020, 8.16735

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6087 [CAL115      115.00] 3PH  1560.21  7832.9  -102.40  
                                  LG      1618.38  8125.0  -82.70  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/8.610/85.134, 11.74584 Z-:/8.413/85.810, 13.65096 Z0:/10.647/32.226, 0.63037

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6088 [LES115      115.00] 3PH  1300.43  6528.7  -101.25  
                                  LG      1086.29  5453.7  -85.83  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/10.364/84.467, 10.32335 Z-:/10.184/84.939, 11.29055 Z0:/18.297/51.405, 1.25291

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6092 [LVA115      115.00] 3PH  1458.72  7323.4  -101.90  
                                  LG      1383.55  6946.0  -84.06  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/9.212/84.844, 11.08192 Z-:/9.021/85.435, 12.52561 Z0:/13.104/41.328, 0.87940

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6096 [FOR230      230.00] 3PH  3384.26  8495.2  -104.63  
                                  LG      3975.81  9980.2  -103.61  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/15.660/82.583, 7.68202 Z-:/15.445/83.351, 8.57803 Z0:/8.927/76.704, 4.23165

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/      AN(I)

```

X----- BUS -----X          MVA      AMP      DEG
  6100 [BAY230      230.00] 3PH   2066.05   5186.2  -126.74
                                LG     2318.83   5820.8  -130.22
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/26.243/75.070, 3.75045  Z-:/26.026/76.147, 4.05513  Z0:/18.149/87.061, 19.47631

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
  6170 [CPA115      115.00] 3PH   1301.32   6533.2  -131.78
                                LG     1368.02   6868.0  -134.71
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/10.248/74.180, 3.52927  Z-:/10.153/75.074, 3.75138  Z0:/8.909/82.814, 7.93082

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
  6171 [PAC230      230.00] 3PH   2189.01   5494.9  -123.89
                                LG     2299.19   5771.5  -127.95
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/24.506/70.401, 2.80854  Z-:/24.205/71.912, 3.06170  Z0:/21.553/81.965, 7.08362

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
  6173 [STR115      115.00] 3PH   2189.30  10991.2  -129.74
                                LG     2641.68  13262.4  -132.41
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/6.109/72.447, 3.16131  Z-:/6.003/73.874, 3.45870  Z0:/3.113/82.765, 7.87666

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
  6179 [GUA230      230.00] 3PH   3366.78   8451.4  -105.30
                                LG     3737.37   9381.6  -104.83
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/15.711/82.494, 7.58982  Z-:/15.534/83.211, 8.40010  Z0:/11.227/79.714, 5.51040

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
  6182 [VEL230      230.00] 3PH   3346.22   8399.8  -109.87
                                LG     3248.53   8154.5  -108.69
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/15.944/78.284, 4.82188  Z-:/15.687/79.586, 5.44109  Z0:/17.685/73.854, 3.45420

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6240 [EHIG230      230.00] 3PH      2218.37  5568.6  -117.85
                LG      2053.53  5154.8  -121.31
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/23.841/71.933, 3.06542  Z-:/23.447/73.663, 3.41162  Z0:/30.106/79.474, 5.38180
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6245 [BNGA230      230.00] 3PH      2345.46  5887.6  -122.48
                LG      2327.09  5841.5  -125.67
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/22.721/70.651, 2.84777  Z-:/22.413/72.345, 3.14199  Z0:/23.682/78.317, 4.83609
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6260 [CHA230       230.00] 3PH      1642.35  4122.7  -99.99
                LG      1900.72  4771.2  -102.04
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/32.709/82.822, 7.94030  Z-:/32.588/83.019, 8.16716  Z0:/19.655/91.360, 42.11304
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6261 [CHA115       115.00] 3PH      598.76   3006.0  -102.56
                LG      960.05   4819.9  -102.36
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/22.201/86.504, 16.36870  Z-:/22.178/86.572, 16.69419  Z0:/2.845/-90.102, 560.60571
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6263 [ESP230       230.00] 3PH      1871.08  4696.8  -100.01
                LG      2158.97  5419.5  -90.75
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/28.757/83.879, 9.32431  Z-:/28.645/84.081, 9.64624  Z0:/20.392/47.375, 1.08655
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6290 [CATIII115    115.00] 3PH      2199.10  11040.4 -130.70
-----

```

LG 2708.27 13596.7 -133.55  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/6.057/73.272, 3.32723 Z-:/5.936/74.702, 3.65587 Z0:/2.807/85.310, 12.19038

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6340 [CAN230 230.00] 3PH 1812.20 4549.0 -103.55  
 LG 1681.79 4221.7 -103.27  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/29.268/82.441, 7.53548 Z-:/29.115/82.765, 7.87712 Z0:/36.234/81.455, 6.65504

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6350 [PM115-8 115.00] 3PH 2320.91 11652.0 -121.80  
 LG 2646.61 13287.1 -125.77  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/5.749/63.282, 1.98669 Z-:/5.669/65.051, 2.14948 Z0:/3.776/76.657, 4.21627

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6380 [BOQIII230 230.00] 3PH 2574.06 6461.4 -102.90  
 LG 2763.67 6937.4 -104.62  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/20.592/82.765, 7.87667 Z-:/20.217/83.524, 8.81033 Z0:/16.768/87.746, 25.40409

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6400 [FRONTCHA 230.00] 3PH 1321.10 3316.3 -99.55  
 LG 1335.46 3352.3 -99.54  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/40.717/82.369, 7.46383 Z-:/40.596/82.527, 7.62309 Z0:/39.527/82.189, 7.28961

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6401 [PM230-29 230.00] 3PH 2450.02 6150.1 -104.84  
 LG 2164.26 5432.8 -102.71  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/21.617/82.657, 7.75961 Z-:/21.449/83.148, 8.32219 Z0:/30.436/77.164, 4.38865

-----  
 <-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6440 [DOM230      230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	1831.54	4597.6	-104.59
LG	2289.23	5746.5	-104.25

Z+:/28.985/83.745, 9.12302    Z-:/28.735/84.104, 9.68370    Z0:/11.865/80.863, 6.21722

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6441 [PRIM230     230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	1477.08	3707.8	-103.62
LG	1555.81	3905.4	-102.16

Z+:/35.937/82.979, 8.11954    Z-:/35.694/83.246, 8.44428    Z0:/30.817/77.809, 4.62876

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6460 [ECO230      230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	2350.55	5900.4	-119.92
LG	2694.99	6765.0	-123.03

Z+:/22.668/75.547, 3.87971    Z-:/22.400/76.951, 4.31479    Z0:/14.413/86.218, 15.12788

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6470 [24DIC230    230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	2449.10	6147.8	-121.42
LG	2636.93	6619.3	-126.14

Z+:/21.872/67.540, 2.41896    Z-:/21.526/69.292, 2.64530    Z0:/17.886/81.640, 6.80453

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6500 [FRONTDOM    230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	1755.62	4407.0	-103.67
LG	2067.81	5190.7	-100.79

Z+:/30.258/83.263, 8.46540    Z-:/29.954/83.649, 8.98455    Z0:/17.251/69.568, 2.68432

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6601 [COP230      230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	2403.39	6033.0	-121.73
LG	2586.16	6491.8	-126.42

Z+:/22.296/67.905, 2.46330    Z-:/21.955/69.615, 2.69110    Z0:/18.255/81.940, 7.06134

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6760 [SBA230      230.00] 3PH    2570.41  6452.3  -113.01
                                LG      2213.07  5555.3  -114.95
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/20.701/78.114, 4.75094  Z-:/20.436/79.311, 5.29792  Z0:/31.022/81.834, 6.96850
-----

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6860 [BBL230      230.00] 3PH    2730.02  6853.0  -110.46
                                LG      2478.97  6222.7  -109.80
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/19.542/78.240, 4.80367  Z-:/19.287/79.317, 5.30085  Z0:/25.756/75.780, 3.94620
-----

```

Año 2017 – Época Seca en Demanda Máxima

OUTPUT FOR AREA 6 [PANAMA ] OWNER 20 [ETESA ]

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6000 [FRONTPRO  230.00] 3PH    2184.58  5483.8  -152.22
                                LG      2285.50  5737.1  -153.08
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/24.346/83.148, 8.32251  Z-:/23.928/83.737, 9.11245  Z0:/21.547/85.275, 12.09873

```

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6001 [PAN230    230.00] 3PH    3556.92  8928.7  -162.20
                                LG      3947.71  9909.6  -166.67
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/14.765/68.579, 2.54895  Z-:/14.510/70.350, 2.80062  Z0:/10.853/82.792, 7.90698

```

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6002 [PAN115   115.00] 3PH    3441.26  17276.6 -162.28
                                LG      3884.59  19502.4 -167.05
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/3.876/66.363, 2.28485  Z-:/3.828/67.844, 2.45584  Z0:/2.672/82.816, 7.93391

```

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG

```



```

6003 [PANII230    230.00] 3PH    3311.00    8311.3  -162.78
                                LG    3519.31    8834.2  -167.29
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/16.008/69.308, 2.64758  Z-:/15.778/70.852, 2.88002  Z0:/13.626/82.581, 7.68008

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6004 [PANII115    115.00] 3PH    2696.93  13539.8 -166.19
                                LG    2845.09  14283.6 -170.81
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.955/71.146, 2.92850  Z-:/4.911/72.341, 3.14115  Z0:/4.307/85.033, 11.50563

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6005 [CHO230      230.00] 3PH    3303.00    8291.3  -162.71
                                LG    3663.08    9195.1  -167.22
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/15.935/71.235, 2.94333  Z-:/15.567/73.446, 3.36426  Z0:/11.816/84.887, 11.17565

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6008 [LSA230      230.00] 3PH    3533.45    8869.7  -159.82
                                LG    3038.35    7626.9  -163.32
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/14.821/76.425, 4.14152  Z-:/14.593/77.738, 4.60102  Z0:/22.379/83.670, 9.01415

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6009 [LSA115      115.00] 3PH    1720.32    8636.8  -166.24
                                LG    2080.91   10447.1 -168.07
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/7.630/80.523, 5.99045  Z-:/7.518/81.477, 6.67273  Z0:/3.796/87.738, 25.31208

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6011 [MDN230      230.00] 3PH    3864.94    9701.9  -154.43
                                LG    5215.73   13092.6 -152.72
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/13.701/82.847, 7.96810  Z-:/13.475/83.637, 8.96673  Z0:/3.448/64.365, 2.08385

```

```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6012 [MDN115      115.00] 3PH    2198.45  11037.2 -156.64
          LG          1254.68   6299.1   -0.27
THEVENIN IMPEDANCE, X/R (OHM) Z+:/6.096/85.204, 11.91950 Z-:/5.828/86.870, 18.28601 Z0:/43.282/-77.296, 4.43600

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6014 [PRO230      230.00] 3PH    2419.06  6072.4  -152.40
          LG          2819.53  7077.6  -153.41
THEVENIN IMPEDANCE, X/R (OHM) Z+:/21.981/83.459, 8.72115 Z-:/21.520/84.192, 9.83133 Z0:/13.089/86.646, 17.06382

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6015 [PRO115      115.00] 3PH    987.22   4956.3 -155.92
          LG          1888.32  9480.2 -155.90
THEVENIN IMPEDANCE, X/R (OHM) Z+:/13.416/86.236, 15.20059 Z-:/12.691/87.704, 24.94621 Z0:/5.072/-89.995, 9999.999

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6018 [CAC115      115.00] 3PH    3395.21  17045.4 -162.48
          LG          3820.03  19178.2 -166.80
THEVENIN IMPEDANCE, X/R (OHM) Z+:/3.925/66.513, 2.30124 Z-:/3.878/67.956, 2.46968 Z0:/2.723/81.209, 6.46600

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6024 [CHI115      115.00] 3PH    1463.36  7346.7  -169.09
          LG          1413.27  7095.2  -172.59
THEVENIN IMPEDANCE, X/R (OHM) Z+:/8.988/73.613, 3.40047 Z-:/8.953/74.112, 3.51343 Z0:/10.060/82.919, 8.05034

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6059 [LM1115      115.00] 3PH    3491.99  17531.3 -169.49
          LG          3874.40  19451.2 -170.92

```

THEVENIN IMPEDANCE, X/R (OHM) Z+:/3.802/78.923, 5.10797 Z-:/3.750/79.781, 5.54724 Z0:/2.732/83.132, 8.30199

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/    AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6060 [LM2115      115.00] 3PH  3479.29  17467.5  -169.50  
                                  LG      3859.03  19374.0  -171.00  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/3.816/78.934, 5.11288 Z-:/3.764/79.789, 5.55171 Z0:/2.746/83.405, 8.64956

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/    AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6087 [CAL115      115.00] 3PH  1622.63   8146.3  -154.58  
                                  LG      1656.70   8317.4  -134.47  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/8.290/85.321, 12.21860 Z-:/8.129/85.904, 13.96445 Z0:/10.640/32.674, 0.64136

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/    AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6088 [LES115      115.00] 3PH  1338.85   6721.6  -153.52  
                                  LG      1101.61   5530.6  -137.92  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/10.076/84.553, 10.48742 Z-:/9.927/84.955, 11.32663 Z0:/18.317/51.659, 1.26434

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/    AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6092 [LVA115      115.00] 3PH  1510.81   7584.9  -154.15  
                                  LG      1410.27   7080.1  -136.00  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/8.904/84.986, 11.39766 Z-:/8.747/85.493, 12.68675 Z0:/13.110/41.693, 0.89074

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/    AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6096 [FOR230      230.00] 3PH  3982.23   9996.3  -154.56  
                                  LG      4499.79  11295.4  -152.89  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/13.353/84.062, 9.61467 Z-:/13.216/84.556, 10.49362 Z0:/8.942/76.668, 4.21981

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/    AN(I)

```

X----- BUS -----X          MVA      AMP      DEG
 6100 [BAY230      230.00] 3PH   1667.26   4185.2  -167.09
                               LG     1955.10   4907.7  -170.42
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/31.956/73.648, 3.40821  Z-:/31.760/74.425, 3.58772  Z0:/18.417/87.227, 20.64406

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
           /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6170 [CPA115      115.00] 3PH   1716.36   8616.9  -169.59
                               LG     1640.22   8234.6  -171.35
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/7.775/78.364, 4.85618  Z-:/7.738/78.776, 5.03949  Z0:/8.911/82.823, 7.94121

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
           /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6171 [PAC230      230.00] 3PH   2316.28   5814.4  -165.90
                               LG     2302.42   5779.6  -169.37
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/22.992/72.657, 3.20223  Z-:/22.792/73.701, 3.41998  Z0:/23.786/81.806, 6.94491

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
           /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6173 [STR115      115.00] 3PH   3082.70  15476.5  -168.76
                               LG     3334.47  16740.5  -170.79
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.310/77.420, 4.48119  Z-:/4.265/78.224, 4.79684  Z0:/3.391/83.594, 8.90683

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
           /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6179 [GUA230      230.00] 3PH   3824.31   9599.9  -155.18
                               LG     4089.99  10266.8  -154.07
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/13.883/83.912, 9.37560  Z-:/13.770/84.351, 10.11018  Z0:/11.316/79.560, 5.42706

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
           /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6182 [VEL230      230.00] 3PH   3876.73   9731.4  -157.59
                               LG     3148.24   7902.8  -152.42
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/13.549/80.473, 5.95874  Z-:/13.387/81.317, 6.54823  Z0:/23.393/68.873, 2.58799

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6240 [EHIG230      230.00] 3PH    2508.76   6297.5  -161.90
                LG      2166.59   5438.6  -164.60
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/20.919/74.760, 3.67058  Z-:/20.659/75.974, 4.00293  Z0:/31.159/80.278, 5.83667

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6245 [BNGA230      230.00] 3PH    2604.70   6538.4  -164.96
                LG      2125.96   5336.6  -168.14
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/20.311/73.616, 3.40131  Z-:/20.117/74.779, 3.67517  Z0:/34.320/79.879, 5.60230

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6260 [CHA230       230.00] 3PH    1709.79   4291.9  -150.97
                LG      1959.17   4918.0  -152.99
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/31.503/83.038, 8.18884  Z-:/31.426/83.146, 8.31934  Z0:/19.706/91.347, 42.53958

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6261 [CHA115       115.00] 3PH     606.93   3047.0  -154.89
                LG      973.64   4888.1  -154.68
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/21.975/86.552, 16.59496  Z-:/21.959/86.589, 16.77560  Z0:/2.845/-90.101, 564.69403

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6263 [ESP230       230.00] 3PH    1951.54   4898.8  -151.17
                LG      2229.04   5595.4  -141.57
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/27.633/84.104, 9.68278  Z-:/27.561/84.215, 9.87047  Z0:/20.393/47.479, 1.09050

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6290 [CATIII115    115.00] 3PH    3274.14  16437.6  -169.45

```

```

                LG      3641.80  18283.4  -171.59
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.055/78.793, 5.04722  Z-:/4.005/79.602, 5.44955  Z0:/2.892/85.794, 13.59743

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6340 [CAN230      230.00] 3PH  1924.97  4832.1  -153.40
                LG      1745.93  4382.7  -152.85
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/27.685/82.962, 8.09949  Z-:/27.586/83.145, 8.31840  Z0:/36.309/81.428, 6.63426

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6350 [PM115-8      115.00] 3PH  2753.87  13825.6 -163.52
                LG      2951.65  14818.6 -167.16
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.793/66.317, 2.27994  Z-:/4.750/67.502, 2.41448  Z0:/3.919/77.397, 4.47268

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6380 [BOQIII230    230.00] 3PH  2766.46  6944.4  -152.90
                LG      2904.92  7292.0  -154.57
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/19.194/82.935, 8.06907  Z-:/18.909/83.500, 8.77712  Z0:/16.771/87.744, 25.38302

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6400 [FRONTCHA     230.00] 3PH  1365.22  3427.0  -150.47
                LG      1365.32  3427.2  -150.39
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/39.508/82.528, 7.62492  Z-:/39.430/82.614, 7.71417  Z0:/39.578/82.194, 7.29441

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6401 [PM230-29     230.00] 3PH  2675.43  6715.9  -154.54
                LG      2276.54  5714.6  -151.80
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/19.878/83.575, 8.87997  Z-:/19.771/83.862, 9.29935  Z0:/30.551/77.079, 4.35902

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->

```

```

X----- BUS -----X
 6440 [DOM230      230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
	1981.10	4973.0	-154.20
	2433.95	6109.8	-153.78

Z+:/26.773/84.249, 9.92911    Z-:/26.603/84.494, 10.37304    Z0:/12.011/81.443, 6.64585

```

-----
<-SCMVA-> <-Sym I''k rms-->
X----- BUS -----X
 6441 [PRIM230     230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
	1567.88	3935.7	-153.18
	1617.77	4061.0	-151.59

Z+:/33.820/83.278, 8.48460    Z-:/33.655/83.455, 8.71643    Z0:/30.948/78.036, 4.71936

```

-----
<-SCMVA-> <-Sym I''k rms-->
X----- BUS -----X
 6460 [ECO230      230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
	2594.83	6513.6	-162.36
	2670.40	6703.3	-166.40

Z+:/20.345/78.319, 4.83696    Z-:/20.169/79.252, 5.26799    Z0:/19.044/90.000, 9999.999

```

-----
<-SCMVA-> <-Sym I''k rms-->
X----- BUS -----X
 6470 [24DIC230    230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
	2633.33	6610.2	-163.27
	2560.44	6427.3	-167.57

Z+:/20.140/69.666, 2.69836    Z-:/19.914/70.891, 2.88643    Z0:/22.321/80.594, 6.03628

```

-----
<-SCMVA-> <-Sym I''k rms-->
X----- BUS -----X
 6500 [FRONTDOM    230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
	1873.42	4702.7	-153.33
	2169.49	5445.9	-150.26

Z+:/28.350/83.585, 8.89453    Z-:/28.128/83.866, 9.30514    Z0:/17.344/70.024, 2.75099

```

-----
<-SCMVA-> <-Sym I''k rms-->
X----- BUS -----X
 6601 [COP230      230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
	2561.75	6430.6	-163.54
	2479.86	6225.0	-167.74

Z+:/20.707/69.935, 2.73781    Z-:/20.482/71.129, 2.92566    Z0:/23.212/80.555, 6.01135

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6760 [SBA230      230.00] 3PH    2904.29   7290.4  -159.67
                                LG      925.55   2323.3  -167.31
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/18.035/80.418, 5.92367  Z-:/17.866/81.182, 6.44626  Z0:/134.246/90.000, 9999.999
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6761 [SBA115      115.00] 3PH    822.91    4131.4  -165.35
                                LG      859.32   4314.2  -166.30
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/17.221/87.107, 19.78922  Z-:/17.188/87.309, 21.27488  Z0:/15.076/90.000, 9999.999
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6860 [BBL230      230.00] 3PH    3058.58   7677.7  -157.61
                                LG      2445.96   6139.9  -154.24
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/17.183/80.027, 5.68666  Z-:/17.020/80.700, 6.10659  Z0:/30.411/72.493, 3.17025
-----

```



Año 2017 – Época Lluviosa en Demanda Máxima

OUTPUT FOR AREA 6 [PANAMA ] OWNER 20 [ETESA ]

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6000 [FRONTPRO  230.00] 3PH    2025.99  5085.7  -103.82
                                LG      2167.19  5440.1  -104.84
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/26.153/82.621, 7.72196  Z-:/25.660/83.308, 8.52328  Z0:/21.547/85.275, 12.09746
  
```

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6001 [PAN230    230.00] 3PH    3335.26  8372.2  -122.85
                                LG      3771.11  9466.3  -128.29
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/15.614/64.764, 2.12169  Z-:/15.324/66.924, 2.34717  Z0:/10.846/82.766, 7.87841
  
```

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6002 [PAN115    115.00] 3PH    3094.88  15537.6 -124.12
                                LG      3595.86  18052.8 -129.56
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.291/62.820, 1.94749  Z-:/4.230/64.691, 2.11468  Z0:/2.671/82.801, 7.91672
  
```

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  
```

```

6003 [PANII230    230.00] 3PH    3242.34    8139.0   -123.53
                                LG    3472.87    8717.7   -129.09
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/16.250/66.013, 2.24741  Z-:/15.999/67.924, 2.46571  Z0:/13.623/82.572, 7.67057

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6004 [PANII115    115.00] 3PH    2541.71  12760.5  -128.30
                                LG    2740.83  13760.2  -133.69
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/5.286/68.268, 2.50883  Z-:/5.233/69.805, 2.71863  Z0:/4.306/85.027, 11.49281

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6005 [CHO230      230.00] 3PH    3082.77  7738.4   -123.13
                                LG    3485.30  8748.9   -128.55
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/16.869/67.565, 2.42202  Z-:/16.462/70.146, 2.76935  Z0:/11.776/84.788, 10.96320

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6008 [LSA230      230.00] 3PH    3857.65  9683.5   -117.77
                                LG    3390.17  8510.1   -122.14
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/13.599/73.071, 3.28537  Z-:/13.407/74.622, 3.63583  Z0:/19.546/82.424, 7.51850

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6009 [LSA115      115.00] 3PH    1801.32  9043.4   -126.05
                                LG    2182.39  10956.6  -128.23
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/7.305/78.720, 5.01357  Z-:/7.215/79.801, 5.55823  Z0:/3.598/87.532, 23.20382

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6011 [MDN230      230.00] 3PH    3593.48  9020.4   -107.46
                                LG    4882.19  12255.4  -106.01
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/14.617/81.931, 7.05386  Z-:/14.363/82.839, 7.95907  Z0:/3.448/64.364, 2.08381

```

```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6012 [MDN115      115.00] 3PH    2134.70  10717.1 -107.93
                        LG      1247.78   6264.4   47.58
THEVENIN IMPEDANCE, X/R (OHM) Z+:/6.212/84.680, 10.73979 Z-:/5.935/86.415, 15.96192 Z0:/43.286/-77.293, 4.43478

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6014 [PRO230      230.00] 3PH    2206.51  5538.8  -103.83
                        LG      2624.93  6589.1  -104.99
THEVENIN IMPEDANCE, X/R (OHM) Z+:/24.002/82.789, 7.90347 Z-:/23.457/83.625, 8.95071 Z0:/13.089/86.646, 17.06250

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6015 [PRO115      115.00] 3PH    948.25   4760.6  -107.59
                        LG      1800.05  9037.0  -107.54
THEVENIN IMPEDANCE, X/R (OHM) Z+:/13.912/85.813, 13.65906 Z-:/13.138/87.349, 21.59598 Z0:/5.072/-89.995, 9999.999

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6018 [CAC115      115.00] 3PH    3049.59  15310.3 -124.38
                        LG      3532.35  17734.0 -129.41
THEVENIN IMPEDANCE, X/R (OHM) Z+:/4.351/62.979, 1.96087 Z-:/4.292/64.811, 2.12614 Z0:/2.722/81.192, 6.45378

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6024 [CHI115      115.00] 3PH    1343.33  6744.1  -134.30
                        LG      1340.19  6728.3  -138.48
THEVENIN IMPEDANCE, X/R (OHM) Z+:/9.756/71.383, 2.96852 Z-:/9.704/72.162, 3.10762 Z0:/10.003/82.952, 8.08867

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6059 [LM1115      115.00] 3PH    2460.27  12351.6 -134.77
                        LG      2988.70  15004.6 -137.20

```

THEVENIN IMPEDANCE, X/R (OHM) Z+:/5.364/73.788, 3.43926 Z-:/5.264/75.129, 3.76601 Z0:/2.646/83.332, 8.55415

-----  
<-SCMVA-> <-Sym I''k rms-->  
  /I/      AN(I)  
X----- BUS -----X                  MVA      AMP      DEG  
  6060 [LM2115      115.00] 3PH      2457.40  12337.2  -134.81  
  LG      2983.15  14976.7  -137.29  
THEVENIN IMPEDANCE, X/R (OHM) Z+:/5.371/73.840, 3.45106 Z-:/5.270/75.179, 3.77930 Z0:/2.659/83.606, 8.92308

-----  
<-SCMVA-> <-Sym I''k rms-->  
  /I/      AN(I)  
X----- BUS -----X                  MVA      AMP      DEG  
  6087 [CAL115      115.00] 3PH      1610.27   8084.3  -104.07  
  LG      1644.65   8256.9   -84.04  
THEVENIN IMPEDANCE, X/R (OHM) Z+:/8.306/85.185, 11.87147 Z-:/8.140/85.806, 13.63524 Z0:/10.641/32.670, 0.64125

-----  
<-SCMVA-> <-Sym I''k rms-->  
  /I/      AN(I)  
X----- BUS -----X                  MVA      AMP      DEG  
  6088 [LES115      115.00] 3PH      1330.61   6680.2  -102.85  
  LG      1095.44   5499.6   -87.32  
THEVENIN IMPEDANCE, X/R (OHM) Z+:/10.090/84.455, 10.30032 Z-:/9.938/84.884, 11.16969 Z0:/18.318/51.655, 1.26420

-----  
<-SCMVA-> <-Sym I''k rms-->  
  /I/      AN(I)  
X----- BUS -----X                  MVA      AMP      DEG  
  6092 [LVA115      115.00] 3PH      1500.32   7532.3  -103.54  
  LG      1401.14   7034.3   -85.47  
THEVENIN IMPEDANCE, X/R (OHM) Z+:/8.919/84.865, 11.12823 Z-:/8.759/85.406, 12.44527 Z0:/13.110/41.689, 0.89061

-----  
<-SCMVA-> <-Sym I''k rms-->  
  /I/      AN(I)  
X----- BUS -----X                  MVA      AMP      DEG  
  6096 [FOR230      230.00] 3PH      3562.60   8942.9  -107.60  
  LG      4126.76  10359.1  -106.39  
THEVENIN IMPEDANCE, X/R (OHM) Z+:/14.809/82.851, 7.97335 Z-:/14.647/83.452, 8.71150 Z0:/8.942/76.668, 4.21971

-----  
<-SCMVA-> <-Sym I''k rms-->  
  /I/      AN(I)

```

X----- BUS -----X
 6100 [BAY230      230.00] 3PH  MVA      AMP      DEG
                               2179.73   5471.6   -128.93
                               LG      2394.32   6010.3   -132.47
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/24.637/75.409, 3.84158  Z-:/24.497/76.299, 4.10188  Z0:/18.417/87.226, 20.64087

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X
 6170 [CPA115      115.00] 3PH  MVA      AMP      DEG
                               1350.17   6778.4   -135.92
                               LG      1398.34   7020.3   -138.74
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/9.783/74.661, 3.64568  Z-:/9.710/75.420, 3.84456  Z0:/8.902/82.812, 7.92943

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X
 6171 [PAC230      230.00] 3PH  MVA      AMP      DEG
                               2365.42   5937.7   -127.23
                               LG      2332.39   5854.8   -131.49
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/22.381/70.753, 2.86401  Z-:/22.186/72.038, 3.08458  Z0:/23.785/81.803, 6.94249

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X
 6173 [STR115      115.00] 3PH  MVA      AMP      DEG
                               2378.55   11941.3  -133.96
                               LG      2765.26   13882.8  -136.85
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/5.568/73.237, 3.31980  Z-:/5.486/74.500, 3.60576  Z0:/3.352/83.602, 8.91840

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X
 6179 [GUA230      230.00] 3PH  MVA      AMP      DEG
                               3575.89   8976.3   -108.56
                               LG      3888.46   9760.9   -107.81
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/14.723/82.923, 8.05536  Z-:/14.598/83.461, 8.72459  Z0:/11.315/79.558, 5.42620

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X
 6182 [VEL230      230.00] 3PH  MVA      AMP      DEG
                               3848.11   9659.6   -113.27
                               LG      3124.87   7844.1   -108.94
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/13.550/78.728, 5.01712  Z-:/13.396/79.714, 5.51038  Z0:/23.321/68.811, 2.57963

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6240 [EHIG230      230.00] 3PH  2535.65  6365.0  -121.85
                LG      2189.66  5496.5  -125.50
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/20.567/72.280, 3.12972  Z-:/20.328/73.722, 3.42466  Z0:/30.684/79.841, 5.58085
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6245 [BNGA230      230.00] 3PH  2635.18  6614.9  -126.15
                LG      2137.69  5366.1  -130.60
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/19.988/71.099, 2.92059  Z-:/19.797/72.545, 3.18035  Z0:/34.319/79.877, 5.60090
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6260 [CHA230       230.00] 3PH  1666.94  4184.4  -103.65
                LG      1919.93  4819.4  -105.70
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/32.172/82.837, 7.95700  Z-:/32.083/82.981, 8.12191  Z0:/19.706/91.346, 42.56914
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6261 [CHA115       115.00] 3PH   600.79  3016.2  -106.22
                LG      963.40  4836.7  -106.01
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/22.117/86.475, 16.23217  Z-:/22.100/86.524, 16.46261  Z0:/2.845/-90.101, 565.10413
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6263 [ESP230       230.00] 3PH  1899.48  4768.1  -103.82
                LG      2181.39  5475.8  -94.44
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/28.278/83.897, 9.35275  Z-:/28.196/84.046, 9.58845  Z0:/20.394/47.478, 1.09046
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6290 [CATIII115   115.00] 3PH  2366.09  11878.8 -134.88
-----

```

LG 2849.89 14307.7 -137.82  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/5.580/73.934, 3.47237 Z-:/5.482/75.223, 3.79097 Z0:/2.880/85.735, 13.40928

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6340 [CAN230 230.00] 3PH 1858.05 4664.1 -106.81  
 LG 1703.77 4276.8 -106.45  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/28.461/82.555, 7.65266 Z-:/28.351/82.791, 7.90563 Z0:/36.308/81.428, 6.63381

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6350 [PM115-8 115.00] 3PH 2529.95 12701.4 -125.83  
 LG 2783.21 13972.9 -130.25  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/5.210/63.245, 1.98357 Z-:/5.158/64.781, 2.12329 Z0:/3.919/77.388, 4.46918

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6380 [BOQIII230 230.00] 3PH 2573.36 6459.7 -105.03  
 LG 2757.98 6923.1 -106.83  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/20.508/82.366, 7.46083 Z-:/20.174/83.039, 8.19044 Z0:/16.771/87.744, 25.38228

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6400 [FRONTCHA 230.00] 3PH 1336.54 3355.0 -103.20  
 LG 1344.25 3374.4 -103.18  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/40.179/82.375, 7.47002 Z-:/40.090/82.490, 7.58532 Z0:/39.578/82.193, 7.29385

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6401 [PM230-29 230.00] 3PH 2548.83 6398.1 -108.06  
 LG 2206.36 5538.4 -105.68  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/20.695/82.924, 8.05613 Z-:/20.576/83.286, 8.49412 Z0:/30.549/77.079, 4.35879

-----  
 <-SCMVA-> <-Sym I''k rms-->



```

X----- BUS -----X
 6440 [DOM230      230.00] 3PH
                               LG
MVA      /I/      AN(I)
1930.34  AMP      DEG
2382.58  4845.6  -106.17
5980.8   -105.83
THEVENIN IMPEDANCE, X/R (OHM) Z+:/27.419/83.982, 9.48592 Z-:/27.226/84.285, 9.99199 Z0:/12.011/81.432, 6.63703

```

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6441 [PRIM230     230.00] 3PH
                               LG
MVA      /I/      AN(I)
1538.02  AMP      DEG
1596.25  3860.8  -105.00
4006.9   -103.50
THEVENIN IMPEDANCE, X/R (OHM) Z+:/34.440/83.103, 8.26661 Z-:/34.252/83.325, 8.54409 Z0:/30.947/78.032, 4.71767

```

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6460 [ECO230      230.00] 3PH
                               LG
MVA      /I/      AN(I)
2809.64  AMP      DEG
2823.22  7052.8  -123.39
7086.9   -128.61
THEVENIN IMPEDANCE, X/R (OHM) Z+:/18.795/75.641, 3.90636 Z-:/18.642/76.811, 4.26717 Z0:/19.044/90.000, 9999.999

```

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6470 [24DIC230    230.00] 3PH
                               LG
MVA      /I/      AN(I)
2693.32  AMP      DEG
2598.77  6760.8  -124.78
6523.5   -129.96
THEVENIN IMPEDANCE, X/R (OHM) Z+:/19.625/67.675, 2.43526 Z-:/19.395/69.194, 2.63172 Z0:/22.320/80.589, 6.03358

```

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6500 [FRONTDOM    230.00] 3PH
                               LG
MVA      /I/      AN(I)
1812.11  AMP      DEG
2113.77  4548.8  -105.26
5306.0   -102.35
THEVENIN IMPEDANCE, X/R (OHM) Z+:/29.236/83.309, 8.52411 Z-:/28.979/83.655, 8.99273 Z0:/17.344/70.016, 2.74994

```

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6601 [COP230      230.00] 3PH
                               LG
MVA      /I/      AN(I)
2635.32  AMP      DEG
2525.86  6615.2  -125.09
6340.5   -130.14
THEVENIN IMPEDANCE, X/R (OHM) Z+:/20.065/68.069, 2.48374 Z-:/19.839/69.547, 2.68137 Z0:/23.210/80.551, 6.00890

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6760 [SBA230      230.00] 3PH    2952.02  7410.2  -116.72
                                LG      924.03  2319.5  -125.71
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/17.616/78.785, 5.04330  Z-:/17.468/79.673, 5.48806  Z0:/134.246/90.000, 9999.999
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6761 [SBA115      115.00] 3PH     810.23  4067.7  -122.24
                                LG      845.41  4244.3  -123.31
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/17.180/86.759, 17.66080  Z-:/17.155/86.988, 19.00380  Z0:/15.076/90.000, 9999.999
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6860 [BBL230      230.00] 3PH    3053.11  7664.0  -113.83
                                LG     2436.52  6116.2  -111.14
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/17.096/78.601, 4.96008  Z-:/16.944/79.391, 5.33906  Z0:/30.333/72.440, 3.15999
-----

```

Año 2018 – Época Seca en Demanda Máxima

OUTPUT FOR AREA 6 [PANAMA ] OWNER 20 [ETESA ]

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6000 [FRONTPRO   230.00] 3PH   2787.28   6996.7  -109.17
                                LG    2770.88   6955.5  -109.89
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/19.100/84.654, 10.68545  Z-:/18.765/85.115, 11.70063  Z0:/19.778/86.296, 15.44495

```

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6001 [PAN230    230.00] 3PH   3348.76   8406.1  -118.83
                                LG    3615.71   9076.2  -124.46
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/15.694/65.105, 2.15478  Z-:/15.432/67.121, 2.36977  Z0:/12.835/82.021, 7.13448

```

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6002 [PAN115    115.00] 3PH   3214.66  16139.0 -119.54
                                LG    3616.08  18154.3 -125.16
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.155/63.017, 1.96407  Z-:/4.106/64.737, 2.11908  Z0:/2.933/82.188, 7.28927

```

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6003 [PANII230  230.00] 3PH   3140.32   7882.9  -119.57

```

```

                LG      3161.98    7937.3   -125.23
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/16.845/66.057, 2.25208  Z-:/16.613/67.835, 2.45474  Z0:/17.081/81.115, 6.39690

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6004 [PANII115    115.00] 3PH    2594.49  13025.4 -123.74
                        LG      2609.57  13101.2 -129.05
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/5.193/68.432, 2.52984  Z-:/5.150/69.834, 2.72285  Z0:/5.247/82.874, 7.99881

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6005 [CHO230     230.00] 3PH    3137.56  7876.0  -119.07
                        LG      3389.56  8508.5  -124.55
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/16.879/67.911, 2.46401  Z-:/16.501/70.362, 2.80249  Z0:/13.817/83.746, 9.12525

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6008 [LSA230     230.00] 3PH    4154.30  10428.2 -114.65
                        LG      3834.73  9626.0  -117.79
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/12.861/74.135, 3.51877  Z-:/12.692/75.554, 3.88192  Z0:/16.307/81.084, 6.37392

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6009 [LSA115     115.00] 3PH    2014.36  10113.0 -122.33
                        LG      2393.66  12017.2 -124.56
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/6.629/79.555, 5.42458  Z-:/6.567/80.494, 5.97204  Z0:/3.570/88.315, 33.98666

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6011 [MDN230     230.00] 3PH    4499.68  11295.2 -109.54
                        LG      5995.76  15050.7 -107.55
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/11.800/83.689, 9.04230  Z-:/11.598/84.426, 10.24633  Z0:/3.331/64.895, 2.13428

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->

```

```

X----- BUS -----X
 6012 [MDN115      115.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	2320.25	11648.7	-111.73
LG	1080.00	5422.1	45.03

Z+:/5.777/85.643, 13.12598 Z-:/5.529/87.278, 21.03558 Z0:/47.878/-76.290, 4.09918

<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6014 [PRO230      230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	3281.40	8237.0	-109.26
LG	3813.21	9572.0	-110.05

Z+:/16.217/84.998, 11.42476 Z-:/15.879/85.590, 12.96578 Z0:/9.776/87.399, 22.01342

<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6015 [PRO115      115.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	1195.22	6000.5	-112.49
LG	2320.33	11649.1	-112.58

Z+:/11.104/88.369, 35.11102 Z-:/10.684/89.210, 72.48085 Z0:/4.630/-90.000, 9999.999

<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6018 [CAC115      115.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	3174.09	15935.3	-119.80
LG	3560.73	17876.4	-125.04

Z+:/4.205/63.206, 1.98014 Z-:/4.156/64.886, 2.13338 Z0:/2.979/80.884, 6.23232

<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6024 [CHI115      115.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	1416.02	7109.0	-128.95
LG	1424.72	7152.7	-127.36

Z+:/9.285/72.130, 3.10160 Z-:/9.249/72.764, 3.22335 Z0:/9.183/66.685, 2.32026

<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6059 [LM1115      115.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	3056.58	15345.4	-129.13
LG	3584.87	17997.6	-130.93

Z+:/4.327/76.267, 4.09188 Z-:/4.261/77.335, 4.45002 Z0:/2.490/82.416, 7.51073

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6060 [LM2115      115.00] 3PH   3043.11  15277.8  -129.15
                                LG   3574.18  17944.0  -130.98
THEVENIN IMPEDANCE, X/R (OHM) Z+:/4.347/76.272, 4.09351 Z-:/4.280/77.338, 4.45111 Z0:/2.486/82.643, 7.74505
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6087 [CAL115      115.00] 3PH   1669.72   8382.7  -109.43
                                LG   1715.89   8614.5   -86.14
THEVENIN IMPEDANCE, X/R (OHM) Z+:/8.056/85.431, 12.51217 Z-:/7.907/85.977, 14.21699 Z0:/10.939/26.458, 0.49767
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6088 [LES115      115.00] 3PH   1367.51   6865.5  -108.29
                                LG   1128.91   5667.6   -90.74
THEVENIN IMPEDANCE, X/R (OHM) Z+:/9.864/84.592, 10.56277 Z-:/9.728/84.964, 11.34769 Z0:/18.193/47.888, 1.10626
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6092 [LVA115      115.00] 3PH   1550.06   7782.0  -108.96
                                LG   1454.23   7300.9   -88.19
THEVENIN IMPEDANCE, X/R (OHM) Z+:/8.678/85.063, 11.57638 Z-:/8.534/85.536, 12.80929 Z0:/13.211/36.452, 0.73867
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6096 [FOR230      230.00] 3PH   4632.07  11627.5  -108.56
                                LG   5021.85  12605.9  -106.35
THEVENIN IMPEDANCE, X/R (OHM) Z+:/11.503/84.527, 10.43716 Z-:/11.391/84.948, 11.31283 Z0:/9.008/76.178, 4.06446
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG

```

```

6100 [BAY230      230.00] 3PH   1595.92   4006.1  -125.28
                                LG   1886.59   4735.8  -129.08
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/33.237/71.573, 3.00138  Z-:/33.054/72.510, 3.17348  Z0:/18.575/87.338, 21.50980

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                                /I/   AN(I)
X----- BUS -----X          MVA     AMP     DEG
6170 [CPA115      115.00] 3PH   1464.11   7350.5  -129.94
                                LG   1397.76   7017.4  -131.66
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/9.047/75.794, 3.95034  Z-:/8.997/76.370, 4.12393  Z0:/10.401/80.004, 5.67367

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                                /I/   AN(I)
X----- BUS -----X          MVA     AMP     DEG
6171 [PAC230      230.00] 3PH   2137.10   5364.6  -123.33
                                LG   2133.08   5354.5  -127.85
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/24.767/69.648, 2.69581  Z-:/24.568/70.887, 2.88574  Z0:/25.446/81.752, 6.89890

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                                /I/   AN(I)
X----- BUS -----X          MVA     AMP     DEG
6173 [STR115      115.00] 3PH   3221.67   16174.2 -128.62
                                LG   3473.18   17436.9 -130.86
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.125/76.580, 4.19106  Z-:/4.078/77.569, 4.53651  Z0:/3.289/83.204, 8.39066

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                                /I/   AN(I)
X----- BUS -----X          MVA     AMP     DEG
6179 [GUA230      230.00] 3PH   4231.96   10623.1 -109.41
                                LG   4393.72   11029.2 -108.32
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/12.580/83.961, 9.45282  Z-:/12.488/84.339, 10.08742  Z0:/11.302/80.046, 5.69814

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                                /I/   AN(I)
X----- BUS -----X          MVA     AMP     DEG
6182 [VEL230      230.00] 3PH   4360.68   10946.3 -112.93
                                LG   3646.31   9153.0  -108.37
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/12.222/80.044, 5.69664  Z-:/12.087/80.876, 6.22657  Z0:/19.745/69.344, 2.65253
-----

```



```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6240 [EHIG230      230.00] 3PH  2637.58  6620.9 -118.13
          LG      2272.60  5704.7 -121.32
THEVENIN IMPEDANCE, X/R (OHM) Z+:/20.140/72.831, 3.23677 Z-:/19.924/74.167, 3.52619 Z0:/30.154/79.393, 5.33980

```

```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6245 [BNGA230      230.00] 3PH  2608.93  6549.0 -121.75
          LG      1874.43  4705.2 -127.57
THEVENIN IMPEDANCE, X/R (OHM) Z+:/20.287/71.156, 2.93007 Z-:/20.112/72.504, 3.17242 Z0:/44.623/81.635, 6.80042

```

```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6260 [CHA230      230.00] 3PH  1769.16  4441.0 -104.16
          LG      1319.30  3311.7 -103.44
THEVENIN IMPEDANCE, X/R (OHM) Z+:/30.257/83.034, 8.18492 Z-:/30.195/83.117, 8.28386 Z0:/61.281/81.570, 6.74746

```

```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6261 [CHA115      115.00] 3PH   611.88  3071.9 -108.13
          LG      971.57  4877.7 -107.81
THEVENIN IMPEDANCE, X/R (OHM) Z+:/21.705/86.585, 16.75875 Z-:/21.693/86.613, 16.89646 Z0:/2.402/-87.668, 24.55492

```

```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6263 [ESP230      230.00] 3PH  2021.56  5074.6 -104.16
          LG      2167.58  5441.1 -96.19
THEVENIN IMPEDANCE, X/R (OHM) Z+:/26.583/84.064, 9.61796 Z-:/26.525/84.148, 9.75729 Z0:/23.009/57.335, 1.55974

```

```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6290 [CATIII115    115.00] 3PH  2940.39  14762.1 -129.21
          LG      3371.33  16925.6 -131.78

```

THEVENIN IMPEDANCE, X/R (OHM) Z+:/4.501/76.438, 4.14539 Z-:/4.437/77.451, 4.49254 Z0:/2.863/85.489, 12.67499

-----<br><-SCMVA-> <-Sym I''k rms--><br>  /I/    AN(I)<br>X----- BUS -----X                  MVA    AMP    DEG<br>  6340 [CAN230      230.00] 3PH      2012.68  5052.3  -107.24<br>  LG      1674.68  4203.8  -106.75<br>THEVENIN IMPEDANCE, X/R (OHM) Z+:/26.450/82.957, 8.09399 Z-:/26.370/83.104, 8.26810 Z0:/42.552/81.760, 6.90541<br>-----

-----<br><-SCMVA-> <-Sym I''k rms--><br>  /I/    AN(I)<br>X----- BUS -----X                  MVA    AMP    DEG<br>  6350 [PM115-8     115.00] 3PH      2613.83  13122.5  -121.26<br>  LG      2812.11  14118.0  -125.88<br>THEVENIN IMPEDANCE, X/R (OHM) Z+:/5.069/63.438, 2.00022 Z-:/5.026/64.837, 2.12870 Z0:/4.122/77.694, 4.58395<br>-----

-----<br><-SCMVA-> <-Sym I''k rms--><br>  /I/    AN(I)<br>X----- BUS -----X                  MVA    AMP    DEG<br>  6380 [BOQIII230   230.00] 3PH      3137.47  7875.7  -109.23<br>  LG      3288.26  8254.3  -111.37<br>THEVENIN IMPEDANCE, X/R (OHM) Z+:/16.949/84.525, 10.43215 Z-:/16.713/84.997, 11.42353 Z0:/14.914/90.966, 59.32293<br>-----

-----<br><-SCMVA-> <-Sym I''k rms--><br>  /I/    AN(I)<br>X----- BUS -----X                  MVA    AMP    DEG<br>  6400 [FRONTCHA    230.00] 3PH      1401.06  3517.0  -103.65<br>  LG      1017.43  2554.0  -102.10<br>THEVENIN IMPEDANCE, X/R (OHM) Z+:/38.258/82.510, 7.60596 Z-:/38.196/82.574, 7.67278 Z0:/81.653/79.479, 5.38470<br>-----

-----<br><-SCMVA-> <-Sym I''k rms--><br>  /I/    AN(I)<br>X----- BUS -----X                  MVA    AMP    DEG<br>  6401 [PM230-29    230.00] 3PH      2862.16  7184.6  -108.62<br>  LG      2340.82  5876.0  -106.18<br>THEVENIN IMPEDANCE, X/R (OHM) Z+:/18.606/83.594, 8.90646 Z-:/18.518/83.831, 9.25231 Z0:/31.207/78.099, 4.74501<br>-----

-----<br><-SCMVA-> <-Sym I''k rms--><br>  /I/    AN(I)<br>-----

```

X----- BUS -----X          MVA      AMP      DEG
 6440 [DOM230      230.00] 3PH  2115.49  5310.3  -110.58
                               LG  2571.96  6456.2  -110.03
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/25.095/84.250, 9.93176  Z-:/24.643/84.489, 10.36536  Z0:/12.203/80.993, 6.30887

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6441 [PRIM230     230.00] 3PH  1647.07  4134.5  -109.47
                               LG  1675.02  4204.7  -107.79
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/32.219/83.204, 8.39131  Z-:/31.785/83.359, 8.58929  Z0:/31.134/77.893, 4.66186

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6460 [ECO230      230.00] 3PH  2893.73  7263.9  -118.37
                               LG  3089.11  7754.3  -122.12
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/18.449/76.213, 4.07513  Z-:/18.310/77.281, 4.43034  Z0:/15.286/87.727, 25.19359

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6470 [24DIC230    230.00] 3PH  2516.55  6317.1  -120.64
                               LG  2400.89  6026.8  -126.06
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/21.025/66.961, 2.35138  Z-:/20.802/68.395, 2.52511  Z0:/24.670/80.364, 5.88982

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6485 [ANT230      230.00] 3PH  2717.47  6821.4  -119.86
                               LG  3178.28  7978.2  -123.20
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/19.664/75.443, 3.85093  Z-:/19.468/76.791, 4.26035  Z0:/11.497/87.905, 27.33156

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6500 [FRONTDOM    230.00] 3PH  2043.14  5128.7  -109.61
                               LG  2307.69  5792.8  -105.95
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/26.017/83.720, 9.08726  Z-:/25.616/83.956, 9.44391  Z0:/17.908/69.127, 2.62246

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
6601 [COP230      230.00] 3PH  2450.24  6150.6  -120.96
                                LG  2333.91  5858.6  -126.27
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/21.597/67.283, 2.38862  Z-:/21.377/68.683, 2.56263  Z0:/25.423/80.390, 5.90582
-----

                <-SCMVA-> <-Sym I''k rms-->
                /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
6760 [SBA230      230.00] 3PH  3195.68  8021.9  -115.28
                                LG  807.80  2027.8  -123.90
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/16.740/79.720, 5.51357  Z-:/16.608/80.481, 5.96339  Z0:/165.736/90.000, 9999.999
-----

                <-SCMVA-> <-Sym I''k rms-->
                /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
6761 [SBA115      115.00] 3PH  807.37  4053.3  -121.85
                                LG  829.36  4163.7  -122.70
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/16.348/87.467, 22.60084  Z-:/16.329/87.627, 24.13366  Z0:/15.076/90.000, 9999.999
-----

                <-SCMVA-> <-Sym I''k rms-->
                /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
6860 [BBL230      230.00] 3PH  3363.26  8442.5  -113.04
                                LG  2721.51  6831.6  -110.15
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/15.853/79.575, 5.43526  Z-:/15.719/80.229, 5.80701  Z0:/27.308/72.967, 3.26410
-----

                <-SCMVA-> <-Sym I''k rms-->
                /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
6995 [SVC-LSA      230.00] 3PH  4154.30  10428.2  -114.65
                                LG  3834.73  9626.0  -117.79
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/12.861/74.135, 3.51877  Z-:/12.692/75.554, 3.88192  Z0:/16.307/81.084, 6.37392
-----

                <-SCMVA-> <-Sym I''k rms-->
                /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
6997 [SVC-PAN2      230.00] 3PH  3140.32  7882.9  -119.57

```

THEVENIN IMPEDANCE, X/R (OHM)      LG      3161.98      7937.3      -125.23  
Z+:/16.845/66.057, 2.25208    Z-:/16.613/67.835, 2.45474    Z0:/17.081/81.115, 6.39690

---

Año 2018 – Época Lluviosa en Demanda Máxima

OUTPUT FOR AREA 6 [PANAMA ] OWNER 20 [ETESA ]

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6000 [FRONTPRO   230.00] 3PH   2661.10  6679.9  -99.57
                                LG      2678.37  6723.3  -100.44
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/19.786/84.263, 9.95422  Z-:/19.417/84.829, 11.04934  Z0:/19.778/86.296, 15.44495
  
```

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6001 [PAN230     230.00] 3PH   3027.12  7598.7  -121.47
                                LG      3368.41  8455.4  -127.58
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/17.286/62.589, 1.92826  Z-:/16.963/64.932, 2.13789  Z0:/12.835/82.021, 7.13461
  
```

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6002 [PAN115     115.00] 3PH   2880.18  14459.8 -122.67
                                LG      3339.34  16764.9 -128.60
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.637/60.661, 1.77914  Z-:/4.572/62.717, 1.93888  Z0:/2.933/82.189, 7.28951
  
```

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  
```

```

6003 [PANII230    230.00] 3PH    2853.32    7162.5   -122.32
                                LG    2972.47    7461.5   -128.60
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/18.529/63.520, 2.00742  Z-:/18.240/65.624, 2.20691  Z0:/17.081/81.115, 6.39700

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6004 [PANII115    115.00] 3PH    2354.93   11822.8  -126.98
                                LG    2453.89   12319.6  -132.89
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/5.742/65.905, 2.23608  Z-:/5.684/67.632, 2.43006  Z0:/5.247/82.874, 7.99896

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6005 [CHO230      230.00] 3PH    2893.86   7264.2   -121.37
                                LG    3195.70   8021.9   -127.37
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/18.067/65.680, 2.21267  Z-:/17.629/68.436, 2.53033  Z0:/13.817/83.746, 9.12533

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6008 [LSA230      230.00] 3PH    3949.74   9914.7   -114.94
                                LG    3691.96   9267.6   -118.71
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/13.253/72.571, 3.18540  Z-:/13.066/74.228, 3.54053  Z0:/16.309/81.083, 6.37314

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6009 [LSA115      115.00] 3PH    1962.57   9853.0   -123.08
                                LG    2338.52   11740.4  -125.58
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/6.701/78.436, 4.88731  Z-:/6.638/79.508, 5.39970  Z0:/3.570/88.314, 33.97938

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6011 [MDN230      230.00] 3PH    3991.14   10018.6  -102.14
                                LG    5382.53   13511.3  -100.48
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/13.058/82.999, 8.14315  Z-:/12.812/83.875, 9.31930  Z0:/3.331/64.895, 2.13428

```



```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
 6012 [MDN115      115.00] 3PH    2209.34  11091.8 -102.11
          LG      1072.60   5384.9   53.99
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/5.974/85.298, 12.15868  Z-:/5.708/86.968, 18.87633  Z0:/47.878/-76.290, 4.09918

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
 6014 [PRO230      230.00] 3PH    3104.27  7792.4  -99.62
          LG      3645.60   9151.3 -100.54
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/16.941/84.503, 10.39013  Z-:/16.568/85.216, 11.94818  Z0:/9.776/87.399, 22.01342

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
 6015 [PRO115      115.00] 3PH    1162.74  5837.5 -102.99
          LG      2248.18  11286.8 -102.96
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/11.280/87.637, 24.23788  Z-:/10.849/88.602, 40.97915  Z0:/4.630/-90.000, 9999.999

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
 6018 [CAC115      115.00] 3PH    2845.33  14284.8 -122.96
          LG      3289.55  16515.0 -128.54
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.690/60.853, 1.79317  Z-:/4.626/62.869, 1.95152  Z0:/2.979/80.885, 6.23255

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
 6024 [CHI115      115.00] 3PH    1330.55  6680.0  -133.99
          LG      1365.42  6855.0  -133.04
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/9.901/70.542, 2.83052  Z-:/9.853/71.411, 2.97324  Z0:/9.210/66.612, 2.31215

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
 6059 [LM1115      115.00] 3PH    2507.81  12590.3 -134.47
          LG      3071.89  15422.2 -136.81

```

THEVENIN IMPEDANCE, X/R (OHM) Z+:/5.284/73.151, 3.30198 Z-:/5.190/74.573, 3.62371 Z0:/2.491/82.421, 7.51612

-----<br><-SCMVA-> <-Sym I''k rms--><br>                                  /I/    AN(I)<br>X----- BUS -----X          MVA      AMP      DEG<br>  6060 [LM2115      115.00] 3PH  2503.51  12568.7  -134.51<br>                                  LG      3068.83  15406.8  -136.88<br>THEVENIN IMPEDANCE, X/R (OHM)  Z+:/5.294/73.199, 3.31191 Z-:/5.199/74.617, 3.63478 Z0:/2.487/82.649, 7.75113<br>-----

-----<br><-SCMVA-> <-Sym I''k rms--><br>                                  /I/    AN(I)<br>X----- BUS -----X          MVA      AMP      DEG<br>  6087 [CAL115      115.00] 3PH  1632.77   8197.2   -97.80<br>                                  LG      1686.74   8468.2   -74.75<br>THEVENIN IMPEDANCE, X/R (OHM)  Z+:/8.168/85.362, 12.32639 Z-:/8.010/85.934, 14.06757 Z0:/10.939/26.458, 0.49767<br>-----

-----<br><-SCMVA-> <-Sym I''k rms--><br>                                  /I/    AN(I)<br>X----- BUS -----X          MVA      AMP      DEG<br>  6088 [LES115      115.00] 3PH  1343.89   6746.9   -96.51<br>                                  LG      1115.02   5597.9   -79.07<br>THEVENIN IMPEDANCE, X/R (OHM)  Z+:/9.966/84.562, 10.50400 Z-:/9.820/84.953, 11.32358 Z0:/18.193/47.888, 1.10626<br>-----

-----<br><-SCMVA-> <-Sym I''k rms--><br>                                  /I/    AN(I)<br>X----- BUS -----X          MVA      AMP      DEG<br>  6092 [LVA115      115.00] 3PH  1518.88   7625.4   -97.24<br>                                  LG      1432.57   7192.1   -76.65<br>THEVENIN IMPEDANCE, X/R (OHM)  Z+:/8.786/85.012, 11.45700 Z-:/8.633/85.508, 12.72975 Z0:/13.211/36.452, 0.73867<br>-----

-----<br><-SCMVA-> <-Sym I''k rms--><br>                                  /I/    AN(I)<br>X----- BUS -----X          MVA      AMP      DEG<br>  6096 [FOR230      230.00] 3PH  3764.38   9449.4  -101.87<br>                                  LG      4290.57  10770.3  -100.37<br>THEVENIN IMPEDANCE, X/R (OHM)  Z+:/13.914/83.126, 8.29487 Z-:/13.756/83.683, 9.03306 Z0:/9.008/76.178, 4.06446<br>-----

-----<br><-SCMVA-> <-Sym I''k rms--><br>                                  /I/    AN(I)<br>-----

```

X----- BUS -----X          MVA      AMP      DEG
 6100 [BAY230      230.00] 3PH   1521.92   3820.3  -128.94
                               LG    1819.79   4568.1  -133.05
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/34.835/69.946, 2.73947  Z-:/34.621/71.112, 2.92280  Z0:/18.575/87.338, 21.50990

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6170 [CPA115      115.00] 3PH   1351.65   6785.9  -135.77
                               LG    1329.76   6676.0  -138.10
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/9.817/74.067, 3.50290  Z-:/9.749/74.891, 3.70381  Z0:/10.402/79.996, 5.66886

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6171 [PAC230      230.00] 3PH   2004.35   5031.3  -126.60
                               LG    2047.21   5138.9  -131.71
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/26.393/67.631, 2.42986  Z-:/26.153/69.146, 2.62511  Z0:/25.446/81.752, 6.89894

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6173 [STR115      115.00] 3PH   2458.72  12343.9  -133.65
                               LG    2851.18  14314.1  -136.64
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/5.410/72.624, 3.19563  Z-:/5.335/73.980, 3.48273  Z0:/3.289/83.206, 8.39356

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6179 [GUA230      230.00] 3PH   3710.59   9314.4  -103.00
                               LG    3986.99  10008.2  -102.32
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/14.097/83.034, 8.18392  Z-:/13.972/83.540, 8.83213  Z0:/11.302/80.046, 5.69814

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6182 [VEL230      230.00] 3PH   3995.31  10029.1  -109.22
                               LG    3426.30   8600.8  -105.31
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/12.955/79.011, 5.14972  Z-:/12.797/80.020, 5.68314  Z0:/19.745/69.344, 2.65253

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6240 [EHIG230      230.00] 3PH      2504.14   6285.9  -119.68
                LG      2189.36   5495.8  -123.50
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/20.800/71.388, 2.96943  Z-:/20.561/72.952, 3.26107  Z0:/30.154/79.393, 5.33984

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6245 [BNGA230      230.00] 3PH      2441.34   6128.3  -124.65
                LG      1814.11   4553.8  -131.48
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/21.571/69.014, 2.60694  Z-:/21.363/70.646, 2.84693  Z0:/44.623/81.635, 6.80043

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6260 [CHA230       230.00] 3PH      1688.98   4239.7  -96.96
                LG      1282.76   3220.0  -96.33
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/31.377/82.915, 8.04619  Z-:/31.291/83.043, 8.19469  Z0:/61.281/81.570, 6.74746

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6261 [CHA115       115.00] 3PH      600.68   3015.7  -99.48
                LG      953.27   4785.8  -99.17
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/21.947/86.529, 16.48854  Z-:/21.931/86.573, 16.69691  Z0:/2.402/-87.668, 24.55492

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6263 [ESP230       230.00] 3PH      1925.36   4833.1  -96.92
                LG      2088.38   5242.3  -89.23
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/27.658/83.941, 9.42053  Z-:/27.577/84.072, 9.63015  Z0:/23.009/57.335, 1.55974

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
                /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
6290 [CATIII115    115.00] 3PH      2414.14  12120.0 -134.61

```

LG 2901.32 14565.9 -137.67  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/5.491/73.325, 3.33839 Z-:/5.400/74.691, 3.65319 Z0:/2.863/85.490, 12.67870

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6340 [CAN230 230.00] 3PH 1883.65 4728.4 -100.82  
 LG 1602.82 4023.4 -100.52  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/27.818/82.607, 7.70743 Z-:/27.710/82.822, 7.94056 Z0:/42.552/81.760, 6.90541

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6350 [PM115-8 115.00] 3PH 2390.44 12001.0 -124.60  
 LG 2643.36 13270.8 -129.66  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/5.548/61.313, 1.82751 Z-:/5.492/63.028, 1.96494 Z0:/4.122/77.694, 4.58405

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6380 [BOQIII230 230.00] 3PH 2932.99 7362.4 -100.31  
 LG 3124.23 7842.5 -102.55  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/17.850/84.093, 9.66502 Z-:/17.577/84.677, 10.73330 Z0:/14.914/90.966, 59.32293

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6400 [FRONTCHA 230.00] 3PH 1347.50 3382.5 -96.49  
 LG 993.30 2493.4 -95.01  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/39.382/82.429, 7.52389 Z-:/39.295/82.530, 7.62628 Z0:/81.653/79.479, 5.38470

-----  
 <-SCMVA-> <-Sym I''k rms-->  
 /I/ AN(I)  
 X----- BUS -----X MVA AMP DEG  
 6401 [PM230-29 230.00] 3PH 2608.77 6548.6 -102.34  
 LG 2207.27 5540.7 -100.28  
 THEVENIN IMPEDANCE, X/R (OHM) Z+:/20.068/83.004, 8.14859 Z-:/19.950/83.338, 8.56203 Z0:/31.207/78.099, 4.74501

-----  
 <-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6440 [DOM230      230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	2068.09	5191.3	-100.76
LG	2523.48	6334.5	-100.28

Z+:/25.529/84.081, 9.64598    Z-:/25.050/84.377, 10.15760    Z0:/12.203/80.993, 6.30888

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6441 [PRIM230     230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	1619.78	4066.0	-99.49
LG	1654.47	4153.1	-97.87

Z+:/32.635/83.098, 8.26108    Z-:/32.175/83.296, 8.50783    Z0:/31.134/77.893, 4.66187

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6460 [ECO230      230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	2766.32	6944.1	-121.18
LG	2983.34	7488.8	-125.37

Z+:/19.030/74.700, 3.65527    Z-:/18.877/75.982, 4.00538    Z0:/15.286/87.727, 25.19383

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6470 [24DIC230    230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	2330.48	5850.0	-123.77
LG	2290.86	5750.6	-129.82

Z+:/22.692/64.808, 2.12586    Z-:/22.419/66.541, 2.30439    Z0:/24.670/80.364, 5.88986

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6485 [ANT230      230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	2576.49	6467.6	-121.77
LG	3038.11	7626.3	-125.46

Z+:/20.290/73.949, 3.47567    Z-:/20.074/75.525, 3.87372    Z0:/11.497/87.905, 27.33150

-----<-SCMVA-> <-Sym I''k rms-->

```

X----- BUS -----X
 6500 [FRONTDOM    230.00] 3PH
                               LG
THEVENIN IMPEDANCE, X/R (OHM)

```

	MVA	/I/ AMP	AN (I) DEG
3PH	1991.56	4999.3	-99.89
LG	2260.52	5674.4	-96.35

Z+:/26.509/83.544, 8.83727    Z-:/26.079/83.841, 9.26624    Z0:/17.908/69.127, 2.62246

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6601 [COP230      230.00] 3PH  2273.93  5708.0  -124.13
                                LG  2229.99  5597.8  -130.06
THEVENIN IMPEDANCE, X/R (OHM) Z+:/23.259/65.159, 2.16016 Z-:/22.990/66.854, 2.33930 Z0:/25.423/80.390, 5.90587
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6760 [SBA230      230.00] 3PH  3000.25  7531.3  -113.15
                                LG  780.47  1959.2  -122.52
THEVENIN IMPEDANCE, X/R (OHM) Z+:/17.318/78.777, 5.03989 Z-:/17.168/79.697, 5.50110 Z0:/165.736/90.000, 9999.999
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6761 [SBA115      115.00] 3PH  778.31  3907.5  -118.62
                                LG  801.12  4022.0  -119.56
THEVENIN IMPEDANCE, X/R (OHM) Z+:/16.450/87.220, 20.59611 Z-:/16.430/87.419, 22.18713 Z0:/15.076/90.000, 9999.999
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6860 [BBL230      230.00] 3PH  3133.33  7865.4  -109.83
                                LG  2584.90  6488.7  -107.42
THEVENIN IMPEDANCE, X/R (OHM) Z+:/16.538/78.772, 5.03760 Z-:/16.383/79.576, 5.43562 Z0:/27.309/72.967, 3.26410
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6995 [SVC-LSA      230.00] 3PH  3949.74  9914.7  -114.94
                                LG  3691.96  9267.6  -118.71
THEVENIN IMPEDANCE, X/R (OHM) Z+:/13.253/72.571, 3.18540 Z-:/13.066/74.228, 3.54053 Z0:/16.309/81.083, 6.37314
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG

```

6997	[SVC-PAN2	230.00]	3PH	2853.32	7162.5	-122.32		
			LG	2972.47	7461.5	-128.60		
THEVENIN IMPEDANCE, X/R (OHM)				Z+:/18.529/63.520,	2.00742	Z-:/18.240/65.624,	2.20691	Z0:/17.081/81.115, 6.39700

---



Año 2019 – Época Seca en Demanda Máxima

OUTPUT FOR OWNER 20 [ETESA                    ]

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6000 [FRONTPRO   230.00] 3PH   2854.12   7164.5   -91.55
                                LG      2829.33   7102.2   -92.43
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/18.721/84.379, 10.15973  Z-:/18.409/84.856, 11.10764  Z0:/19.532/86.465, 16.18866
  
```

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6001 [PAN230     230.00] 3PH   4644.46  11658.6  -91.83
                                LG      5409.42  13578.8  -95.19
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/11.362/69.399, 2.66034  Z-:/11.209/70.917, 2.89057  Z0:/6.797/81.430, 6.63557
  
```

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6002 [PAN115     115.00] 3PH   4301.30  21594.4  -92.48
                                LG      4967.98  24941.4  -96.22
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/3.073/68.168, 2.49609  Z-:/3.042/69.447, 2.66707  Z0:/1.905/81.900, 7.02605
  
```

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  
```

```

6003 [PANII230    230.00] 3PH    4275.09   10731.4   -92.71
                                LG    4515.46   11334.8   -95.84
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/12.374/70.113, 2.76447  Z-:/12.232/71.468, 2.98319  Z0:/10.617/78.950, 5.12070

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6004 [PANII115    115.00] 3PH    3190.01  16015.2  -97.06
                                LG    3239.47  16263.5  -100.56
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.156/73.200, 3.31213  Z-:/4.130/74.157, 3.52382  Z0:/4.027/82.923, 8.05432

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6005 [CHO230      230.00] 3PH    4208.95  10565.4  -92.83
                                LG    4602.20  11552.5  -96.76
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/12.638/71.361, 2.96470  Z-:/12.427/73.179, 3.30776  Z0:/9.738/83.105, 8.26920

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6008 [LSA230      230.00] 3PH    4719.70  11847.5  -92.11
                                LG    4431.02  11122.8  -94.17
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/11.433/76.482, 4.15962  Z-:/11.308/77.529, 4.52145  Z0:/13.814/81.071, 6.36472

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6009 [LSA115      115.00] 3PH    2134.20  10714.6  -98.98
                                LG    2520.15  12652.3  -100.88
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/6.282/81.064, 6.35944  Z-:/6.230/81.784, 6.92600  Z0:/3.469/88.526, 38.86057

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6011 [MDN230      230.00] 3PH    4747.79  11918.0  -91.94
                                LG    6292.24  15794.9  -90.03
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/11.277/82.834, 7.95370  Z-:/11.089/83.636, 8.96608  Z0:/3.305/65.115, 2.15583

```

```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6012 [MDN115      115.00] 3PH  2334.59  11720.7  -94.89
                      LG    1051.43   5278.6   61.66
THEVENIN IMPEDANCE, X/R (OHM) Z+:/5.767/85.307, 12.18160 Z-:/5.513/87.131, 19.95688 Z0:/49.024/-76.306, 4.10390

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6014 [PRO230      230.00] 3PH  3379.20  8482.5   -91.73
                      LG    3930.60  9866.7   -92.69
THEVENIN IMPEDANCE, X/R (OHM) Z+:/15.809/84.649, 10.67692 Z-:/15.494/85.265, 12.07309 Z0:/9.480/87.805, 26.08612

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6015 [PRO115      115.00] 3PH  1211.42  6081.9   -95.20
                      LG    2356.37  11830.0  -95.27
THEVENIN IMPEDANCE, X/R (OHM) Z+:/10.988/88.242, 32.57471 Z-:/10.588/89.115, 64.76949 Z0:/4.630/-90.000, 9999.999

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6018 [CAC115      115.00] 3PH  4247.55  21324.6  -92.61
                      LG    4897.01  24585.2  -95.98
THEVENIN IMPEDANCE, X/R (OHM) Z+:/3.110/68.282, 2.51053 Z-:/3.079/69.538, 2.68000 Z0:/1.933/80.478, 5.96164

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6024 [CHI115      115.00] 3PH  1523.33  7647.8   -98.70
                      LG    1493.39  7497.4   -96.17
THEVENIN IMPEDANCE, X/R (OHM) Z+:/8.508/74.309, 3.55973 Z-:/8.480/74.693, 3.65362 Z0:/9.102/66.684, 2.32020

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6059 [LM1115      115.00] 3PH  3445.91  17300.0  -98.78
                      LG    3942.10  19791.1  -99.83

```

THEVENIN IMPEDANCE, X/R (OHM) Z+:/3.805/78.872, 5.08375 Z-:/3.753/79.639, 5.46976 Z0:/2.422/82.016, 7.12961

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6060 [LM2115      115.00] 3PH  3426.92  17204.6  -98.78  
                                  LG      3924.73  19703.9  -99.89  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/3.826/78.856, 5.07657 Z-:/3.773/79.623, 5.46071 Z0:/2.425/82.264, 7.36094

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6087 [CAL115      115.00] 3PH  1680.40   8436.3  -92.93  
                                  LG      1734.18   8706.3  -69.00  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/8.024/85.316, 12.20556 Z-:/7.872/85.935, 14.07239 Z0:/10.981/24.923, 0.46468

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6088 [LES115      115.00] 3PH  1374.23   6899.2  -91.87  
                                  LG      1137.94   5713.0  -73.94  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/9.836/84.502, 10.38905 Z-:/9.696/84.927, 11.26384 Z0:/18.124/46.978, 1.07156

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6092 [LVA115      115.00] 3PH  1559.13   7827.5  -92.47  
                                  LG      1468.26   7371.3  -71.18  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/8.648/84.958, 11.33410 Z-:/8.501/85.496, 12.69421 Z0:/13.201/35.166, 0.70454

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6096 [FOR230      230.00] 3PH  5127.81  12871.9  -92.20  
                                  LG      5504.82   13818.3  -91.28  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/10.453/82.995, 8.13852 Z-:/10.353/83.546, 8.83960 Z0:/8.421/79.131, 5.20786

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/      AN(I)

```

X----- BUS -----X          MVA      AMP      DEG
 6100 [BAY230      230.00] 3PH   1837.03  4611.4   -96.98
                               LG     1979.34  4968.6  -101.80
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/29.006/73.996, 3.48653  Z-:/28.884/74.600, 3.63050  Z0:/23.498/90.000, 9999.999

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6170 [CPA115      115.00] 3PH   1556.05  7812.0   -98.94
                               LG     1447.44  7266.8  -100.01
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/8.428/77.520, 4.51802  Z-:/8.389/77.878, 4.65575  Z0:/10.370/80.027, 5.68682

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6171 [PAC230      230.00] 3PH   2702.52  6783.9   -95.45
                               LG     2336.00  5863.9  -99.18
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/19.624/72.591, 3.18917  Z-:/19.495/73.466, 3.36867  Z0:/29.141/80.748, 6.13879

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6173 [STR115      115.00] 3PH   3743.94  18796.2  -98.66
                               LG     3946.26  19811.9 -99.68
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/3.524/79.723, 5.51548  Z-:/3.489/80.385, 5.90273  Z0:/3.018/82.365, 7.45957

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6179 [GUA230      230.00] 3PH   4661.99  11702.6  -92.86
                               LG     4664.42  11708.7 -93.25
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/11.503/82.768, 7.87999  Z-:/11.419/83.253, 8.45222  Z0:/11.569/83.445, 8.70292

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6182 [VEL230      230.00] 3PH   4622.08  11602.4  -92.84
                               LG     4176.33  10483.5 -90.11
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/11.673/80.471, 5.95734  Z-:/11.555/81.182, 6.44646  Z0:/15.612/73.150, 3.30178

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
6240 [EHIG230      230.00] 3PH      2991.67      7509.8      -93.58
                LG      2473.71      6209.6      -95.50
THEVENIN IMPEDANCE, X/R (OHM) Z+:/17.935/75.175, 3.77827 Z-:/17.793/76.068, 4.03117 Z0:/29.371/78.893, 5.09371
-----

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
6245 [BNGA230      230.00] 3PH      4004.27      10051.6      -93.74
                LG      4106.17      10307.4      -95.84
THEVENIN IMPEDANCE, X/R (OHM) Z+:/13.241/72.052, 3.08730 Z-:/13.108/73.301, 3.33329 Z0:/12.416/77.292, 4.43452
-----

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
6260 [CHA230      230.00] 3PH      2055.72      5160.3      -92.89
                LG      1682.81      4224.2      -92.14
THEVENIN IMPEDANCE, X/R (OHM) Z+:/26.289/81.593, 6.76636 Z-:/26.232/81.796, 6.93575 Z0:/43.836/79.822, 5.57018
-----

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
6261 [CHA115      115.00] 3PH      641.82      3222.2      -98.12
                LG      1026.60      5154.0      -97.79
THEVENIN IMPEDANCE, X/R (OHM) Z+:/20.800/86.384, 15.82248 Z-:/20.790/86.442, 16.08135 Z0:/2.591/-88.137, 30.73528
-----

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
6263 [ESP230      230.00] 3PH      2298.39      5769.5      -93.25
                LG      2656.03      6667.2      -91.66
THEVENIN IMPEDANCE, X/R (OHM) Z+:/23.524/82.644, 7.74635 Z-:/23.473/82.848, 7.96916 Z0:/14.162/75.414, 3.84277
-----

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
6275 [CHG500      500.00] 3PH      3630.43      4192.1      -95.04
-----

```

```

                LG      3662.28    4228.8    -91.17
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/70.275/80.344, 5.87729  Z-:/69.900/80.955, 6.28198  Z0:/69.937/68.092, 2.48652

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6276 [CHG230      230.00] 3PH    3983.87  10000.4  -93.54
                        LG      4216.42  10584.1  -88.03
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/13.486/80.615, 6.05051  Z-:/13.411/81.160, 6.43026  Z0:/11.783/61.796, 1.86466

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6290 [CATIII115  115.00] 3PH    3304.69  16591.0  -98.78
                        LG      3692.45  18537.7  -100.61
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/3.970/78.983, 5.13627  Z-:/3.920/79.700, 5.50252  Z0:/2.779/85.020, 11.47593

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6309 [PAN3 500    500.00] 3PH    3953.17  4564.7   -95.15
                        LG      4306.72  4973.0   -97.86
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/64.001/74.688, 3.65229  Z-:/63.465/75.842, 3.96415  Z0:/49.101/82.965, 8.10344

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6310 [PAN3 230    230.00] 3PH    4664.74  11709.5  -91.81
                        LG      5470.03  13731.0  -94.89
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/11.342/69.556, 2.68259  Z-:/11.192/71.059, 2.91397  Z0:/6.567/80.648, 6.07237

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6311 [PAN3 115    115.00] 3PH    3187.65  16003.4  -96.12
                        LG      3127.65  15702.2  -100.69
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.144/72.296, 3.13271  Z-:/4.117/73.295, 3.33210  Z0:/4.470/84.426, 10.24729

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->

```



```

X----- BUS -----X
 6314 [SAB500      500.00] 3PH 3403.50 3930.0 -96.42
                               LG    0.00    0.0    0.00
THEVENIN IMPEDANCE, X/R (OHM) Z+:/74.492/75.942, 3.99350 Z-:/73.981/76.945, 4.31272 Z0:/0.2E+10/90.000, 9999.999
-----
<-SCMVA-> <-Sym I''k rms-->
                               /I/   AN(I)
X----- BUS -----X
 6315 [MET230      230.00] 3PH 512.28 1285.9 -103.97
                               LG 471.37 1183.2 -107.94
THEVENIN IMPEDANCE, X/R (OHM) Z+:/105.680/79.932, 5.63214 Z-:/105.599/80.110, 5.73590 Z0:/134.524/90.000, 9999.999
-----
<-SCMVA-> <-Sym I''k rms-->
                               /I/   AN(I)
X----- BUS -----X
 6317 [CHE         230.00] 3PH 2333.31 5857.1 -95.86
                               LG    0.00    0.0    0.00
THEVENIN IMPEDANCE, X/R (OHM) Z+:/22.824/72.884, 3.24725 Z-:/22.697/73.645, 3.40763 Z0:/0.53E+09/90.000, 9999.999
-----
<-SCMVA-> <-Sym I''k rms-->
                               /I/   AN(I)
X----- BUS -----X
 6318 [SAB230      230.00] 3PH 1864.62 4680.6 -102.83
                               LG    0.00    0.0    0.00
THEVENIN IMPEDANCE, X/R (OHM) Z+:/28.771/82.353, 7.44759 Z-:/28.693/82.921, 8.05284 Z0:/0.53E+09/90.000, 9999.999
-----
<-SCMVA-> <-Sym I''k rms-->
                               /I/   AN(I)
X----- BUS -----X
 6340 [CAN230      230.00] 3PH 3384.48 8495.8 -93.34
                               LG 3931.49 9868.9 -88.15
THEVENIN IMPEDANCE, X/R (OHM) Z+:/15.859/80.897, 6.24123 Z-:/15.783/81.333, 6.55990 Z0:/9.916/58.210, 1.61347
-----
<-SCMVA-> <-Sym I''k rms-->
                               /I/   AN(I)
X----- BUS -----X
 6350 [PM115-8     115.00] 3PH 3514.64 17645.0 -93.50
                               LG 3619.33 18170.6 -96.09
THEVENIN IMPEDANCE, X/R (OHM) Z+:/3.731/68.429, 2.52941 Z-:/3.703/69.492, 2.67353 Z0:/3.452/75.471, 3.85858

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6380 [BOQIII230  230.00] 3PH  3275.19  8221.5  -91.83
                                LG  3505.10  8798.6  -93.97
THEVENIN IMPEDANCE, X/R (OHM) Z+:/16.325/84.119, 9.70849 Z-:/16.110/84.617, 10.61281 Z0:/13.388/90.873, 65.65820
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6400 [FRONTCHA  230.00] 3PH  1578.46  3962.3  -92.65
                                LG  1223.91  3072.3  -90.94
THEVENIN IMPEDANCE, X/R (OHM) Z+:/34.284/81.344, 6.56868 Z-:/34.226/81.499, 6.69046 Z0:/64.206/77.730, 4.59797
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6401 [PM230-29  230.00] 3PH  3467.48  8704.1  -93.32
                                LG  2682.79  6734.4  -91.54
THEVENIN IMPEDANCE, X/R (OHM) Z+:/15.473/82.372, 7.46697 Z-:/15.393/82.762, 7.87374 Z0:/29.169/78.496, 4.91357
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6440 [DOM230    230.00] 3PH  2139.75  5371.2  -91.99
                                LG  2601.22  6529.6  -91.37
THEVENIN IMPEDANCE, X/R (OHM) Z+:/24.870/84.159, 9.77555 Z-:/24.433/84.393, 10.18558 Z0:/12.091/80.550, 6.00811
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6441 [PRIM230   230.00] 3PH  1661.29  4170.2  -90.89
                                LG  1687.42  4235.8  -89.17
THEVENIN IMPEDANCE, X/R (OHM) Z+:/32.005/83.126, 8.29478 Z-:/31.586/83.277, 8.48366 Z0:/31.034/77.719, 4.59369
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG

```

```

6460 [ECO230      230.00] 3PH   3324.39   8344.9   -94.20
                                LG   3501.29   8789.0   -96.61
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/16.179/78.353, 4.85131  Z-:/16.077/79.124, 5.20476  Z0:/13.896/85.453, 12.57490

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
6470 [24DIC230    230.00] 3PH   3227.99   8103.0   -93.11
                                LG   2793.02   7011.1   -96.84
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/16.402/70.295, 2.79211  Z-:/16.262/71.321, 2.95799  Z0:/24.327/78.353, 4.85152

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
6485 [ANT230      230.00] 3PH   3167.51   7951.1   -95.09
                                LG   3586.29   9002.4   -97.81
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/17.104/78.198, 4.78597  Z-:/16.980/79.092, 5.18897  Z0:/11.345/87.773, 25.71542

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
6500 [FRONTDOM    230.00] 3PH   2069.13   5194.0   -91.27
                                LG   2333.85   5858.5   -87.54
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/25.763/83.597, 8.91108  Z-:/25.379/83.831, 9.25193  Z0:/17.828/68.789, 2.57674

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
6601 [COP230      230.00] 3PH   3129.45   7855.6   -93.40
                                LG   2660.22   6677.7   -97.08
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/16.924/70.574, 2.83556  Z-:/16.785/71.572, 3.00113  Z0:/26.138/78.374, 4.86033

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
6760 [SBA230      230.00] 3PH   3384.23   8495.1   -94.05
                                LG   2259.76   5672.5   -92.89
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/16.011/80.590, 6.03366  Z-:/15.900/81.182, 6.44593  Z0:/40.044/78.264, 4.81377

```

```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6761 [SBA115      115.00] 3PH    822.50   4129.3  -99.99
                      LG      844.93   4241.9 -100.75
THEVENIN IMPEDANCE, X/R (OHM) Z+:/16.216/87.704, 24.93765 Z-:/16.199/87.825, 26.33016 Z0:/14.950/89.969, 1828.9919

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6860 [BBL230      230.00] 3PH   3531.08  8863.8  -92.59
                      LG   2978.57  7476.9 -90.71
THEVENIN IMPEDANCE, X/R (OHM) Z+:/15.285/79.989, 5.66475 Z-:/15.169/80.529, 5.99459 Z0:/23.956/75.385, 3.83502

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6990 [REACTOR1    500.00] 3PH   3630.43  4192.1  -95.04
                      LG   3662.28  4228.8 -91.17
THEVENIN IMPEDANCE, X/R (OHM) Z+:/70.275/80.344, 5.87729 Z-:/69.900/80.955, 6.28198 Z0:/69.937/68.092, 2.48652

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6991 [REACTOR2    500.00] 3PH   3953.17  4564.7  -95.15
                      LG   4306.72  4973.0 -97.86
THEVENIN IMPEDANCE, X/R (OHM) Z+:/64.001/74.688, 3.65229 Z-:/63.465/75.842, 3.96415 Z0:/49.101/82.965, 8.10344

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6992 [REACTOR3    500.00] 3PH   3630.43  4192.1  -95.04
                      LG   3662.28  4228.8 -91.17
THEVENIN IMPEDANCE, X/R (OHM) Z+:/70.275/80.344, 5.87729 Z-:/69.900/80.955, 6.28198 Z0:/69.937/68.092, 2.48652

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6993 [REACTOR4    500.00] 3PH   3953.17  4564.7  -95.15
                      LG   4306.72  4973.0 -97.86

```

THEVENIN IMPEDANCE, X/R (OHM) Z+:/64.001/74.688, 3.65229 Z-:/63.465/75.842, 3.96415 Z0:/49.101/82.965, 8.10344

---

<-SCMVA-> <-Sym I''k rms-->  
  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6985 [SVC-PAN3  230.00] 3PH  4664.74  11709.5  -91.81  
  LG      5470.03  13731.0  -94.89  
THEVENIN IMPEDANCE, X/R (OHM) Z+:/11.342/69.556, 2.68259 Z-:/11.192/71.059, 2.91397 Z0:/6.567/80.648, 6.07237

---

<-SCMVA-> <-Sym I''k rms-->  
  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6995 [SVC-LSA  230.00] 3PH  4719.70  11847.5  -92.11  
  LG      4431.02  11122.8  -94.17  
THEVENIN IMPEDANCE, X/R (OHM) Z+:/11.433/76.482, 4.15962 Z-:/11.308/77.529, 4.52145 Z0:/13.814/81.071, 6.36472

---

<-SCMVA-> <-Sym I''k rms-->  
  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6997 [SVC-PAN2  230.00] 3PH  4275.09  10731.4  -92.71  
  LG      4515.46  11334.8  -95.84  
THEVENIN IMPEDANCE, X/R (OHM) Z+:/12.374/70.113, 2.76447 Z-:/12.232/71.468, 2.98319 Z0:/10.617/78.950, 5.12070

---

Año 2019 – Época Lluviosa en Demanda Máxima

OUTPUT FOR OWNER 20 [ETESA ]

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6000 [FRONTPRO  230.00] 3PH    2811.11  7056.5  -89.83
                                LG      2795.72  7017.9  -90.89
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/18.897/83.914, 9.37846  Z-:/18.584/84.480, 10.34796  Z0:/19.532/86.465, 16.18866
  
```

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6001 [PAN230    230.00] 3PH    4171.20 10470.6 -96.67
                                LG      4997.91 12545.8 -100.73
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/12.766/65.638, 2.20835  Z-:/12.583/67.513, 2.41579  Z0:/6.797/81.430, 6.63565
  
```

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6002 [PAN115    115.00] 3PH    3698.00 18565.6 -98.16
                                LG      4446.02 22320.9 -102.43
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/3.633/64.436, 2.09056  Z-:/3.592/66.085, 2.25508  Z0:/1.905/81.900, 7.02631
  
```

```

                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
  
```

```

6003 [PANII230    230.00] 3PH    3958.10    9935.7    -97.67
                                LG    4297.96    10788.8   -101.76
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/13.499/66.664, 2.31794  Z-:/13.333/68.369, 2.52176  Z0:/10.617/78.950, 5.12075

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6004 [PANII115    115.00] 3PH    2882.60   14471.9   -103.25
                                LG    3050.10   15312.8   -107.60
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.702/69.912, 2.73447  Z-:/4.668/71.207, 2.93867  Z0:/4.027/82.923, 8.05440

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6005 [CHO230      230.00] 3PH    3864.96   9701.9    -97.97
                                LG    4340.98   10896.8   -102.69
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/13.832/68.034, 2.47928  Z-:/13.594/70.186, 2.77540  Z0:/9.738/83.105, 8.26924

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6008 [LSA230      230.00] 3PH    4495.66   11285.1   -96.93
                                LG    4285.25   10756.9   -99.84
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/11.885/74.267, 3.54986  Z-:/11.758/75.552, 3.88122  Z0:/13.814/81.071, 6.36472

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6009 [LSA115      115.00] 3PH    2093.53   10510.4   -104.59
                                LG    2479.59   12448.6   -106.87
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/6.359/79.456, 5.37245  Z-:/6.310/80.306, 5.85394  Z0:/3.469/88.526, 38.86057

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/    AN(I)
X----- BUS -----X          MVA    AMP    DEG
6011 [MDN230      230.00] 3PH    4588.88   11519.1   -92.45
                                LG    6098.22   15307.9   -90.76
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/11.575/81.988, 7.10450  Z-:/11.383/82.925, 8.05707  Z0:/3.305/65.115, 2.15583

```



```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6012 [MDN115      115.00] 3PH  2295.82  11526.0  -93.48
          LG      1042.96   5236.1   62.51
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/5.810/84.894, 11.19127  Z-:/5.556/86.799, 17.88053  Z0:/49.024/-76.306, 4.10390

```

```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6014 [PRO230      230.00] 3PH  3320.68  8335.6   -90.00
          LG      3872.61   9721.1  -91.13
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/15.987/84.071, 9.62850  Z-:/15.672/84.794, 10.97595  Z0:/9.480/87.805, 26.08612

```

```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6015 [PRO115      115.00] 3PH  1199.55  6022.3   -93.71
          LG      2329.94  11697.3  -93.66
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/11.027/87.504, 22.93571  Z-:/10.632/88.508, 38.38433  Z0:/4.630/-90.000, 9999.999

```

```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6018 [CAC115      115.00] 3PH  3649.78  18323.5  -98.32
          LG      4380.10  21990.0 -102.27
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/3.679/64.546, 2.10090  Z-:/3.638/66.173, 2.26436  Z0:/1.933/80.478, 5.96184

```

```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6024 [CHI115      115.00] 3PH  1413.61  7096.9  -108.10
          LG      1425.74  7157.8  -106.47
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/9.295/72.209, 3.11640  Z-:/9.256/72.845, 3.23946  Z0:/9.130/66.609, 2.31181

```

```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X          MVA      AMP      DEG
  6059 [LM1115      115.00] 3PH  2536.06  12732.1 -108.90
          LG      3110.63  15616.7 -110.83

```

THEVENIN IMPEDANCE, X/R (OHM) Z+:/5.204/74.386, 3.57825 Z-:/5.117/75.589, 3.89150 Z0:/2.423/82.020, 7.13332

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/    AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6060 [LM2115      115.00] 3PH  2533.74  12720.5  -108.94  
                                  LG      3107.88  15602.9  -110.91  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/5.209/74.443, 3.59207 Z-:/5.122/75.644, 3.90706 Z0:/2.426/82.268, 7.36530

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/    AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6087 [CAL115      115.00] 3PH  1666.72   8367.7   -89.29  
                                  LG      1721.05   8640.4   -65.48  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/8.050/85.165, 11.82181 Z-:/7.898/85.824, 13.69598 Z0:/10.981/24.923, 0.46468

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/    AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6088 [LES115      115.00] 3PH  1365.57   6855.8   -88.03  
                                  LG      1131.79   5682.1   -70.19  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/9.860/84.395, 10.19018 Z-:/9.720/84.850, 11.09604 Z0:/18.124/46.978, 1.07156

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/    AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6092 [LVA115      115.00] 3PH  1547.62   7769.7   -88.74  
                                  LG      1458.55   7322.6   -67.56  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/8.673/84.825, 11.04155 Z-:/8.525/85.399, 12.42632 Z0:/13.201/35.166, 0.70454

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/    AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6096 [FOR230      230.00] 3PH  4891.92  12279.8   -94.39  
                                  LG      5310.46  13330.4   -93.84  
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/10.880/81.968, 7.08640 Z-:/10.775/82.660, 7.76356 Z0:/8.421/79.131, 5.20786

-----  
<-SCMVA-> <-Sym I''k rms-->  
                                  /I/    AN(I)

```

X----- BUS -----X          MVA      AMP      DEG
 6100 [BAY230      230.00] 3PH  2348.36  5894.9  -103.59
                               LG    2345.35  5887.3  -108.60
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/22.875/75.918, 3.98640  Z-:/22.785/76.633, 4.20815  Z0:/23.498/90.000, 9999.999

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6170 [CPA115      115.00] 3PH  1395.28  7004.9  -109.75
                               LG    1357.44  6814.9  -111.64
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/9.495/75.280, 3.80632  Z-:/9.435/75.922, 3.98768  Z0:/10.371/80.018, 5.68176

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6171 [PAC230      230.00] 3PH  2793.09  7011.3  -101.45
                               LG    2391.71  6003.7  -105.87
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/19.163/71.244, 2.94486  Z-:/19.036/72.357, 3.14416  Z0:/29.141/80.748, 6.13881

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6173 [STR115      115.00] 3PH  2432.06  12210.0 -108.18
                               LG    2876.92  14443.4 -110.46
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/5.455/73.856, 3.45455  Z-:/5.385/74.963, 3.72232  Z0:/3.018/82.366, 7.46123

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6179 [GUA230      230.00] 3PH  4376.30  10985.5  -95.29
                               LG    4461.51  11199.4  -96.06
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/12.175/81.691, 6.84723  Z-:/12.087/82.315, 7.41081  Z0:/11.569/83.445, 8.70292

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
              /I/      AN(I)

```

```

X----- BUS -----X          MVA      AMP      DEG
 6182 [VEL230      230.00] 3PH  4418.36  11091.1  -95.60
                               LG    4045.82  10155.9  -93.54
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/12.092/79.057, 5.17204  Z-:/11.972/79.943, 5.63869  Z0:/15.612/73.150, 3.30178

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
X----- BUS -----X          /I/   AN(I)
          MVA      AMP      DEG
6240 [EHIG230    230.00] 3PH    2866.21  7194.8  -99.34
          LG      2412.30  6055.4  -102.13
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/18.639/73.284, 3.32989  Z-:/18.494/74.399, 3.58128  Z0:/29.371/78.893, 5.09371
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
X----- BUS -----X          /I/   AN(I)
          MVA      AMP      DEG
6245 [BNGA230    230.00] 3PH    3708.69  9309.6  -99.00
          LG      3909.77  9814.4  -102.12
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/14.406/68.780, 2.57553  Z-:/14.255/70.358, 2.80182  Z0:/12.416/77.292, 4.43454
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
X----- BUS -----X          /I/   AN(I)
          MVA      AMP      DEG
6260 [CHA230     230.00] 3PH    2013.72  5054.9  -95.29
          LG      1661.05  4169.6  -94.83
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/26.740/81.020, 6.32781  Z-:/26.682/81.298, 6.53332  Z0:/43.836/79.822, 5.57018
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
X----- BUS -----X          /I/   AN(I)
          MVA      AMP      DEG
6261 [CHA115     115.00] 3PH    637.06   3198.3  -99.49
          LG      1018.67  5114.2  -99.16
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/20.887/86.189, 15.01042  Z-:/20.878/86.268, 15.33062  Z0:/2.591/-88.137, 30.73528
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
X----- BUS -----X          /I/   AN(I)
          MVA      AMP      DEG
6263 [ESP230     230.00] 3PH    2252.03  5653.1  -95.41
          LG      2612.14  6557.1  -93.99
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/23.931/82.070, 7.17872  Z-:/23.879/82.349, 7.44435  Z0:/14.162/75.414, 3.84277
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
X----- BUS -----X          /I/   AN(I)
          MVA      AMP      DEG
6275 [CHG500     500.00] 3PH    3447.71  3981.1  -98.43
-----

```

```

                LG      3529.61   4075.6   -95.33
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/73.832/78.563, 4.94277  Z-:/73.445/79.372, 5.32882  Z0:/69.937/68.092, 2.48652

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6276 [CHG230      230.00] 3PH  3790.19  9514.2  -96.37
                LG      4056.98  10183.9  -91.54
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/14.093/79.086, 5.18610  Z-:/14.017/79.807, 5.56154  Z0:/11.783/61.796, 1.86466

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6290 [CATIII115   115.00] 3PH  2434.24 12221.0 -109.01
                LG      2932.25 14721.2 -111.61
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/5.425/74.521, 3.61105  Z-:/5.340/75.672, 3.91508  Z0:/2.779/85.021, 11.47797

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6309 [PAN3 500    500.00] 3PH  3648.87  4213.3  -99.67
                LG      4074.56  4704.9  -103.22
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/69.681/71.433, 2.97716  Z-:/69.074/72.906, 3.25169  Z0:/49.102/82.965, 8.10348

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6310 [PAN3 230    230.00] 3PH  4196.97 10535.3  -96.61
                LG      5056.40 12692.7 -100.39
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/12.716/65.838, 2.22902  Z-:/12.536/67.698, 2.43797  Z0:/6.567/80.649, 6.07243

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->
                        /I/      AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6311 [PAN3 115    115.00] 3PH  2903.96 14579.1 -102.06
                LG      2962.50 14873.1 -107.47
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/4.613/69.196, 2.63194  Z-:/4.579/70.516, 2.82638  Z0:/4.470/84.426, 10.24736

```

```

-----
                <-SCMVA-> <-Sym I''k rms-->

```

```

X----- BUS -----X
 6314 [SAB500      500.00] 3PH 3180.94 3673.0 -101.26
                               LG    0.00    0.0    0.00
THEVENIN IMPEDANCE, X/R (OHM) Z+:/80.097/73.011, 3.27302 Z-:/79.536/74.307, 3.55923 Z0:/0.2E+10/90.000, 9999.999
-----
<-SCMVA-> <-Sym I''k rms-->
                               /I/   AN(I)
X----- BUS -----X
 6315 [MET230      230.00] 3PH 531.22 1333.5 -110.36
                               LG 481.07 1207.6 -114.30
THEVENIN IMPEDANCE, X/R (OHM) Z+:/102.805/80.260, 5.82564 Z-:/102.746/80.457, 5.94850 Z0:/136.180/90.000, 9999.999
-----
<-SCMVA-> <-Sym I''k rms-->
                               /I/   AN(I)
X----- BUS -----X
 6317 [CHE         230.00] 3PH 2689.36 6750.9 -102.18
                               LG    0.00    0.0    0.00
THEVENIN IMPEDANCE, X/R (OHM) Z+:/19.973/73.125, 3.29665 Z-:/19.864/74.074, 3.50446 Z0:/0.53E+09/90.000, 9999.999
-----
<-SCMVA-> <-Sym I''k rms-->
                               /I/   AN(I)
X----- BUS -----X
 6318 [SAB230      230.00] 3PH 1806.25 4534.1 -108.69
                               LG    0.00    0.0    0.00
THEVENIN IMPEDANCE, X/R (OHM) Z+:/29.848/80.449, 5.94351 Z-:/29.777/81.206, 6.46441 Z0:/0.53E+09/90.000, 9999.999
-----
<-SCMVA-> <-Sym I''k rms-->
                               /I/   AN(I)
X----- BUS -----X
 6340 [CAN230      230.00] 3PH 3241.14 8136.0 -96.33
                               LG 3791.91 9518.5 -91.61
THEVENIN IMPEDANCE, X/R (OHM) Z+:/16.463/79.711, 5.50853 Z-:/16.385/80.290, 5.84420 Z0:/9.916/58.210, 1.61347
-----
<-SCMVA-> <-Sym I''k rms-->
                               /I/   AN(I)
X----- BUS -----X
 6350 [PM115-8     115.00] 3PH 3140.61 15767.2 -99.51
                               LG 3369.34 16915.5 -102.98
THEVENIN IMPEDANCE, X/R (OHM) Z+:/4.245/65.192, 2.16342 Z-:/4.208/66.599, 2.31077 Z0:/3.452/75.471, 3.85864

```

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-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6380 [BOQIII230  230.00] 3PH  3207.77  8052.2  -90.86
                                LG  3446.55  8651.6  -93.17
THEVENIN IMPEDANCE, X/R (OHM) Z+:/16.539/83.609, 8.92794 Z-:/16.322/84.201, 9.84585 Z0:/13.388/90.873, 65.65820
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6400 [FRONTCHA  230.00] 3PH  1552.22  3896.4  -95.19
                                LG  1211.07  3040.0  -93.72
THEVENIN IMPEDANCE, X/R (OHM) Z+:/34.737/80.904, 6.24612 Z-:/34.679/81.119, 6.39944 Z0:/64.206/77.730, 4.59797
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6401 [PM230-29  230.00] 3PH  3310.30  8309.6  -96.11
                                LG  2610.29  6552.4  -94.86
THEVENIN IMPEDANCE, X/R (OHM) Z+:/16.105/81.415, 6.62412 Z-:/16.022/81.929, 7.05194 Z0:/29.169/78.496, 4.91357
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6440 [DOM230    230.00] 3PH  2121.87  5326.4  -89.77
                                LG  2582.63  6483.0  -89.23
THEVENIN IMPEDANCE, X/R (OHM) Z+:/25.027/83.912, 9.37553 Z-:/24.586/84.194, 9.83496 Z0:/12.091/80.550, 6.00811
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
  6441 [PRIM230   230.00] 3PH  1651.62  4145.9  -88.52
                                LG  1680.16  4217.6  -86.87
THEVENIN IMPEDANCE, X/R (OHM) Z+:/32.157/82.949, 8.08521 Z-:/31.733/83.138, 8.30994 Z0:/31.034/77.719, 4.59369
-----

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG

```

```

6460 [ECO230      230.00] 3PH   3197.14   8025.5  -101.11
                                LG   3405.82   8549.4  -104.11
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/16.765/76.402, 4.13420  Z-:/16.663/77.384, 4.46775  Z0:/13.896/85.453, 12.57491

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
6470 [24DIC230    230.00] 3PH   3178.40   7978.5  -99.01
                                LG   2784.05   6988.6  -103.61
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/16.832/68.300, 2.51294  Z-:/16.681/69.614, 2.69094  Z0:/24.328/78.353, 4.85154

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
6485 [ANT230      230.00] 3PH   3027.43   7599.5  -101.61
                                LG   3462.11   8690.7  -104.82
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/17.747/76.266, 4.09153  Z-:/17.623/77.379, 4.46597  Z0:/11.345/87.773, 25.71544

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
6500 [FRONTDOM    230.00] 3PH   2050.00   5146.0  -89.22
                                LG   2315.57   5812.6  -85.60
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/25.925/83.341, 8.56542  Z-:/25.538/83.627, 8.95321  Z0:/17.828/68.789, 2.57674

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
6601 [COP230      230.00] 3PH   3104.49   7792.9  -99.34
                                LG   2663.23   6685.3  -103.88
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/17.236/68.700, 2.56489  Z-:/17.088/69.977, 2.74400  Z0:/26.138/78.374, 4.86034

```

```

-----
                                <-SCMVA-> <-Sym I''k rms-->
                                /I/      AN(I)
X----- BUS -----X          MVA      AMP      DEG
6760 [SBA230      230.00] 3PH   3278.26   8229.1  -97.83
                                LG   2209.75   5547.0  -97.37
THEVENIN IMPEDANCE, X/R (OHM)  Z+:/16.293/79.397, 5.34169  Z-:/16.183/80.139, 5.75280  Z0:/40.044/78.264, 4.81377

```



```

<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6761 [SBA115      115.00] 3PH   822.74   4130.5  -102.40
          LG      840.05   4217.4  -103.24
THEVENIN IMPEDANCE, X/R (OHM) Z+:/15.910/87.499, 22.89623 Z-:/15.895/87.650, 24.36512 Z0:/14.950/89.969, 1828.9919

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6860 [BBL230      230.00] 3PH  3405.96  8549.7  -95.80
          LG      2905.48  7293.4  -94.47
THEVENIN IMPEDANCE, X/R (OHM) Z+:/15.696/78.896, 5.09503 Z-:/15.579/79.579, 5.43733 Z0:/23.956/75.385, 3.83502

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6985 [SVC-PAN3      230.00] 3PH  4196.97 10535.3 -96.61
          LG      5056.40 12692.7 -100.39
THEVENIN IMPEDANCE, X/R (OHM) Z+:/12.716/65.838, 2.22902 Z-:/12.536/67.698, 2.43797 Z0:/6.567/80.649, 6.07243

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6990 [REACTOR1      500.00] 3PH  3447.71  3981.1  -98.43
          LG      3529.61  4075.6  -95.33
THEVENIN IMPEDANCE, X/R (OHM) Z+:/73.832/78.563, 4.94277 Z-:/73.445/79.372, 5.32882 Z0:/69.937/68.092, 2.48652

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6991 [REACTOR2      500.00] 3PH  3648.87  4213.3  -99.67
          LG      4074.56  4704.9  -103.22
THEVENIN IMPEDANCE, X/R (OHM) Z+:/69.681/71.433, 2.97716 Z-:/69.074/72.906, 3.25169 Z0:/49.102/82.965, 8.10348

```

```

-----
<-SCMVA-> <-Sym I''k rms-->
          /I/   AN(I)
X----- BUS -----X      MVA      AMP      DEG
 6992 [REACTOR3      500.00] 3PH  3447.71  3981.1  -98.43
          LG      3529.61  4075.6  -95.33

```

THEVENIN IMPEDANCE, X/R (OHM) Z+:/73.832/78.563, 4.94277 Z-:/73.445/79.372, 5.32882 Z0:/69.937/68.092, 2.48652

-----  
<-SCMVA-> <-Sym I''k rms-->  
  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6993 [REACTOR4  500.00] 3PH  3648.87  4213.3  -99.67  
  LG  4074.56  4704.9  -103.22  
THEVENIN IMPEDANCE, X/R (OHM) Z+:/69.681/71.433, 2.97716 Z-:/69.074/72.906, 3.25169 Z0:/49.102/82.965, 8.10348

-----  
<-SCMVA-> <-Sym I''k rms-->  
  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6995 [SVC-LSA   230.00] 3PH  4495.66  11285.1  -96.93  
  LG  4285.25  10756.9  -99.84  
THEVENIN IMPEDANCE, X/R (OHM) Z+:/11.885/74.267, 3.54986 Z-:/11.758/75.552, 3.88122 Z0:/13.814/81.071, 6.36472

-----  
<-SCMVA-> <-Sym I''k rms-->  
  /I/      AN(I)  
X----- BUS -----X          MVA      AMP      DEG  
  6997 [SVC-PAN2  230.00] 3PH  3958.10  9935.7  -97.67  
  LG  4297.96  10788.8  -101.76  
THEVENIN IMPEDANCE, X/R (OHM) Z+:/13.499/66.664, 2.31794 Z-:/13.333/68.369, 2.52176 Z0:/10.617/78.950, 5.12075